

Component-Level Information Packets

70004A Color Display



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The following safety symbols are used throughout this manual. Familiarize yourself with each of the symbols and its meaning before operating this instrument.

CAUTION The *CAUTION* sign denotes a hazard. It calls attention to a procedure which, if not correctly performed or adhered to, could result in damage to or destruction of the product or the user's work. Do not proceed beyond a *CAUTION* sign until the indicated conditions are fully understood and met.

WARNING The *WARNING* sign denotes a hazard. It calls attention to a procedure which, if not correctly performed or adhered to, could result in injury to the user. Do not proceed beyond a *WARNING* sign until the indicated conditions are fully understood and met.

DANGER The *DANGER* sign denotes an imminent hazard to people. It warns the reader of a procedure which, if not correctly performed or adhered to, could result in injury or loss of life. Do not proceed beyond a *DANGER* sign until the indicated conditions are fully understood and met.

General Safety Considerations

WARNING ■ Before this instrument is switched on, make sure it has been properly grounded through the protective conductor of the ac power cable to a socket outlet provided with protective earth contact.

Any interruption of the protective (grounding) conductor, inside or outside the instrument, or disconnection of the protective earth terminal can result in personal injury.

■ There are many points in the instrument which can, if contacted, cause personal injury. Be extremely careful.

Any adjustments or service procedures that require operation of the instrument with protective covers removed should be performed only by trained service personnel.

CAUTION Before this instrument is switched on, make sure its primary power circuitry has been adapted to the voltage of the ac power source.

Failure to set the ac power input to the correct voltage could cause damage to the instrument when the ac power cable is plugged in.

Component-Level Information Packages

This manual contains a set of component-level information packages (CLIPs) that correspond to each board assembly in the HP 70004A color display with field-replaceable parts.

Each CLIP package contains component-level repair information that includes parts lists, component-location drawings, and schematics.

Each board assembly and each CLIP packet are assigned a separate HP part number. When a board assembly is updated by Hewlett-Packard, a new CLIP packet is created for the new board assembly, and both the new board assembly and its CLIP packet are also assigned new HP part numbers.

Because there may be multiple versions of the same board assembly, refer to Table 1-1 before replacing any of the assemblies.

Table 1-2, Table 1-3, and Table 1-4 provide a guide to reference designations, abbreviations, and multipliers used in the "Description" column of the parts lists.

Table 1-5 lists manufacturer codes used in the "Mfr Code" column of the parts lists, along with the names of the manufacturers they represent.

Figure 1-1 and Figure 1-2 provide a guide to graphics symbols used on schematic and block diagrams.

Assembly Cross Matrix

**Table 1-1.
Board Assemblies, CLIP Packets, and Replacement Assemblies for the
HP 70004A Color Display**

Name of Board Assembly	HP Part Number of Assembly	Serial Number of Module	HP Part Number of CLIP Packet for Assembly	HP Part Number of Replacement Assembly ¹
A1A1 keyboard	70004-60001 ²	All units shipped.	70004-90024	70004-60001
A2 interface	70004-60005 ²	All units shipped.	70004-90025	70004-60005
A4 power supply	70004-60040 ²	3317A and above	70004-90048	70004-60040
	70004-60028 ³	3039A through 3317A and 3003A00418 through 00420	70004-90054	70004-60040
	70004-60003 ³	3003A and below	70004-90055	70004-60040
A5 processor	70004-60043 ²	3328A02259 and above	70004-90049	70004-60043
	70004-60033 ³	3040A01109 through 3317A02258	70004-90050	70004-60043
	70004-60002 ³	3040A01108 and below	70004-90027	70004-60043
A6 HP-MSIB	70004-60042 ²	3342A02424 and above	70004-90051	70004-60042
	70004-60029 ³	3040A through 3339A02423 and 3003A00498 through 00500	70004-90052	70004-60042
	70004-60004 ³	3039A and below	70004-90053	70004-60042

1 Exchange assemblies may also be available.

2 This is the most current board assembly in production.

3 This board assembly is obsolete. Order the replacement assembly number.

Reference Designations

Table 1-2. Reference Designations

REFERENCE DESIGNATIONS		
A Assembly	F Fuse	RT Thermistor
AT Attenuator, Isolator, Limiter, Termination	FL Filter	S Switch
B Fan, Motor	HY Circulator	T Transformer
BT Battery	J Electrical Connector (Stationary Portion), Jack	TB Terminal Board
C Capacitor	K Relay	TC Thermocouple
CP Coupler	L Coil, Inductor	TP Test Point
CR Diode, Diode Thyristor, Step Recovery Diode, Varactor	M Meter	U Integrated Circuit, Microcircuit
DC Directional Coupler	MP Miscellaneous Mechanical Part	V Electron Tube
DL Delay Line	P Electrical Connector (Movable Portion), Plug	VR Breakdown Diode (Zener), Voltage Regulator
DS Annunciator, Lamp, Light Emitting Diode (LED), Signaling Device (Visible)	Q Silicon Controlled Rectifier (SCR), Transistor, Triode Thyristor	W Cable, Wire, Jumper
E Miscellaneous Electrical Part	R Resistor	X Socket
		Y Crystal Unit (Piezoelectric, Quartz)
		Z Tuned Cavity, Tuned Circuit

Abbreviations

Table 1-3. Abbreviations

ABBREVIATIONS			
A		BSC	Basic
A	Across Flats, Acrylic, Air (Dry Method), Ampere	BTN	Button
ADJ	Adjust, Adjustment	C	
ANSI	American National Standards Institute (formerly USASI-ASA)	C	Capacitance, Capacitor, Center Tapped, Cermet, Cold, Compression
ASSY	Assembly	CCP	Carbon Composition Plastic
AWG	American Wire Gage	CD	Cadmium, Card, Cord
B		CER	Ceramic
BCD	Binary Coded Decimal	CHAM	Chamfer
BD	Board, Bundle	CHAR	Character, Characteristic, Charcoal
BE-CU	Beryllium Copper	CMOS	Complementary Metal Oxide Semiconductor
BNC	Type of Connector	FT	Current Gain Bandwidth Product (Transition Frequency), Feet, Foot
BRG	Bearing, Boring	FXD	Fixed
BRS	Brass	G	
DAP-GL	Diallyl Phthalate Glass	GEN	General, Generator
DBL	Double	GND	Ground
DCCR	Decoder	GP	General Purpose, Group
DEG	Degree	H	
D-HOLE	D-Shaped Hole	H	Henry, High
DIA	Diameter	HDW	Hardware
DIP	Dual In-Line Package	I	
DIP-SLDR	Dip Solder	J	
D-MODE	Depletion Mode	K	
DO	Package Type Designation	L	
DP	Deep, Depth, Diametric Pitch, Dip	LED	Light Emitting Diode
DP3T	Double Pole Three Throw	LG	Length, Long
DPDT	Double Pole Double Throw	LIN	Linear, Linearity
		LK	Link, Lock
		CNDCT	Conducting, Conductive, Conductivity, Conductor
		CONT	Contact, Continuous, Control, Controller
		CONV	Converter
		CPRSN	Compression
		CUP-PT	Cup Point
		CW	Clockwise, Continuous Wave
		D	
		D	Deep, Depletion, Depth, Diameter, Direct Current
		DA	Darlington
		JFET	Junction Field Effect Transistor
		K	
		K	Kelvin, Key, Kilo, Potassium
		KNRLD	Knurled
		KVDC	Kilovolts Direct Current

Table 1-3. Abbreviations (continued)

ABBREVIATIONS					
DWL	Dowell	HEX	Hexadecimal, Hexagon, Hexagonal	LKG	Leakage, Locking
	E			LUM	Luminous
E-R	E-Ring	HLCL	Helical		
EXT	Extended, Extension, External, Extinguish	HP	Hewlett-Packard Company, High Pass	M	
	F		I	M	Male, Maximum, Mega, Mil, Milli, Mode
F	Fahrenheit, Farad, Female, Film (Resistor), Fixed, Flange, Frequency	IC	Collector Current, Integrated Circuit	MA	Milliampere
FC	Carbon Film/ Composition, Edge of Cutoff Frequency, Face	ID	Identification, Inside Diameter	MACH	Machined
FDTHRU	Feedthrough	IF	Forward Current, Intermediate Frequency	MAX	Maximum
FEM	Female	IN	Inch	MC	Molded Carbon Composition
FIL-HD	Fillister Head	INCL	Including	MET	Metal, Metallized
FL	Flash, Flat, Fluid	INT	Integral, Intensity, Internal	MHZ	Megahertz
FLAT-PT	Flat Point		J	MINTR	Miniature
FR	Front	J-FET	Junction Field Effect Transistor	MIT	Miter
FREQ	Frequency	PLSTC	Plastic	MLD	Mold, Molded
	N	PNL	Panel	MM	Magnetized Material, Millimeter
N	Nano, None	PNP	Positive Negative Positive (Transistor)	MOM	Momentary
N-CHAN	N-Channel	POLYC	Polycarbonate	MTG	Mounting
NH	Nanohenry	POLYE	Polyester	MTLC	Metallic
NM	Nanometer, Nonmetallic	POT	Potentiometer	MW	Milliwatt
NO	Normally Open, Number	POZI	Pozidriv Recess	SMA	Subminiature, A Type (Threaded Connector)
NOM	Nominal	PREC	Precision	SMB	Subminiature, B Type (Slip-on Connector)
NPN	Negative Positive Negative (Transistor)	PRP	Purple, Purpose	SMC	Subminiature, C-Type (Threaded Connector)
NS	Nanosecond, Non-Shorting, Nose	PSTN	Piston	SPCG	Spacing
NUM	Numeric	PT	Part, Point, Pulse Time	SPDT	Single Pole Double Throw
NYL	Nylon (Polyamide)	PW	Pulse Width	SPST	Single Pole Single Throw
				SQ	Square
				SST	Stainless Steel

Table 1-3. Abbreviations (continued)

ABBREVIATIONS			
	O	Q	STL Steel
			SUBMIN Subminiature
		Q Figure of Merit	SZ Size
OA	Over-All		
OD	Outside Diameter	R	
OP AMP	Operational Amplifier	R Range, Red, Resistance, Resistor, Right, Ring	T
OPT	Optical, Option, Optional	REF Reference	T Teeth, Temperature, Thickness, Time, Timed, Tooth, Typical
	P	RES Resistance, Resistor	
PA	Picoampere, Power Amplifier	RF Radio Frequency	
PAN-HD	Pan Head	RGD Rigid	TA Ambient Temperature, Tantalum
PAR	Parallel, Parity	RND Round	
PB	Lead (Metal), Pushbutton	RR Rear	TC Temperature Coefficient
PC	Printed Circuit	RVT Rivet, Riveted	
PCB	Printed Circuit Board	S	THD Thread, Threaded
P-CHAN	P-Channel	SAWR Surface Acoustic Wave Resonator	THK Thick
PD	Pad, Power Dissipation	SEG Segment	TO Package Type Designation
PF	Picofarad, Power Factor	SGL Single	TPG Tapping
PKG	Package	SI Silicon, Square Inch	TR-HD Truss Head
	U	SL Slide, Slow	TRMR Trimmer
UCD	Microcandela	SLT Slot, Slotted	TRN Turn, Turns
UF	Microfarad	VAR Variable	TRSN Torsion
UH	Microhenry	VDC Volts—Direct Current	Y
UL	Microliter, Underwriters' Laboratories, Inc.		YIG Yttrium-Iron-Garnet
UNHDND	Unhardened	W	
	V	W Watt, Wattage, White, Wide, Width	Z
V	Variable, Violet, Volt, Voltage	W/SW With Switch	
VAC	Vacuum, Volts—Alternating Current	WW Wire Wound	ZNR Zener
		X	
		X By (Used with Dimensions), Reactance	

Multipliers

Table 1-4. Multipliers

MULTIPLIERS					
Abbreviation	Prefix	Multiple	Abbreviation	Prefix	Multiple
T	tera	10^{12}	m	milli	10^{-3}
G	giga	10^9	μ	micro	10^{-6}
M	mega	10^6	n	nano	10^{-9}
k	kilo	10^3	p	pico	10^{-12}
da	deka	10^2	f	femto	10^{-15}
d	deci	10^{-1}	a	atto	10^{-18}
c	centi	10^{-2}			

Manufacturer Codes

Table 1-5. Manufacturers Code List

Mfr Code	Manufacturer Name	Address	Country	ZIP Code
00039	NEC ELECTRONICS INC	MTN VIEW, CA	US	94043
00046	UNITRODE CORP	LEXINGTON, MA	US	02173
00075	ARIZONA COIL INC	NOGALES, AZ	US	85621
00273	STILLWATER MFG CO	EAST FREEDOM, MA	US	02717
00278	MCCOY ELECTRONICS CO	HOLLY SPRINGS, PA	US	17065
00350	EXAR INTEGRATED SYSTEMS INC	SUNNYVALE, CA	US	94086
00466	NORELCO NORTH AMER PHILIPS LTG CORP	LOS ANGELES, CA	US	90021
00493	UNITED CHEMI-CON INC	COMPTON, CA	US	90220
00746	ROHM CORP	IRVINE, CA	US	92713
00779	NICHICON (AMERICA) CORP	SCHAUMBERG, IL	US	60195
00830	KYOCERA INTERNATIONAL INC	SAN DIEGO, CA	US	
00901	UNION CARBIDE CORP	DANBURY, CT	US	06810
01064	SCHAAL BROS INC	BERTHOUD, CO	US	80513
01074	HOLSWORTHY ELECTRONICS LTD	HOLSWORTHY	EG	
01128	RES-NET CORP	WHIPPANY, NJ	US	07981
01131	WESTERN THERMISTOR CORP	OCEANSIDE, CA	US	92054
01136	ELCO INDUSTRIES INC	ROCKFORD, IL	US	61125
01172	R C D COMPONENTS INC	BEDFORD, NH	US	03102
01185	MAGNET WIRE CORP	NEW YORK, NY	US	10013
01230	AEROVOX CORP	NEW BEDFORD, MA	US	02741
01250	GTE SYLVANIA ELEK COMPONENTS GROUP	WALTHAM, MA	US	02154
01339	GETTIG ENGRG & MFG CO INC	SPRING MILLS, PA	US	16875
01380	AMP INC	HARRISBURG, PA	US	17111
01409	CROVEN CRYSTALS	WHITBY	CN	L1N 5
01417	NEL FREQUENCY CONTROLS INC	BURLINGTON, WI	US	53105
01452	SANGAMO WESTON INC	NORCROSS, GA	US	30071
01461	GOE ENGINEERING CO INC	ONTARIO, CA	US	91761
01468	STETTNER & CO	LAUF	GM	D-856
01478	BOYD CORP	PLEASANTON, CA	US	94566
01542	HP DIV 01 SAN JOSE COMPONENTS	SAN JOSE, CA	US	95131
01590	PLESSEY SEMICONDUCTORS	SANTA ANA, CA	US	92705
01607	ALLEN-BRADLEY CO INC	EL PASO, TX	US	79935
01688	MURATA CORPORATION OF AMERICA	MARIETTA, GA	US	30067
01691	TRW INC SEMICONDUCTOR DIV	LAWNDALE, CA	US	90260
01698	TEXAS INSTRUMENTS INC	DALLAS, TX	US	75265
01708	JUBULATION	SANTA CRUZ, CA	US	95060
01736	ALLIED ELECTRONICS CORP	CHICAGO, IL	US	60612
01760	MATSUO ELECTRONICS OF AMERICA	HUNTINGTON BEACH, CA	US	90245
01795	SYNERTEK	SANTA CLARA, CA	US	95051

Table 1-5. Manufacturers Code List (continued)

Mfr Code	Manufacturer Name	Address	Country	ZIP Code
01850	AROMAT CORP	MOUNTAINSIDE, NJ	US	07092
01854	RCL ELECTRONICS INC	NORTHBROOK, IL	US	60062
01869	PULSE ENGINEERING INC	SAN DIEGO, CA	US	92111
01876	HP DIV 02 SCD IC'S	SANTA CLARA, CA	US	95050
01885	HAMILTON STANDARD CONTROLS INC	WINDWOR LOCKS, CT	US	06096
01886	COILCRAFT INC	CARY, IL	US	60013
01887	FERROXCUBE CORP	SAUGERTIES, NY	US	12477
01898	HI-G CO INC	HARTFORD, CT	US	06114
01916	BUNKER RAMO CORP AMPHENOL CONN DIV	BROADVILLE, IL	US	60153
01921	RCA CORP	NEW YORK, NY	US	10112
01923	NYLOGRIP PRODUCTS	WALTHAM, MA	US	02154
01924	ITW FASTEX	DES PLAINES, IL	US	60016
01939	ELPAC INC COMPONENTS DIV	IRVINE, CA	US	92664
01943	HP DIV 04 SPD CABLES 64	PALO ALTO, CA	US	94304
01953	HP DIV 04 SPD MOLDING 91	PALO ALTO, CA	US	94304
01973	GE CO SEMICONDUCTOR PROD DEPT	AUBURN, NY	US	13201
01991	TRANSITRON ELECTRONIC CORP	WAKEFIELD, MA	US	01880
01992	KDI PYROFILM CORP	WHIPPANY, NJ	US	07981
01993	MARKEL CORP	NORRISTOWN, PA	US	19404
02010	AVX CORP	GREAT NECK, NY	US	11021
02030	NATIONAL WIRE & CABLE CO INC	LOS ANGELES, CA	US	90031
02037	MOTOROLA INC	ROSELLE, IL	US	60195
02038	UNICORP	ORANGE, NJ	US	07050
02062	HP DIV 05 MSD	SAN JOSE, CA	US	94304
02086	WESTINGHOUSE ELEC CORP SEMICON DEPT	YOUNGWOOD, PA	US	15697
02091	ULTRONIX INC	GRAND JUNCTION, CO	US	81501
02123	EG & G INC	WELLESLEY, MA	US	02181
02139	MEPCO/ELECTRA INC	MORRISTOWN, NJ	US	07960
02145	RAYCHEM CORP	MENLO PARK, CA	US	94025
02160	PANDUIT CORP	TINLEY PARK, IL	US	60477
02170	AMATOM ELEK HARDWARE DIV OF MITE	NEW ROCHELLE, NY	US	06515
02172	JEFFERS ELECTRONICS INC	NOGALES, AZ	US	85621
02180	PRECISION MONOLITHICS INC	SANTA CLARA, CA	US	95054
02191	CORNING COMPONENTS INC	CORNING, NY	US	14830
02194	ROBINSON NUGENT INC	NEW ALBANY, IN	US	47150
02210	MILTON ROSS CO	SOUTHAMPTON, PA	US	18966
02215	KELVIN ELECTRIC CO	VAN NUYS, CA	US	91401
02236	SILICON TRANSISTOR CORP	CHELMSFORD, MA	US	11530
02237	FAIRCHILD SEMICONDUCTOR CORP	CUPERTINO, CA	US	95014

Table 1-5. Manufacturers Code List (continued)

Mfr Code	Manufacturer Name	Address	Country	ZIP Code
02273	TRW INC BURLINGTON DIV	BURLINGTON, IA	US	52601
02290	RAYTHEON CO SEMICONDUCTOR DIV HQ	MOUNTAIN VIEW, CA	US	94040
02296	HP DIV 08 COLO SPRGS	COLORADO SPRGS, CO	US	80907
02344	GE CO MINIATURE LAMP PROD DEPT	CLEVELAND, OH	US	44112
02362	HP DIV 09 LID COMPONENTS	LOVELAND, CO	US	80537
02363	HP DIV C5 COLORADO IC	FT COLLINS, CO	US	80525
02366	KOA SPEER ELECTRONICS INC	BRADFORD, PA	US	16701
02367	CORNELL-DUBILIER/SANGAMO	WAYNE, NJ	US	07470
02379	TEXAS CAPACITOR CO INC	HOUSTON, TX	US	77036
02392	C & K COMPONENTS INC	NEWTON, MA	US	02158
02408	DIXON INDUSTRIES CORPORATION	BRISTOL, RI	US	02809
02414	BURNDY CORP	NORWALK, CT	US	06856
02415	DALE ELECTRONICS INC	YANKTON, SD	US	57078
02440	THOMPSON BREMER DIV VARE	CHICAGO, IL	US	60622
02465	ANILLO INDUSTRIES INC	ORANGE, CA	US	92667
02483	CTS CORP	ELKHART, IN	US	46514
02484	CTS CORP PASO ROBLES	PASO ROBLES, CA	US	93446
02499	IRC INC	BOONE, NC	US	28607
02501	TELEDYNE INDUSTRIES INC	LOS ANGELES, CA	US	90067
02556	MONTROSE PRODUCTS CO	AUBURN, MA	US	01501
02567	OMTRONICS MFG INC	OMAHA, NE	US	68105
02569	CRYSTALONICS, DIV TELEDYNE	CAMBRIDGE, MA	US	02140
02572	TELEDYNE THERMATICS	ELM CITY, NC	US	27822
02574	RLC ELECTRONICS INS	MT KISCO, NY	US	10549
02577	HAMLIN INC	LAKE MILLS, WI	US	53551
02582	CLAROSTAT MFG CO INC	DOVER, NH	US	03820
02598	UNITRODE CORP	WATERTOWN, MA	US	02172
02603	NATIONAL WIRE & STAMPING INC	ENGLEWOOD, CO	US	80110
02608	THERMALLOY INC	DALLAS, TX	US	75234
02619	SOLITRON DEVICES INC (DIODES)	TAPPAN, NY	US	10983
02634	SPRAGUE ELECTRIC SEMICON DIV	CONCORD, NH	US	03301
02664	SEMTECH CORP	NEWBURY PARK, CA	US	91320
02668	EDISON ELEK DIV MCGRAW-EDISON	MANCHESTER, NH	US	03130
02675	AMERICAN COMPONENTS INC	CONSHOHOCKEN, PA	US	19428
02682	ITT SEMICONDUCTORS DIV	TUSTIN, CA	US	92680
02685	LOBAUGH ROLLIN J	SOUTH SAN FRANC, CA	US	94080
02686	WATKINS-JOHNSON CO	PALO ALTO, CA	US	94304
02688	MICROSEMI CORP	SCOTSDALE, AZ	US	85252
02696	CORNING GLASS WORKS ELEK PROD DIV	CORNING, NY	US	14830

Table 1-5. Manufacturers Code List (continued)

Mfr Code	Manufacturer Name	Address	Country	ZIP Code
02706	WARD LEONARD HAGERSTOWN DIV	HAGERSTOWN, MD	US	21740
02713	GENERAL INSTRUMENT CORP (DIODE)	HICKSVILLE, NY	US	11802
02718	VALOR ELECTRONICS INC	SANTA ANA, CA	US	92705
02734	AMETEK INC RODAN DIV	ANAHEIM, CA	US	92806
02739	MINI-CIRCUITS LAB	BROOKLYN, NY	US	11235
02744	ELEC-TROL INC	SAUGUS, CA	US	91350
02761	FENWAL ELECTRONICS INC	SADDLE BROOK, NJ	US	07662
02763	TELEDYNE SEMICONDUCTOR	MOUNTAIN VIEW, CA	US	94043
02771	ANSLEY ELECTRIC	LOS ANGELES, CA	US	90032
02788	M/A-COM INC	BURLINGTON, MA	US	01803
02798	CORNING ELECTRONICS	RALEIGH, NC	US	27604
02803	CODI SEMICONDUCTOR	LINDEN, NJ	US	07410
02805	COOPER INDUSTRIES INC	HOUSTON, TX	US	77210
02813	U S CAPACITOR CORP	BURBANK, CA	US	91504
02826	DENNISON MFG CO	FRAMINGHAM, MA	US	01701
02856	MOHAWK SPRING CO INC	ARLINGTON HEIGH, IL	US	60008
02865	ALPHA INDUSTRIES INC	WOBURN, MA	US	01801
02877	ANGSTROHM PRECISION INC	VAN NUYS, CA	US	91405
02883	SILICONIX INC	SANTA CLARA, CA	US	95054
02910	SIGNETICS CORP	SUNNYVALE, CA	US	94086
02923	CHOMERICS INC	WOBURN, MA	US	01801
02928	VISHAY INTERTECHNOLOGY INC	MALVERN, PA	US	19355
02937	VOLTRONICS CORP	HANOVER, NJ	US	07936
02946	DUPONT E I DE NEMOURS & CO	WILMINGTON, DE	US	19801
02995	MEPCO/CENTRALAB INC	RIVIERA, FL	US	33404
03038	INTL RECTIFIER CORP	LOS ANGELES, CA	US	90069
03122	EMCON DIV ITW	SAN DIEGO, CA	US	92129
03123	MICRO-OHM CORP	EL TORO, CA	US	92630
03171	SOLITRON DEVICES INC	PALM BEACH, FL	US	33404
03172	TRW MICROWAVE	SUNNYVALE, CA	US	94086
03174	ANZAC ELEK DIV ADAMS-RUSSEL CO INC	WALTHAM, MA	US	02154
03206	DUPONT CONNECTOR SYSTEMS	CAMP HILL, PA	US	17011
03232	PRODUCT COMPONENT CORP	MT VERNON, NY	US	10553
03239	WAVETEK	SAN DIEGO, CA	US	92111
03257	M-TRON INDUSTRIES INC	YANKTON, SD	US	57078
03259	STANFORD APPLIED ENGINEERING	SANTA CLARA, CA	US	95054
03263	ELECTRONIZED CHEMICALS CORP	BURLINGTON, MA	US	01803
03273	GOWANDA ELECTRONICS CORP	GOWANDA, NY	US	14070
03282	GENERAL CABLE CORP	NEW YORK, NY	US	10017

Table 1-5. Manufacturers Code List (continued)

Mfr Code	Manufacturer Name	Address	Country	ZIP Code
03285	ANALOG DEVICES INC	NORWOOD, MA	US	02062
03291	AVANTEK INC	SANTA CLARA, CA	US	95054
03292	CORNING GLASS WORKS	CORNING, NY	US	14830
03297	EMC TECHNOLOGY INC	CHERRY HILL, NJ	US	08034
03316	SPECIALTY CONNECTOR CO	FRANKLIN, IN	US	46131
03317	AEG-TELEFUNKEN CORP	ENGLEWOOD, NJ	US	07632
03334	NV PHILIPS ELCOMA	EINDHOVEN	NE	02876
03352	SWISS AUTOMATICS INC	COLUMBUS, NE	US	68601
03371	USM CORP NYLOK FASTENER DIV	TORRANCE, CA	US	90501
03380	GRIES/DYNACAST CO DIV COATES-CLARK	NEW ROCHELLE, NY	US	10802
03389	VARADYNE INC	SANTA MONICA, CA	US	90404
03394	METHODE ELECTRONICS INC	CHICAGO, IL	US	60656
03395	MEPCO/CENTRALAB INC	WEST PALM BEACH, FL	US	33407
03406	NATIONAL SEMICONDUCTOR CORP	SANTA CLARA, CA	US	95052
03412	CORNING GLASS WORKS (WILMINGTON)	WILMINGTON, NC	US	28401
03418	MOLEX INC	LISLE, IL	US	60532
03428	NONOTUCK MFG CO	HADLEY FALLS, MA	US	01075
03441	F-DYNE ELECTRONICS CO	BRIDGEPORT, CT	US	06605
03521	JOHANSON DIELECTRICS INC	BURBANK, CA	US	91510
03530	STACKPOLE COMPONENT CO	RALEIGH, NC	US	27620
03545	TELEDYNE PHILBRICK NEXUS	DEDHAM, MA	US	02026
03594	CARTER SEMICONDUCTORS	LOWELL, MA	US	01850
03621	M/A-COM CABLEWAVE MINI PROD	BURLINGTON, MA	US	01803
03627	SOLID STATE DEVICES INC	LA MIRADA, CA	US	90638
03647	INSTRUMENT SPECIALTIES CO INC	DEL WATER GAP, PA	US	07424
03651	MEPCO/ELECTRA CORP	SAN DIEGO, CA	US	92121
03658	ALPHA IND MICROELECTRONICS DIVISION	COLMAR, PA	US	18915
03706	WEST-CAP ARIZONA	SAN FERNANDO, CA	US	91340
03714	INTERSIL INC	CUPERTINO, CA	CA	95014
03724	BIVAR INC	SANTA ANA, CA	US	92705
03740	ERIE TECH PROD INC ERIE FREQ CONT	CARLISLE, PA	US	17013
03744	BOURNS INC	RIVERSIDE, CA	US	92507
03746	SPECTRUM CONTROL INC	ERIE, PA	US	16505
03747	COLORADO CRYSTAL CORP	LOVELAND, CO	US	80537
03762	TELE-TECH CORP	BOZEMAN, MT	US	59771
03793	SILICON GENERAL INC	SAN JOSE, CA	US	95134
03794	ADVANCED MICRO DEVICES INC	SUNNYVALE, CA	US	94086
03795	MOTOROLA INC	FRANKLIN PARK, IL	US	60131
03799	HARRIS CORP	MELBOURNE, FL	US	32901

Table 1-5. Manufacturers Code List (continued)

Mfr Code	Manufacturer Name	Address	Country	ZIP Code
03811	INTEL CORP	SANTA CLARA, CA	US	95054
03827	FAIR RITE PRODUCTS CORP	WALLKILL, NY	US	12589
03849	MICROSYSTEMS INTERNATIONAL LTD	OTTAWA	CN	
03910	GENERAL ELECTRIC CO	PHILADELPHIA, PA	US	19124
03923	SIEMENS CORP	ISELIN, NJ	US	08830
03938	MIDLAND-ROSS CORP	CLEVELAND, OH	US	44113
03972	OHMITE MFG CO	SKOKIE, IL	US	60076
03973	HP DIV 45 NMD	SANTA ROSA, CA	US	95401
04068	LABINAL COMPONENTS & SYSTEMS INC	ELK GROVE VILLA, IL	US	60007
04078	SGS-THOMSON MICROELECTRONICS INC	PHOENIX, AZ	US	85022
04092	MONOLITHIC MEMORIES INC	SANTA CLARA, CA	US	95054
04121	SEMICONDUCTOR CIRCUITS INC	HAVERHILL, MA	US	01830
04150	VICLAN INC	SAN DIEGO, CA	US	92138
04169	SANGAMO ELECTRIC CO	SPRINGFIELD, IL	US	62702
04181	AHAM-TOR	RANCHO, CA	US	91702
04182	SHALLCROSS INC	NORTHBROK, IL	US	60062
04200	SPRAGUE ELECTRIC CO	LEXINGTON, MA	US	02173
04204	SPS TECHNOLOGIES	NEWTOWN, PA	US	18940
04213	STIMPSON EDWIN B CO INC	BROOKLYN, NY	US	11705
04225	THOMAS & BETTS CORP	RARITAN, NJ	US	08869
04234	DELBERT BLINN CO	POMONA, CA	US	91766
04261	INSULECTRO CORP	BURLINGAME, CA	US	94010
04314	VLN CORP VICTOREEN INSTRUMENT DIV	CLEVELAND, OH	US	44103
04379	AMETEK INC	PAOLI, PA	US	19301
04393	CENTRE ENGINEERING INC	STATE COLLEGE, PA	US	16801
04418	ALLEN MFG CO	HARTFORD, CT	US	06101
04423	G.E. CERAMICS, INC.	CHATTANOOGA, TN	US	37405
04458	BLILEY ELECTRIC CO	ERIE, PA	US	16508
04464	BRAND REX CO	WILLIMANTIC, CT	US	06226
04475	CAMBRIDGE THERMIONIC CORP	CAMBRIDGE, MA	US	02138
04486	ITT CORP	NEW YORK, NY	US	10022
04492	CENTRALAB INC	MILWAUKEE, WI	US	53209
04504	GENERAL INSTRUMENT CORP	CLIFTON, NJ	US	07012
04507	TRW INC	CLEVELAND, OH	US	44124
04514	DOW CORNING CORP	MIDLAND, MI	US	48641
04522	ELECTRO MOTIVE CORP	FLORENCE, SC	US	06226
04550	GENERAL ELECTRIC CO	FAIRFIELD, CT	US	06430
04563	ERIE TECHNOLOGICAL PRODUCTS INC	ERIE, PA	US	16512
04564	ESSEX INTERNATIONAL INC	FORT WAYNE, IN	US	46804

Table 1-5. Manufacturers Code List (continued)

Mfr Code	Manufacturer Name	Address	Country	ZIP Code
04567	ITT HARPER DIV	CHICAGO, IL	US	60606
04568	BECKMAN INDUSTRIAL CORP	FULLERTON, CA	US	92635
04581	BARWOOD MFG CORP	EVERETT, MA	US	02149
04605	FISCHER SPECIAL MFG CO	CINCINNATI, OH	US	45206
04615	J F D ELECTRONICS CORP	BROOKLYN, NY	US	11219
04645	SIGNALITE DIV GENERAL INST CORP	NEPTUNE, NJ	US	07753
04648	PIEZO CRYSTAL CO	CARLSILE, PA	US	17013
04670	EF JOHNSON CO	WASECA, MN	US	56093
04672	TRW INC PHILADELPHIA DIV	PHILADELPHIA, PA	US	19108
04703	LITTELFUSE INC	DES PLAINES, IL	US	60016
04719	MARWEDEL C W	SAN FRANCISCO, CA	US	94103
04726	3M CO	ST PAUL, MN	US	55144
04733	BELL INDUSTRIES INC MILLER JW DIV	COMPTON, CA	US	90224
04757	OAK SWITCH SYSTEMS INC	CRYSTAL LAKE, IL	US	60014
04776	POTTER & BRUMFIELD INC	PRINCETON, IN	US	47671
04805	ILLINOIS TOOL WORKS INC SHAKEPROOF	ELGIN, IL	US	60126
04821	TILLEY MFG CO	MORGAN HILL, CA	US	94070
04822	STACKPOLE CARBON CO	ST MARYS, PA	US	15857
04828	TINNERMAN PRODUCTS INC	CLEVELAND, OH	US	44101
04830	STEWART STAMPING CORP	YONKERS, NY	US	10704
04853	VARFLEX CORP	ROME, NY	US	13440
04880	ZIERICK MFG CO	MT KISCO, NY	US	10549
04935	MEPCO ELECTRA CORP	MORRISTOWN, NJ	US	07960
04939	SCHNITZER ALLOY PRODUCTS CO	ELIZABETH, NJ	US	07206
04977	ITT CORP COMPONENTS DIV	NEW YORK, NY	US	10022
04990	GRAYHILL INC	LA GRANGE, IL	US	60525
05016	MONITOR PRODUCTS CO INC	OCEANSIDE, CA	US	92054
05065	TEXAS INSTRUMENTS INC	ATTLEBORO, MA	US	02703
05088	VARO INC	GARLAND, TX	US	75046
05098	VICTORY ENGINEERING CORP	SPRINGFIELD, NJ	US	07081
05108	KULKA-SMITH INC	MANASQUAN, NJ	US	08736
05131	ELECTRONIC DEVICES INC	YONKERS, NY	US	10710
05160	VRN INTERNATIONAL	ST PETERSBURG, FL	US	33710
05176	AMERICAN SHIZUKI CORP	CANOGA PARK, CA	US	91304
05232	BRADY W H CO	MILWAUKEE, WI	US	53209
05293	PRECISION METAL PRODUCT CO	STONEHAM, MA	US	02180
05347	UNIMICA	NEW YORK, NY	US	10013
05350	WILMINGTON FIBRE SPECIALTY CO	NEW CASTLE, DE	US	19720
05364	LITTON PRECISION PROD INC	VAN NUYS, CA	US	91409

Table 1-5. Manufacturers Code List (continued)

Mfr Code	Manufacturer Name	Address	Country	ZIP Code
05368	FCP INC	OLATHE, KS	US	66062
05400	REESE J RAMSEY INC	NEW YORK, NY	US	10007
05436	BURR-BROWN CORP	TUCSON, AZ	US	85706
05447	BERGQUIST CO	MINNEAPOLIS, MN	US	55420
05453	ICO-RALLY CORP	SUNNYVALE, CA	US	94303
05461	ITT HARPER INC	MORTON GROVE, IL	US	60053
05466	EMHART CORP	FARMINGTON, CT	US	06032
05507	MILLER DIAL & NAMEPLATE CO	EL MONTE, CA	US	91734
05518	AUGAT INC	MANSFIELD, MA	US	02048
05524	DALE ELECTRONICS INC	COLUMBUS, NE	US	68601
05535	KEYSTONE ELECTRONICS CORP	NEW YORK, NY	US	10012
05545	NATIONAL TEL TRONICS CORP	YONKERS, NY	US	10701
05559	ALPHA WIRE CORP	ELIZABETH, NJ	US	07207
05568	JACOBSON MFG CO INC	KENILWORTH, NJ	US	07033
05589	UNIFORM TUBES	COLLEGEVILLE, PA	US	19426
05623	CAMDEN WIRE CO INC	CAMDEN, NY	US	13316
05630	WESTON COMPONENTS	ARCHBALD, PA	US	18403
05648	MAGNECRAFT ELECTRIC CO	CHICAGO, IL	US	60630
05661	ALCO ELECTRONIC PRODUCTS INC	NORTH ANDOVER, MA	US	01845
05668	VITRAMON INC	MONROE, CT	US	06468
05683	WECKESSER CO INC	CHICAGO, IL	US	60641
05704	SAN FERNANDO ELECTRIC MFG CO	SAN FERNANDO, CA	US	91341
05742	P C A ELECTRONICS INC	SEPULVEDA, CA	US	91343
05768	MALCO-A MICRODOT CO	PASADENA, CA	US	91030
05769	ITT SEAELECTRO CORP	TRUMBULL, CT	US	06611
05792	INTL ELECTRONIC RESEARCH CORP	BURBANK, CA	US	91502
05809	MARSHALL IND CAPACITOR DIV	MONROVIA, CA	US	91016
05826	AMER PRCN IND INC DELEVAN DIV	AURORA, NY	US	14052
05879	AMPHENOL CORPORATION	DANBURY, CT	US	06810
05917	RIFA AB	STOCKHOLM	SW	S-163
05943	TEXAS INSTRUMENTS DEUTSCHLAND GMBH	FREISING	GM	8050
05946	VALVO GMBH	HAMBURG	GM	2000
05951	WICKMANN-WERKE A G	WITTEN-ANNEN	GM	5870
05959	MARQUARDT GMBH	RIETHEIM	GM	D-720
05967	VTM A/S	GLOSTRUP	DK	2080
05982	CELDUC CONSTR ELECTRIQUES DU CENTRE	SORBIERS	FR	42
05985	SESCOSEM	SAINT EGREVE	FR	75781
05992	EFCO COMPOSANTS	NANTERRE	FR	
05993	CORNING GLASS EUROPE SOVCOR	LE VESINET	FR	

Table 1-5. Manufacturers Code List (continued)

Mfr Code	Manufacturer Name	Address	Country	ZIP Code
06003	SESCOSEM (63)	PARIS	FR	75781
06032	STC/STANTEL	DEVON	EG	
06039	SEAELECTRO LTD	PORTSMOUTH	EG	
06058	BOURNS TRIMPOT LTD	MIDDLESEX	EG	
06118	ROEDERSTEIN/RESISTA GMBH	LANDSHUT	GM	8300
06121	SIEMENS AG	MUNICH	GM	8000
06127	WIMA	MANNHEIM	GM	6800
06252	AB ELEKTRONIK GMBH	SALZBURG	AU	A-501
06328	SCHURTER AG	LUZERN	SW	CH-60
06330	CONDENSATEURS FRIBOURG S A	FRIBOURG	SW	
06337	PHILLIPS GLOEILAMPENFABRIEKEN N V	EINDHOVEN	HL	
06344	FUJITSU MICROELECTRONICS INC	SANTA CLARA, CA	US	95054
06347	HITACHI AMERICA LTD	SUNNYVALE, CA	US	94086
06352	TDK CORPORATION OF AMERICA	SKOKIE, IL	US	60076
06354	TOSHIBA CORP	TOKYO	JP	
06424	E-SIL COMPONENTS LTD	SUNDERLAND	EG	SR4 6
06501	BARBER & COLEMAN LTD	SALE CHES	EG	
06563	SIEMENS CORP COMPONENTS GROUP	SCOTTSDALE, AZ	US	85252
06650	AEG-TELEFUNKEN	HEILBRONN	GM	7100
06665	SAMTEC	NEW ALBANY, IN	US	47150
06784	MIDWEST COMPONENTS	MUSKEGON, MI	US	49443
06857	TRAK MICROWAVE CORP	TAMPA, FL	US	33614
06860	HUBER & SUHNER AG	HERISAU	SW	
06900	JUDD WIRE	BURLINGTON, MA	US	01803
06916	SONY CORP	TOYKO	JP	141
06951	TRW RESISTIVE PRODUCTS DIV	CORPUS CHRISTI, TX	US	78411
07041	R.A.F. ELECTRONIC HARDWARE INC	STRATFORD, CT	US	06497
07050	MICRO POWER SYSTEMS	SANTA CLARA, CA	US	95050
07158	EATON CORP	CLEVELAND, OH	US	44144
07179	AAVID ENGINEERING INC	LACONIA, NH	US	03247
07221	SUPERTEX INC	SUNNYVALE, CA	US	94086
07284	PAKTRON DIV ITW	VIENNA, VA	US	22180
07338	J K L COMPONENTS CORP	LOS ANGELES, CA	US	90064
07379	SAN-O INDUSTRIAL CORP	BOHEMIA LI, NY	US	11716
07398	BEL FUSE INC	JERSEY CITY, NJ	US	07302
07477	AMERICAN OIL & SUPPLY CO	NEWARK, NJ	US	07105
07766	LA RADIOTECHNIQUE COMPELEC	VILLEVRBANNE	FR	
07798	REMTEK CORP	SUNNYVALE, CA	US	
08097	SPRAGUE-GOODMAN ELECTRONICS	NEW HYDE PARK, NY	US	11040

Table 1-5. Manufacturers Code List (continued)

Mfr Code	Manufacturer Name	Address	Country	ZIP Code
08113	KAHGAN ELECTRONICS CORP	HEMPSTEAD, NY	US	11550
08123	COIL-Q CORP	BRONXVILLE, NY	US	
08259	DALE ELECTRONICS INC	TEMPE, AZ	US	85252
08261	STAR MICRONICS INC	NEW YORK, NY	US	
08335	SOURIAU INC	SAUGUS, CA	US	95203
08369	FILECA	STE GENEVIEVE	FR	
08560	OXLEY DEV LTD	CUMBRIA	EG	
08666	PANEL COMPONENTS CORP	SANTA ROSA, CA	US	
08709	PANASONIC INDUSTRIAL CO	SECAUCUS, NJ	US	07094
08778	MADISON CABLE CORP	WORCHESTER, MA	US	01603
08779	MINITUBISHI ELECTRONICS AMERICA	SUNNYVALE, CA	US	94086
08781	CATALYST RESEARCH CORP	BALTIMORE, MD	US	
08810	ROCKWELL INTERNATIONAL	ANAHEIM, CA	US	
08838	AND (ALPHA NUMERIC DISPLAYS)	BURLINGAME, CA	US	
08852	METELICS CORP	SUNNYVALE, CA	US	
09043	GLOW-LITE DIV OF DUTCH BOY	PAULS VALLEY, OK	US	
09050	XENELL	WYNNEWOOD, OK	US	
09126	ASJ PTE LTD	JURONG TOWN	SG	
09171	RHOMBUS INDUSTRIES INC	HUNTINGTON BEACH, CA	US	92649
09226	NEC ELECTRONICS INC	SANTA CLARA, CA	US	
09235	FOX ELECTRONICS	FT MEYERS, FL	US	33910
09283	TOPAZ SEMICONDUCTOR	SAN JOSE, CA	US	95132
09441	APPLIED ENGINEERING PRODUCT CO	HAMDEN, CT	US	
09448	WAMCO INC	FOUNTAIN VALLEY, CA	US	
09454	PRECISION RESISTIVE PRODS INC	MEDIAPOLIS, IA	US	52637
09507	HP DIV 53 SAD	ROHNERT PARK, CA	US	94928
09538	TUSONIX	TUCSON, AZ	US	85740
09694	ELECTRONIC ESSENTIALS	WOODSIDE, NY	US	
09849	NDK AMERICA INC	CUPERTINO, CA	US	54014
09855	KOWASANGYO CORP	TOKYO	JP	
09859	CERA-MITE CORP	GRAFTON, WI	US	53024
09862	HITACHI CABLE LTD	TOKYO	JP	
09914	UNITRODE CORP	LEXINGTON, MA	US	
09939	MURATA ERIE NORTH AMERICA INC	SMYRNA, GA	US	30080
09955	BOYD CORP	DENVER, CO	US	
10183	TADIRAN	TEL-AVIV	IS	
10200	ELECTRONIC CONCEPTS INC	EATONTOWN, NJ	US	
10290	COMMODORE SEMICONDUCTOR GROUP	NORRISTOWN, PA	US	
10302	CENTENNIAL PLASTICS	YELLVILLE, AR	US	

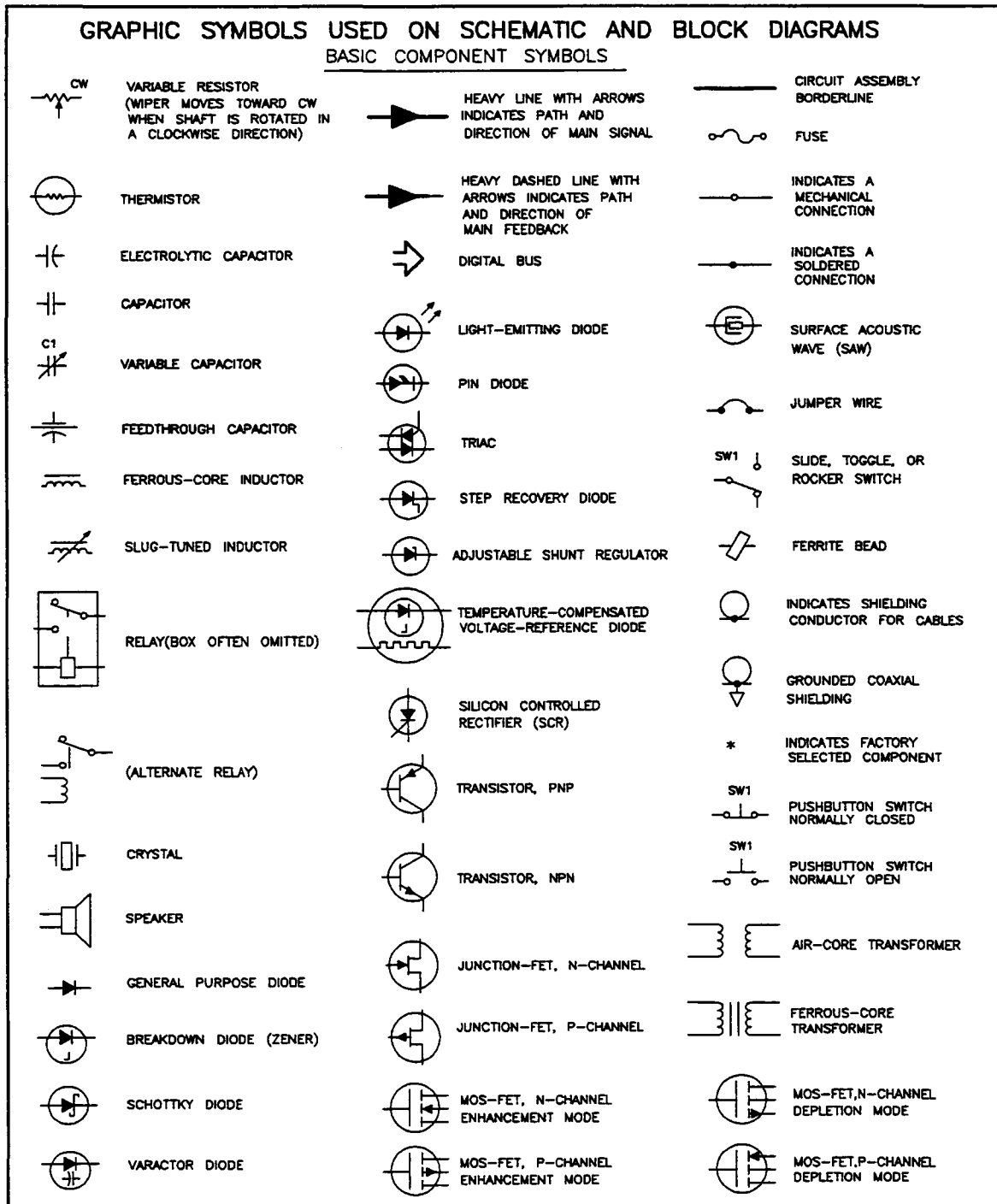
Table 1-5. Manufacturers Code List (continued)

Mfr Code	Manufacturer Name	Address	Country	ZIP Code
10358	VOGT AG	LOSTORF	GM	
10401	NEW SYSTEMS MOLDING CORP	LOVELAND, CO	US	80537
10407	LSI LOGIC CORP	MILPITAS, CA	US	95035
10421	EPSON	TORRENCE, CA	US	
10443	HP DIV 64 NID	CORVALLIS, OR	US	
10456	PLASTEC PRODUCTS INC	FORT COLLINS, CO	US	-
10457	JERMYN INDUSTRIES LTD (63)	KENT SEVENOAKS	EG	
10481	DALE ELECTRONICS INC	NORFOLK, NE	US	68701
10549	SCI MANUFACTURING INC	HUNTSVILLE, AL	US	35805
10572	XICOR, INC	MILPITAS, CA	US	
10631	GASKET SPECIALTIES	BRISBANE, CA	US	
10784	SHINNITOKU ELECTRIC CO LTD	MINATO-KU TOKYO	JP	145
10795	STANDEX - PAUL SMITH DIVISION	CINCINNATI, OH	US	
10858	LINEAR TECHNOLOGY CORP	MILPITAS, CA	US	95035
10881	THOMSON-CSF	COURBEVOIE	FR	
10905	FIRA	LYON	FR	
11047	TEKA PRODUCTS INC	WOODSIDE, NY	US	
11111	SEEQ TECHNOLOGY INC	SAN JOSE, CA	US	
11171	SYNERGY MICROWAVE CORP	FAIRFIELD, NJ	US	
11187	VLSI TECHNOLOGY INC	SAN JOSE, CA	US	95131
11212	INDUCTOR SUPPLY, INC.	HUNTINGTON BEACH, CA	US	
11248	MICRON DIV OF R G ALLEN CO INC	NORTH HOLLYWOOD, CA	US	
11263	W GUNTHER GMBH	NURNBERG	GM	
11298	AVEL-LINDBURG	DANBURY	CT	
11345	CYPRESS SEMICONDUCTOR CORP	SAN JOSE, CA	US	95134
11357	BRISTOL ROYAL WORKSHOP BLIND	BRISTOL	EG	
11412	ISOLANTITE MFG COMPANY INC	STIRLING, NJ	US	
11421	KYOCERA CORPORATION	KYOTO	JP	
11599	MICRO-COAX COMPONENTS, INC	COLLEGEVILLE, PA	US	19426
11677	SARONIX	PALO ALTO, CA	US	
11684	JOSLYN DEFENSE SYSTEMS INC	BURLINGTON, VT	US	05401
11686	KYUSHU DENTSU CO LTD	NAGASAKI	JP	
11699	CENTRAL SEMICONDUCTOR CORP	HAUPPAUGE, NY	US	11788
11703	POWER GENERAL	CANTON, MA	US	
11708	THOMSON SEMICONDUCTORS	VELIZY VILLACOU	FR	78140
11723	CTL COMPONENTS LTD	LONDON	EG	SW19
11781	MIDLAND-ROSS CORP	LIVINGSTON, NJ	US	07039
11844	ELECTREY S A	MONTERREY	MX	64000
11892	EVOX/RIFA INC	LINCOLNSHIRE, IL	US	60015

Table 1-5. Manufacturers Code List (continued)

Mfr Code	Manufacturer Name	Address	Country	ZIP Code
11920	MIYAMA DENSEN CO LTD	TOKYO	JP	
11946	BKC INTERNATIONAL ELECTRONICS	LAWRENCE, MA	US	01841
11961	ALEXCO ENGINEERING SUPPLIES	COWDENBEATH	EG	KY4 9
11981	POWEREX	YOUNGWOOD, PA	US	15697
12125	SAMSUNG SEMICONDUCTOR INC	SANTA CLARA, CA	US	95054
12127	RF MONOLITHICS INC	DALLAS, TX	US	75234
12131	PRESIDIO COMPONENTS INC	SAN DIEGO, CA	US	92121
12186	DALLAS SEMICONDUCTOR CORP	DALLAS, TX	US	75244
12213	STACKPOLE ELECTRONICS INC	RALEIGH, NC	US	27620
12261	ERIE SPECIALTY PRODUCTS INC	ERIE, PA	US	16512
12340	KEMET ELECTRONICS CORPORATION	GREENVILLE, SC	US	29606
12355	INTERCONNECTION PRODUCTS INC	SANTA ANA, CA	US	92707
12382	LATTICE SEMICONDUCTOR CORP	BEAVERTON, OR	US	97006
12395	FEI MICROWAVE, INC.	SUNNYVALE, CA	US	94086
12418	OWL WIRE AND CABLE	CANASTATA, NY	US	13032
12456	WIRE PRO INC	SALEM, NJ	US	08079
12465	INTERNATIONAL POWER DEVICES	BRIGHTON, MA	US	02135
12473	AVX-RALEIGH DIVISION	RALEIGH, NC	US	27604
12482	BRADFORD ELECTRONICS INC	BRADFORD, PA	US	16701
12513	BUNNELL PLASTICS, INC	MICKLETON, NJ	US	08056
12516	MICROTRONICS ASSOCIATES PTE LTD	SINGAPORE	SG	1334
12580	SOUTH AMERICAN DEVELOPMENT CO	HYDE PARK, NY	US	12538
12656	BEYSCHLAG GMBH	HEIDE	GM	
12703	CHAMPION TECHNOLOGIES INC	FRANKLIN PARK, IL	US	60131
12830	KETEMA	BENSALEM, PA	US	19020
12845	WARTH INTERNATIONAL LTD	EAST GRINSTEAD	EG	RH192
12896	DOWKEY MICROWAVE INC	VENTURA, CA	US	93003

Graphics Symbols



symbols1

Figure 1-1. Graphic Symbols (1 of 2)

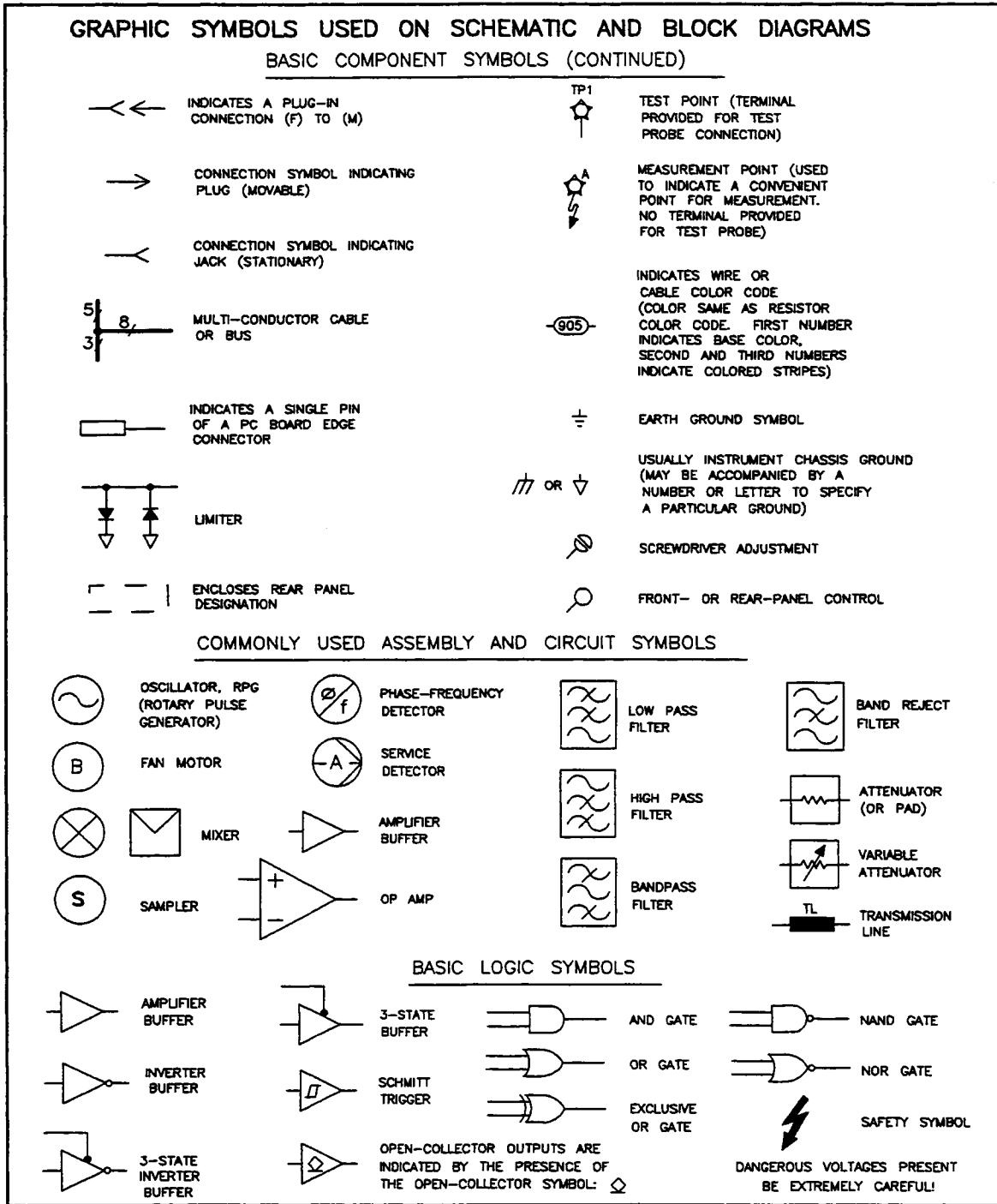


Figure 1-2. Graphic Symbols (2 of 2)

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Component-Level Information Packet

for 70004-60001

A1A1 Keyboard



HP Part No. 70004-90024
Printed in USA May 1994

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1400 Fountaingrove Parkway, Santa Rosa, CA 95403-1799, USA

**HP Part Number 70004-60001
A1A1 Keyboard**

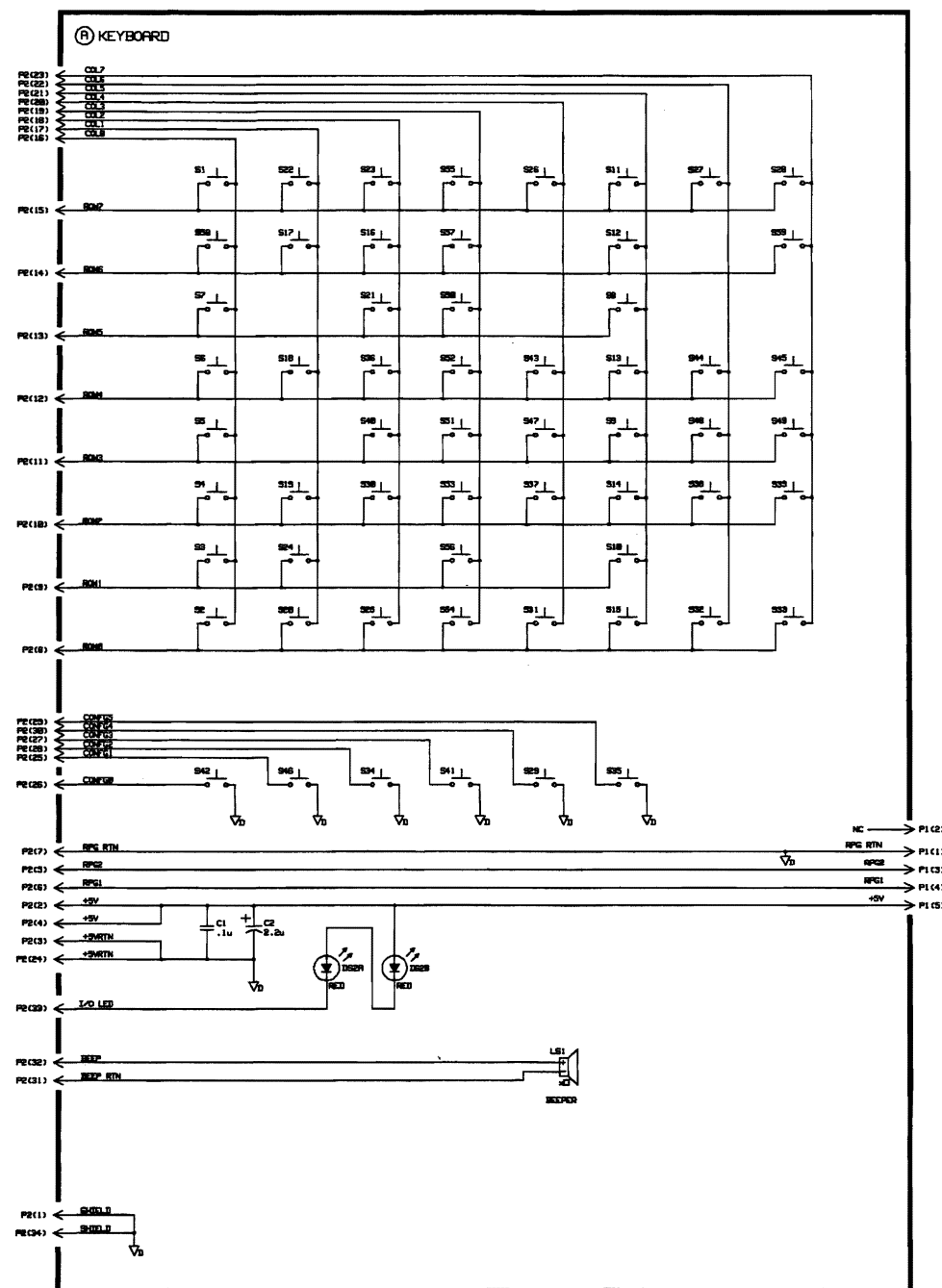
Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C1	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C2	0180-4130	1	CAP-FXD 2.2uF +10% 20 V TA	28480	0180-4130
DS2	1990-0696	1	LED-LIGHT BAR LUM-INT=4.5MCD IF=30MA-MAX	28480	1990-0696
LS1	0960-0561	1	AUDIO TRANSDUCER 1-3VDC; 80DB AT 10CM	08261	QMB-01-S.P.
P1	1251-7497	1	CONN-POST TYPE .100-PIN-SPCG 4-CONT	28480	1251-7497
P2	1251-8683	1	CONN-POST TYPE .100-PIN-SPCG 34-CONT	28480	1251-8683

**Indicates factory-selected value*

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ITEM	QTY.	PART/MATERIAL-DESCRIPTION	MAT'L-PART NO.	MAT'L-DMG. NO.	MAT'L-SPEC.
DRWN BY		DATE	BOARD ASSEMBLY- KEYBOARD		
ENGINEER/CHECKER			TITLE (SCHEMATIC)		
RELEASE TO PROD.			PART NUMBER 70004-60001		
SUPersedes DMG.			SCALE NONE FILED 000000 SHEET 1 OF 1 D-70004-60001-1		

Component-Level Information Packet

for 70004-60005

A2 Interface



**HP Part No. 70004-90025
Printed in USA May 1994**

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HP Part Number 70004-60005
A2 Interface

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C1	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C2	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C3	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C4	0180-4136	1	CAP-FXD 10uF +10% 20 V TA	28480	0180-4136
C5	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C6	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C7	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C8	0180-2618	1	CAP-FXD 33uF +10% 10 V TA	01760	202L1002-336-K0-552
C9	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C10	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C11	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C12	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C13	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C14	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C15	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C16	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C17	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C18	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C19	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C20	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C21	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C22	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C23	0160-4491	1	CAP-FXD 8.2pF +6.1% 200 V CER C0G	09939	RPE121-105C0G8R2D200V
C24	0160-4491	1	CAP-FXD 8.2pF +6.1% 200 V CER C0G	09939	RPE121-105C0G8R2D200V
C25	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C26	0160-4617	1	CAP-FXD 180pF +5% 200 V CER C0G	09939	RPE121-105C0G181J200V
C27	0160-4386	1	CAP-FXD 33pF +5% 200 V CER C0G	09939	RPE121-105C0G330J200V
C28	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	09939	RPA10C0G8R2D100
C29	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	09939	RPA10C0G8R2D100
C31	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	09939	RPA10C0G8R2D100
C32	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	09939	RPA10C0G8R2D100
CR1	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR2	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR3	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR4	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050

*Indicates factory-selected value

CLIP 70004-90025 1

**HP Part Number 70004-60005
A2 Interface (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
CR5	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR6	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR7	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
DS1	1990-0485	1	LED-LAMP LUM-INT=2MCD IF=30MA-MAX BVR=5V	28480	1990-0485
J1	1251-8995	1	CONN-RECT D-SUBMIN 37-CKT 37-CONT	01380	747375-2
J2	1252-0057	1	CONN-RECT D-SUBMIN 37-CKT 37-CONT	01380	747481-2
J11	1252-2980	1	CONN-POST TYPE .100-PIN-SPCG 50-CONT	03206	68779-650
L1	9100-2261	1	INDUCTOR RF-CH-MLD 2.7UH +10%	05826	1025-30
L2	9100-2261	1	INDUCTOR RF-CH-MLD 2.7UH +10%	05826	1025-30
L3	9100-2261	1	INDUCTOR RF-CH-MLD 2.7UH +10%	05826	1025-30
L4	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L5	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L6	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L7	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L8	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L9	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
Q1	1853-0281	1	TRANSISTOR PNP 2N2907A SI TO-18 PD=400MW	28480	1853-0281
Q2	1855-0278	1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE	28480	1855-0278
Q3	1855-0278	1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE	28480	1855-0278
Q4	1855-0278	1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE	28480	1855-0278
R1	0698-7239	1	RESISTOR 1.33K +1% .05W TF TC=0+-100	05524	CMF-50-2
R2	0698-7240	1	RESISTOR 1.47K +1% .05W TF TC=0+-100	05524	CMF-50-2
R3	0698-7279	1	RESISTOR 61.9K +1% .05W TF TC=0+-100	05524	CMF-50-2
R4	0698-7238	1	RESISTOR 1.21K +1% .05W TF TC=0+-100	05524	CMF-50-2
R5	0698-7279	1	RESISTOR 61.9K +1% .05W TF TC=0+-100	05524	CMF-50-2
R6	0698-7239	1	RESISTOR 1.33K +1% .05W TF TC=0+-100	05524	CMF-50-2
R7	0698-7244	1	RESISTOR 2.15K +1% .05W TF TC=0+-100	05524	CMF-50-2
R8	0698-7260	1	RESISTOR 10K +1% .05W TF TC=0+-100	05524	CMF-50-2
R9	0698-7228	1	RESISTOR 464 +1% .05W TF TC=0+-100	05524	CMF-50-2
R10	0698-7219	1	RESISTOR 196 +1% .05W TF TC=0+-100	05524	CMF-50-2
R11	0698-7260	1	RESISTOR 10K +1% .05W TF TC=0+-100	05524	CMF-50-2
R12	0698-7228	1	RESISTOR 464 +1% .05W TF TC=0+-100	05524	CMF-50-2
R13	0698-7238	1	RESISTOR 1.21K +1% .05W TF TC=0+-100	05524	CMF-50-2
R14	0698-7238	1	RESISTOR 1.21K +1% .05W TF TC=0+-100	05524	CMF-50-2
R15	0698-8866	1	RESISTOR 4.1K +0.1% .125W TF TC=0+-25	05524	CMF-55-1

HP Part Number 70004-60005
A2 Interface (continued)

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R16	0698-6631	1	RESISTOR 2.5K +0.1% .125W TF TC=0+25	05524	CMF-55-1, T-9
R17	0698-7272	1	RESISTOR 31.6K +1% .05W TF TC=0+100	05524	CMF-50-2
R18	0699-0127	1	RESISTOR 464K +1% .05W TF TC=0+100	02499	RG-1/8-T050
R19	0698-7223	1	RESISTOR 287 +1% .05W TF TC=0+100	05524	CMF-50-2
R20	0698-7245	1	RESISTOR 2.37K +1% .05W TF TC=0+100	05524	CMF-50-2
R21	0698-7238	1	RESISTOR 1.21K +1% .05W TF TC=0+100	05524	CMF-50-2
R22	0698-7245	1	RESISTOR 2.37K +1% .05W TF TC=0+100	05524	CMF-50-2
R23	0698-7238	1	RESISTOR 1.21K +1% .05W TF TC=0+100	05524	CMF-50-2
U1	1820-3009	1	IC-ASIC GT-ARY 880 GATES CMOS 5220	10407	LSI5080
U2	70001-80032	1	IC ARGMD C PAL	28480	70001-80032
U3	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U4	1820-1568	1	IC DRVR TTL/LS BUS QUAD	28480	1820-1568
U5	1826-0544	1	IC V RGLTR-V-REF-FXD 2.5V 8-DIP-C PKG	28480	1826-0544
U6	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U7	1820-3426	1	IC TRANSCEIVER TTL/S BUS 9-BIT	28480	1820-3426
U8	1810-0275	1	NETWORK-RES 10-SIP 1.0K OHM X 9	06252	750-101
U9	1826-0412	1	IC COMPARATOR PRCN DUAL 8 PIN DIP-P	28480	1826-0412
U10	1820-2922	1	IC GATE CMOS/HC NAND QUAD 2-INP	28480	1820-2922
U11	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U12	1810-0275	1	NETWORK-RES 10-SIP 1.0K OHM X 9	06252	750-101
U14	1820-8730	1	IC-ASIC GT-ARY 2.01K GATES CMOS 5220	10407	LSI5220
U15	1820-2921	1	IC INV CMOS/HC HEX	28480	1820-2921
U16	1820-2144	1	IC-INTERFACE RCVR BIPOLAR LINE QUAD	28480	1820-2144
U17	1820-2144	1	IC-INTERFACE RCVR BIPOLAR LINE QUAD	28480	1820-2144
U18	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U19	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U20	1810-0573	1	NETWORK-RES 14-DIP 100.0 OHM X 7	02483	760-3-R100
U21	1820-2144	1	IC-INTERFACE RCVR BIPOLAR LINE QUAD	28480	1820-2144
U22	1820-2144	1	IC-INTERFACE RCVR BIPOLAR LINE QUAD	28480	1820-2144
U23	1810-0450	1	NETWORK-RES 14-DIP 47.0 OHM X 7	02483	760-3-R47
U24	1810-0573	1	NETWORK-RES 14-DIP 100.0 OHM X 7	02483	760-3-R100
U25	1810-0450	1	NETWORK-RES 14-DIP 47.0 OHM X 7	02483	760-3-R47
U26	1820-2145	1	IC-INTERFACE DRVR BIPOLAR LINE QUAD	28480	1820-2145
U27	1810-0450	1	NETWORK-RES 14-DIP 47.0 OHM X 7	02483	760-3-R47
U28	1820-2145	1	IC-INTERFACE DRVR BIPOLAR LINE QUAD	28480	1820-2145

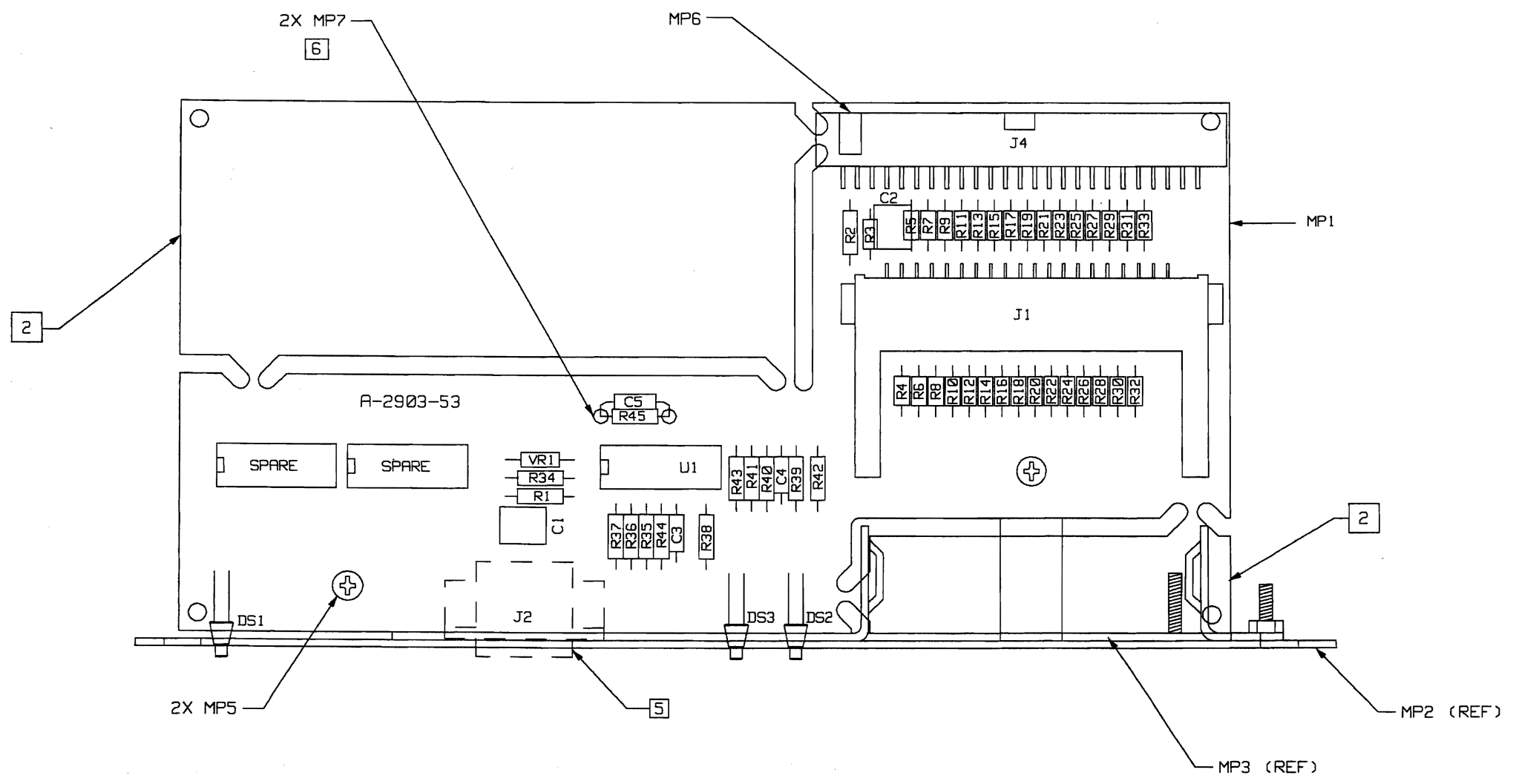
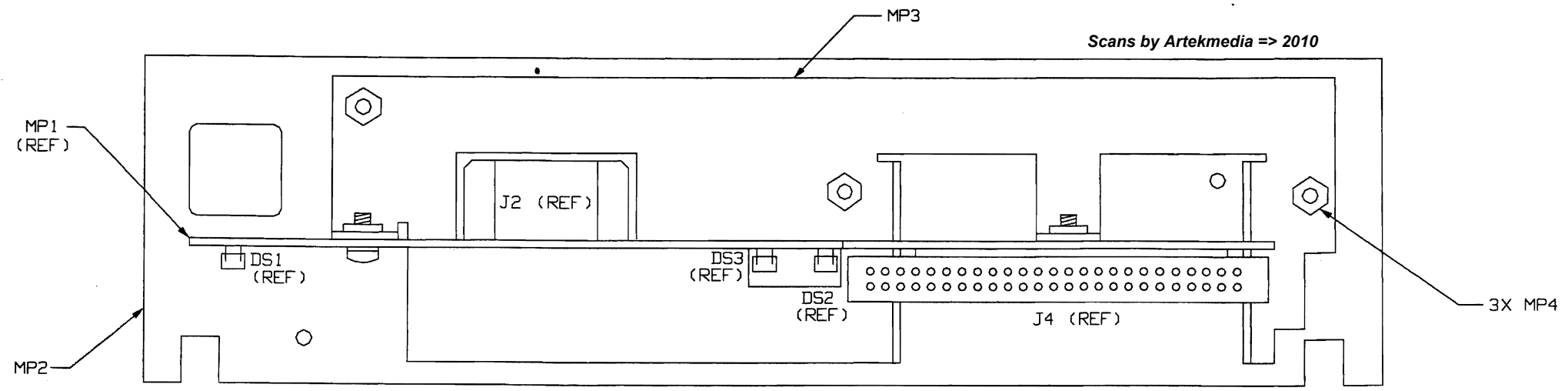
*Indicates factory-selected value

CLIP 70004-90025 3

**HP Part Number 70004-60005
A2 Interface (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U29	1820-2145	1	IC-INTERFACE DRVR BIPOLAR LINE QUAD	28480	1820-2145
U30	1810-0450	1	NETWORK-RES 14-DIP 47.0 OHM X 7	02483	760-3-R47
U31	1820-2145	1	IC-INTERFACE DRVR BIPOLAR LINE QUAD	28480	1820-2145
U32	1826-1543	1	IC OP AMP HS DUAL 8 PIN DIP-C	28480	1826-1543
W1	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W2	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
Y1	0410-1849	1	CRYSTAL-QUARTZ 6.200 MHZ HC-49/U-HLDR	02483	R1235-6BC-6.2MHZ

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A	AS ISSUED		



NOTES: UNLESS OTHERWISE SPECIFIED

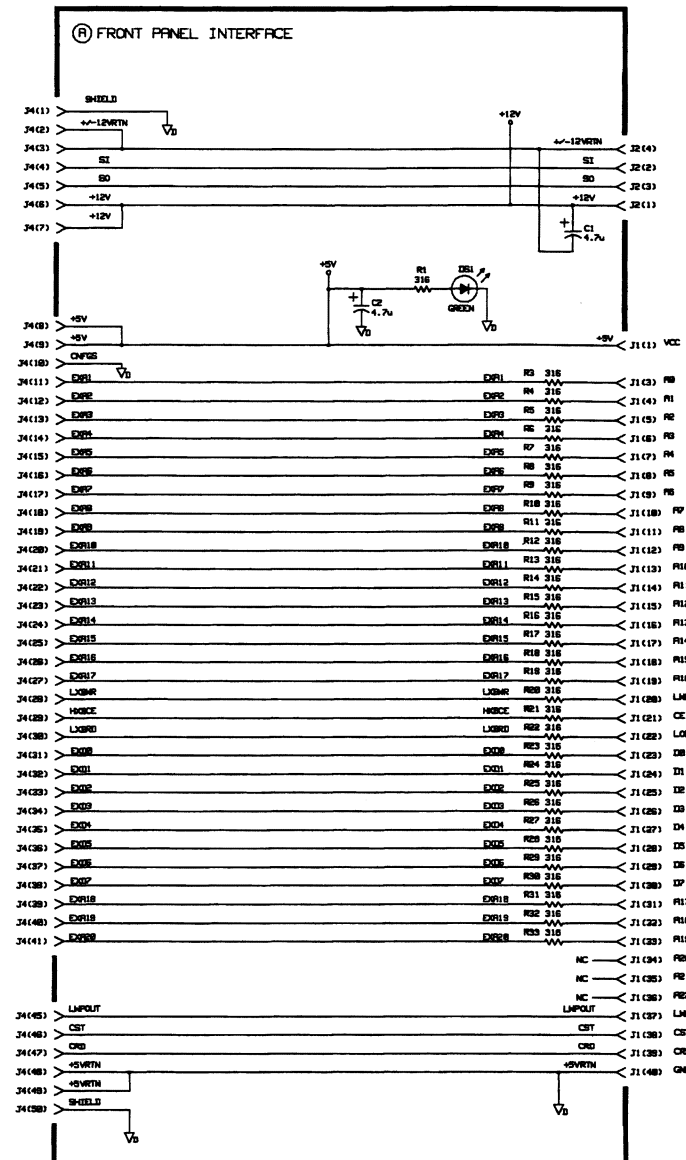
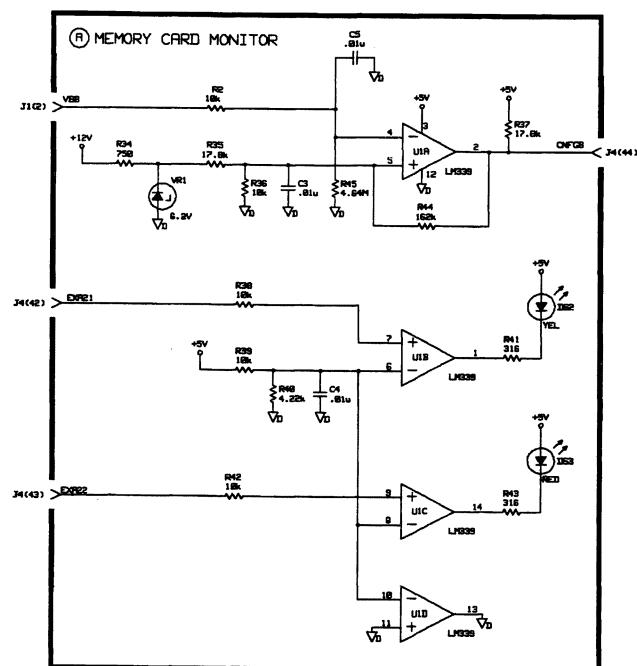
- 1. DIMENSIONS ARE IN INCHES.
- 2 REMOVE TABS AFTER WAVE SOLDER.
- 3. MAXIMUM COMPONENT HEIGHT .500.
- 4. MAXIMUM LEAD TRIM LENGTH .118.
- 5 INSTALL J2 ON SOLDER SIDE OF BOARD.
- 6 WRAP R45 AND C5 ON TERMINALS (MP7).

SEE 70004-60005 MATERIAL LIST

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UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.	DESIGN BY	DATE	BOARD ASSEMBLY FRONT PANEL INTERFACE	HEWLETT PACKARD PART NUMBER 70004-60005
	TOLERANCES: XX.XXX ±.015	ENGINEER/CHECKER		
SEE CORP. STD. 688	RELEASED TO PROD.		NONE	1 1
	SUPERSEDES DWG.		SCALE	SHEET OF

SYM	REVISIONS	APPROVED	DATE
A	AS ISSUED		



HP HIL EXTERNAL JACK

BIAS INDICATOR LED

MEMORY CARD SOCKET

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ITEM	QTY.	PART/MATERIAL-DESCRIPTION	PART'L-PART NO.	PART'L-DMG. NO.	PART'L-SPEC.
		BOARD ASSEMBLY-FRONT PANEL INTERFACE (SCHEMATIC)			
		SOLE NONE			

Component-Level Information Packet

for 70004-60040

A4 Power Supply



**HP Part No. 70004-90048
Printed in USA May 1994**

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HP Part Number 70004-60040
A4 Power Supply

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C1	0160-0156	1	CAP-FXD 3900pF +10% 200 V POLYE-FL	02367	WMC 2D39
C2	0160-5491	1	CAP-FXD 240pF +5% 100 V CER COG	28480	0160-5491
C3	0160-0156	1	CAP-FXD 3900pF +10% 200 V POLYE-FL	02367	WMC 2D39
C4	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C5	0160-4822	1	CAP-FXD 1000pF +5% 100 V CER COG	28480	0160-4822
C6	0160-0299	1	CAP-FXD 1800pF +10% 200 V POLYE-FL	02367	WMC 2D18
C7	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C8	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C10	0180-4134	1	CAP-FXD 22uF +10% 15 V TA	28480	0180-4134
C11	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C12	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C13	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C14	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C24	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C25	0160-5098	1	CAP-FXD 0.22uF +10% 50 V CER X7R	28480	0160-5098
C26	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C27	0160-4831	1	CAP-FXD 4700pF +10% 100 V CER X7R	28480	0160-4831
C28	0160-4822	1	CAP-FXD 1000pF +5% 100 V CER COG	28480	0160-4822
C29	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C31	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C100	0160-7559	1	CAP-FXD 2.2uF +10% 250 V POLYP-MET	11892	PMR15 224K250
C102	0160-3825	1	CAP-FXD 0.039uF +10% 50 V POLYC-MET	13171	
C171	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C202	0160-5093	1	CAP-FXD 0.33uF +10% 250 V PPR-MET	28480	0160-5093
C204	0160-5044	1	CAP-FXD 3300pF +20% 250 V PPR-MET	28480	0160-5044
C206	0160-4281	1	CAP-FXD 2200pF +20% 250 V PPR-MET	28480	0160-4281
C207	0160-4413	1	CAP-FXD 0.6uF +10% 250 V PPR-MET	28480	0160-4413
C208	0160-6316	1	CAP-FXD 0.015uF +20% 250 V PPR-MET	28480	0160-6316
C209	0180-3638	1	CAP-FXD 560uF +20% 200 V AL-ELCTLT	28480	0180-3638
C210	0180-3638	1	CAP-FXD 560uF +20% 200 V AL-ELCTLT	28480	0180-3638
C211	0160-6066	1	CAP-FXD 820pF +10% 500 V POLYP-FL	05176	HEW682-2
C212	0160-6065	1	CAP-FXD 560pF +10% 500 V POLYP-FL	05176	HEW682-3
C213	0180-3432	1	CAP-FXD 180uF +20% 250 V AL-ELCTLT	28480	0180-3432
C214	0160-4825	1	CAP-FXD 560pF +5% 100 V CER COG	28480	0160-4825
C215	0180-3847	1	CAP-FXD 22uF +10% 25 V TA	28480	0180-3847

*Indicates factory-selected value

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**HP Part Number 70004-60040
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C216	0180-3847	1	CAP-FXD 22uF +10% 25 V TA	28480	0180-3847
C217	0160-4810	1	CAP-FXD 330pF +5% 100 V CER C0G	28480	0160-4810
C218	0160-4801	1	CAP-FXD 100pF +5% 100 V CER C0G	28480	0160-4801
C219	0160-6005	1	CAP-FXD 3.3uF +10% 160 V POLYC-MET	28480	0160-6005
C220	0160-6005	1	CAP-FXD 3.3uF +10% 160 V POLYC-MET	28480	0160-6005
C221	0160-6060	1	CAP-FXD 1000pF +10% 500 V POLYP-FL	05176	HEW682-1
C222	0160-4834	1	CAP-FXD 0.047uF +10% 100 V CER X7R	28480	0160-4834
C223	0160-6060	1	CAP-FXD 1000pF +10% 500 V POLYP-FL	05176	HEW682-1
C224	0160-4834	1	CAP-FXD 0.047uF +10% 100 V CER X7R	28480	0160-4834
C225	0180-3847	1	CAP-FXD 22uF +10% 25 V TA	28480	0180-3847
C226	0180-3847	1	CAP-FXD 22uF +10% 25 V TA	28480	0180-3847
C227	0160-6068	1	CAP-FXD 0.33uF +5% 150 V POLYP-FL	05176	HEW681-3
C228	0160-6331	1	CAP-FXD 0.22uF +5% 400 V POLYP-FL	05176	HEW681-1B
C229	0180-3638	1	CAP-FXD 560uF +20% 200 V AL-ELCTLT	28480	0180-3638
C230	0180-3638	1	CAP-FXD 560uF +20% 200 V AL-ELCTLT	28480	0180-3638
C270	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C271	0160-2055	1	CAP-FXD 0.01uF +80% -20% 100 V CER Y5V	28480	0160-2055
C291	0180-3847	1	CAP-FXD 22uF +10% 25 V TA	28480	0180-3847
C292	0160-4830	1	CAP-FXD 2200pF +10% 100 V CER X7R	28480	0160-4830
C300	0180-3433	1	CAP-FXD 2200uF +20% 63 V AL-ELCTLT	28480	0180-3433
C302	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C303	0180-3336	1	CAP-FXD 220uF +20% 35 V AL-ELCTLT	28480	0180-3336
C304	0160-4822	1	CAP-FXD 1000pF +5% 100 V CER C0G	28480	0160-4822
C313	0160-2055	1	CAP-FXD 0.01uF +80% -20% 100 V CER Y5V	28480	0160-2055
C314	0160-2055	1	CAP-FXD 0.01uF +80% -20% 100 V CER Y5V	28480	0160-2055
C701	0160-5770	1	CAP-FXD 5600pF +10% 1 kV POLYP-FL	11892	PHE431PB4560K
C702	0180-3186	1	CAP-FXD 100uF +20% 100 V AL-ELCTLT	28480	0180-3186
C703	0180-3848	1	CAP-FXD 33uF +10% 16 V TA	28480	0180-3848
C704	0160-4822	1	CAP-FXD 1000pF +5% 100 V CER C0G	28480	0160-4822
C705	0180-3186	1	CAP-FXD 100uF +20% 100 V AL-ELCTLT	28480	0180-3186
C706	0170-0040	1	CAP-FXD 0.047uF +10% 200 V POLYE-FL	02367	WMC2S47
C707	0180-3634	1	CAP-FXD 2200uF +20% 10 V AL-ELCTLT	28480	0180-3634
C708	0180-3844	1	CAP-FXD 3.3uF +10% 35 V TA	28480	0180-3844
C709	0160-4825	1	CAP-FXD 560pF +5% 100 V CER C0G	28480	0160-4825
C710	0160-5098	1	CAP-FXD 0.22uF +10% 50 V CER X7R	28480	0160-5098

**HP Part Number 70004-60040
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C711	0180-3634	1	CAP-FXD 2200uF +20% 10 V AL-ELCTLT	28480	0180-3634
C712	0160-0162	1	CAP-FXD 0.022uF +10% 200 V POLYE-FL	02367	WMC 2S22
C713	0180-3635	1	CAP-FXD 470uF +20% 25 V AL-ELCTLT	28480	0180-3635
C714	0180-3635	1	CAP-FXD 470uF +20% 25 V AL-ELCTLT	28480	0180-3635
C715	0160-4389	1	CAP-FXD 100pF +5% 200 V CER COG	28480	0160-4389
C801	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C802	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C803	0160-0300	1	CAP-FXD 2700pF +10% 200 V POLYE-FL	02367	WMC 2D27
C804	0160-4787	1	CAP-FXD 22pF +5% 100 V CER COG	28480	0160-4787
C805	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C808	0160-5091	1	CAP-FXD 2200pF +2% 100 V POLYP-FL	07284	222G01PP481
C810	0160-6016	1	CAP-FXD 0.047uF +10% 100 V CER X7R	28480	0160-6016
CR1	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR2	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR3	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR4	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR5	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR9	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR200	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR201	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR202	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR203	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR205	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR206	1901-1130	1	DIODE-GEN PRP 600V 8A 50NS TO-220AC	28480	1901-1130
CR207	1901-0519	1	DIODE-SWITCHING 200V 150MA 50NS DO-34	28480	1901-0519
CR208	1901-0519	1	DIODE-SWITCHING 200V 150MA 50NS DO-34	28480	1901-0519
CR209	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR210	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR212	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR213	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR214	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR215	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR216	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR217	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR218	1901-1130	1	DIODE-GEN PRP 600V 8A 50NS TO-220AC	28480	1901-1130

*Indicates factory-selected value

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**HP Part Number 70004-60040
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Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
CR219	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR220	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR221	1901-1130	1	DIODE-GEN PRP 600V 8A 50NS TO-220AC	28480	1901-1130
CR222	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR223	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR300	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR302	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR601	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR701	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR702	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR703	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR704	1901-1165	1	DIODE-SCHOTTKY 60V 1A DO-41	28480	1901-1165
CR705	1901-1165	1	DIODE-SCHOTTKY 60V 1A DO-41	28480	1901-1165
CR706	1901-1165	1	DIODE-SCHOTTKY 60V 1A DO-41	28480	1901-1165
CR707	1901-1165	1	DIODE-SCHOTTKY 60V 1A DO-41	28480	1901-1165
CR708	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR709	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR801	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR802	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR803	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR804	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR805	1901-0518	1	DIODE-SCHOTTKY SM SIG	12395	5082-2800
CR806	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
DS1	2140-0015	1	LAMP-GLOW C2A 115/58VDC 1.9MA T-2-BULB	04550	SELECTED NE-2H
DS5	1990-1270	1	LED-LAMP LUM-INT=500UCD IF=15MA-MAX	00746	LTZ-MR15
DS6	1990-1270	1	LED-LAMP LUM-INT=500UCD IF=15MA-MAX	00746	LTZ-MR15
E1	1970-0096	1	TUBE-ELECTRON SURGE V PTCTR	08761	Y085-230B + 10%
E2	1970-0096	1	TUBE-ELECTRON SURGE V PTCTR	08761	Y085-230B + 10%
E3	1970-0096	1	TUBE-ELECTRON SURGE V PTCTR	08761	Y085-230B + 10%
F1	2110-0710	1	FUSE (METRIC) 2A 250V NTD FE IEC	06328	SP 034.9221
F2	2110-0700	1	FUSE (METRIC) 1A 250V TD FE IEC	02805	GDB-1
F3	2110-0516	1	FUSE (INCH) 1A 125V NTD BI UL-LST CSA	04703	273001
F701	2110-0695	1	FUSE-BIPIN 1.5A 125V NTD RA UL-LST	04703	273 01.5
F702	2110-0517	1	FUSE (INCH) 2A 125V NTD BI UL-LST CSA	04703	273002
J5	1251-4789	1	CONN-POST TYPE .100-PIN-SPCG 8-CONT	28480	1251-4789

HP Part Number 70004-60040
A4 Power Supply (continued)

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
L1	9140-0871	1	ER DIVISION	04200	99ZSPA44265
L2	9140-0872	1	ER DIVISION	09507	
L3	9140-0873	1	ER DIVISION	09507	
L4	9140-0874	1	ER DIVISION	09507	
L14	9140-0858	1	INDUCTOR 22uH +10% .13D-INX.335LG-IN	28480	9140-0858
L30	9140-0873	1	ER DIVISION	09507	
L33	9140-0873	1	ER DIVISION	09507	
L100	9100-3313	1	INDUCTOR RF-CH-MLD 22UH +5%	03706	22201M-5%
L101	9100-3313	1	INDUCTOR RF-CH-MLD 22UH +5%	03706	22201M-5%
L102	9100-3313	1	INDUCTOR RF-CH-MLD 22UH +5%	03706	22201M-5%
L200	9100-1644	1	INDUCTOR RF-CH-MLD 330UH +5%	05826	2500-04
L291	9100-3313	1	INDUCTOR RF-CH-MLD 22UH +5%	03706	22201M-5%
L701	9140-1384	1	INDUCTOR 700UH +7% -7%	01886	K9673-A
L702	9140-1382	1	INDUCTOR 16UH +10% -10% 17D-MMX25.5LG-MM	01886	K9671-A
L703	9140-1383	1	INDUCTOR 500uH +7.2% -7.2%	01886	
MP2	0515-0866	6	SCREW-MACHINE ASSEMBLY M3 X 0.5 8MM-LG	05610	
MP4	2360-0117	4	SCREW-MACH 6-32 .375-IN-LG PAN-HD-POZI	05610	
MP7	1205-0568	2	HEAT SINK	07179	
MP10	0535-0025	3	NUT-HEX DBL-CHAM M3 X 0.5 2.4MM-THK	06691	
MP12	1205-0735	2	HEAT SINK SGL TO-66-CS	07179	EL5201B-66-KD
MP15	1205-0567	1	HEAT SINK	07179	
MP29	0380-1360	1	STANDOFF-HEX 8-MM-LG M3.0 X 0.5-THD	02121	
MP30	0515-2256	1	SCREW-MACH M3 X 0.5 4MM-LG PAN-HD	05610	
MP31	0590-0523	1	NUT-SPCLY 8-32-THD .5-IN-THK .438AL	11537	
MP32	2510-0061	1	SCREW-MACH 8-32 1.25-IN-LG PAN-HD-POZI	05610	
MP59	1205-0734	2	HEAT SINK SGL PLSTC-PWR-CS	07179	A-003-875-98
MP60	70004-40015	1	CLIP-ON/OFF	28480	70004-40015
MP61	1205-0803	3	SPRING CLIP HIGH FORCE CLIP; STAINLESS	07179	KOOL KLIP #116600
MP62	70004-00016	1	SHIELD-CLOCK	28480	70004-00016
MP63	70004-00017	1	SHIELD-FILTER	28480	70004-00017
MP64	0515-0680	1	SCREW-MACH M3 X 0.5 6MM-LG PAN-HD	05610	
MP65	70004-60039	1	BD AY-BRDG RECT	28480	70004-60039
NONE	0470-0440	1	COATING DOW CORNING 3140 SIL-RBR-RTV 1P	04514	3140
P1	1251-7575	1	CONN-POST TYPE .100-PIN-SPCG 60-CONT	28480	1251-7575
P2	1251-8861	1	CONN-POST TYPE .156-PIN-SPCG 7-CONT	28480	1251-8861

*Indicates factory-selected value

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**HP Part Number 70004-60040
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
P4	1252-3411	1	CONN-POST TYPE .100-PIN-SPCG & CONT	28480	1252-3411
Q1	1854-1222	1	TRANSISTOR NPN SI PD=135W	28480	1854-1222
Q2	1854-0477	1	TRANSISTOR NPN 2N2222A SI TO-18 PD=500MW	28480	1854-0477
Q3	1853-0449	1	TRANSISTOR PNP SI DARL PD=1W	28480	1853-0449
Q4	1853-0449	1	TRANSISTOR PNP SI DARL PD=1W	28480	1853-0449
Q5	1884-0337	1	THYRISTOR-SCR TO-66 VRRM=600	06650	T3SMPC600VOLT
Q6	1884-0337	1	THYRISTOR-SCR TO-66 VRRM=600	06650	T3SMPC600VOLT
Q9	1853-0281	1	TRANSISTOR PNP 2N2907A SI TO-18 PD=400MW	28480	1853-0281
Q11	1853-0281	1	TRANSISTOR PNP 2N2907A SI TO-18 PD=400MW	28480	1853-0281
Q702	1854-0474	1	TRANSISTOR NPN SI PD=625MW FT=100MHZ	28480	1854-0474
Q703	1853-0468	1	TRANSISTOR PNP SI DARL TO-220AB PD=65W	28480	1853-0468
Q704	1855-0694	1	TRANSISTOR MOSFET N-CHAN TO-220 SI	28480	1855-0694
Q705	1854-0474	1	TRANSISTOR NPN SI PD=625MW FT=100MHZ	28480	1854-0474
R1	0698-6362	1	RESISTOR 1K +0.1% .125W TF TC=0+25	05524	CMF-55-1, T-9
R2	0698-6322	1	RESISTOR 4K +0.1% .125W TF TC=0+25	05524	CMF-55-1, T-9
R3	0698-3150	1	RESISTOR 2.37K +1% .125W TF TC=0+100	05524	CMF-55-1
R4	0698-6320	1	RESISTOR 5K +0.1% .125W TF TC=0+25	05524	CMF-55-1, T-9
R5	0757-0465	1	RESISTOR 100K +1% .125W TF TC=0+100	05524	CMF-55-1
R6	0757-0279	1	RESISTOR 3.16K +1% .125W TF TC=0+100	05524	CMF-55-1
R7	0757-0440	1	RESISTOR 7.5K +1% .125W TF TC=0+100	05524	CMF-55-1
R15	0757-0199	1	RESISTOR 21.5K +1% .125W TF TC=0+100	05524	CMF-55-1
R16	0757-0461	1	RESISTOR 68.1K +1% .125W TF TC=0+100	05524	CMF-55-1
R17	0757-0180	1	RESISTOR 31.6 +1% .125W TF TC=0+100	05524	CMF-55-1
R35	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R36	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R37	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R38	0698-3444	1	RESISTOR 316 +1% .125W TF TC=0+100	05524	CMF-55-1
R39	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R40	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R41	0698-8812	1	RESISTOR 1 +1% .125W TF TC=0+100	05524	CMF-55-1
R42	0757-0200	1	RESISTOR 5.62K +1% .125W TF TC=0+100	05524	CMF-55-1
R43	0757-0439	1	RESISTOR 6.81K +1% .125W TF TC=0+100	05524	CMF-55-1
R44	0698-3151	1	RESISTOR 2.87K +1% .125W TF TC=0+100	05524	CMF-55-1
R46	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R47	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1

**HP Part Number 70004-60040
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R48	0757-0465	1	RESISTOR 100K +1% .125W TF TC=0+100	05524	CMF-55-1
R49	0698-3450	1	RESISTOR 42.2K +1% .125W TF TC=0+100	05524	CMF-55-1
R50	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R51	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R52	0757-0444	1	RESISTOR 12.1K +1% .125W TF TC=0+100	05524	CMF-55-1
R53	0698-3155	1	RESISTOR 4.64K +1% .125W TF TC=0+100	05524	CMF-55-1
R54	0757-0458	1	RESISTOR 51.1K +1% .125W TF TC=0+100	05524	CMF-55-1
R55	0757-0200	1	RESISTOR 5.62K +1% .125W TF TC=0+100	05524	CMF-55-1
R56	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R57	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R58	2100-0554	1	RESISTOR-TRMR 500 10% TKF TOP-ADJ 1-TRN	03744	3386P-Y46-501
R59	0757-0279	1	RESISTOR 3.16K +1% .125W TF TC=0+100	05524	CMF-55-1
R69	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R100	0757-0394	1	RESISTOR 51.1 +1% .125W TF TC=0+100	05524	CMF-55-1
R101	0757-0394	1	RESISTOR 51.1 +1% .125W TF TC=0+100	05524	CMF-55-1
R102	0757-0461	1	RESISTOR 68.1K +1% .125W TF TC=0+100	05524	CMF-55-1
R103	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1
R104	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R105	0757-0290	1	RESISTOR 6.19K +1% .125W TF TC=0+100	05524	CMF-55-1
R106	0757-0440	1	RESISTOR 7.5K +1% .125W TF TC=0+100	05524	CMF-55-1
R107	2100-0568	1	RESISTOR-TRMR 100 10% TKF TOP-ADJ 1-TRN	03744	3386P-Y46-101
R108	0757-0424	1	RESISTOR 1.1K +1% .125W TF TC=0+100	05524	CMF-55-1
R109	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R110	0698-3136	1	RESISTOR 17.8K +1% .125W TF TC=0+100	05524	CMF-55-1
R199	0811-1732	1	RESISTOR 1 +5% 3W PWI TC=0+50	28480	0811-1732
R200	0699-0172	1	RESISTOR 3M +5% 1W TF TC=0+250	01992	FL1
R201	0764-0046	1	RESISTOR 33K +5% 2W MO TC=0+200	02499	GS-3
R202	0764-0046	1	RESISTOR 33K +5% 2W MO TC=0+200	02499	GS-3
R203	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R204	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R205	0812-0019	1	RESISTOR .33 +5% 3W PWI TC=0+90	02499	T2B-79
R206	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R207	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R208	0757-0417	1	RESISTOR 562 +1% .125W TF TC=0+100	05524	CMF-55-1
R209	0757-0439	1	RESISTOR 6.81K +1% .125W TF TC=0+100	05524	CMF-55-1

*Indicates factory-selected value

CLIP 70004-90048 7

**HP Part Number 70004-60040
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R210	2100-3252	1	RESISTOR-TRMR 5K 10% TKF TOP-ADJ 1-TRN	03744	3386P-Y46-502
R211	0757-0278	1	RESISTOR 1.78K +1% .125W TF TC=0+100	05524	CMF-55-1
R212	0698-8812	1	RESISTOR 1 +1% .125W TF TC=0+100	05524	CMF-55-1
R213	0698-3441	1	RESISTOR 215 +1% .125W TF TC=0+100	05524	CMF-55-1
R214	0757-0421	1	RESISTOR 825 +1% .125W TF TC=0+100	05524	CMF-55-1
R215	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R216	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R217	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R218	0811-3693	1	RESISTOR 33 +5% 5W PWI TC=0+400	11248	MNS05N-330-J
R219	0811-3692	1	RESISTOR 3.9 +5% 5W PWI TC=0+400	11248	MNS05N-3R9-J
R220	0757-0465	1	RESISTOR 100K +1% .125W TF TC=0+100	05524	CMF-55-1
R221	0757-0465	1	RESISTOR 100K +1% .125W TF TC=0+100	05524	CMF-55-1
R222	0811-3696	1	RESISTOR 150 +5% 2W PWI TC=0+400	11248	MNS02N-151-J
R223	0698-8820	1	RESISTOR 4.64 +1% .125W TF TC=0+100	05524	CMF-55-1
R224	0698-3390	1	RESISTOR 19.6 +1% .5W TF TC=0+100	05524	CMF-65-2
R225	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R226	0698-3150	1	RESISTOR 2.37K +1% .125W TF TC=0+100	05524	CMF-55-1
R227	0811-1084	1	RESISTOR 22 +5% 3W PWI TC=0+30	28480	0811-1084
R228	0811-3696	1	RESISTOR 150 +5% 2W PWI TC=0+400	11248	MNS02N-151-J
R229	0698-3390	1	RESISTOR 19.6 +1% .5W TF TC=0+100	05524	CMF-65-2
R230	0698-8820	1	RESISTOR 4.64 +1% .125W TF TC=0+100	05524	CMF-55-1
R231	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R232	0698-3150	1	RESISTOR 2.37K +1% .125W TF TC=0+100	05524	CMF-55-1
R233	0811-1084	1	RESISTOR 22 +5% 3W PWI TC=0+30	28480	0811-1084
R239	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R242	0757-0279	1	RESISTOR 3.16K +1% .125W TF TC=0+100	05524	CMF-55-1
R243	0757-0279	1	RESISTOR 3.16K +1% .125W TF TC=0+100	05524	CMF-55-1
R300	0698-3443	1	RESISTOR 287 +1% .125W TF TC=0+100	05524	CMF-55-1
R301	0698-3151	1	RESISTOR 2.87K +1% .125W TF TC=0+100	05524	CMF-55-1
R304	0757-0346	1	RESISTOR 10 +1% .125W TF TC=0+100	05524	CMF-55-1
R601	0698-3150	1	RESISTOR 2.37K +1% .125W TF TC=0+100	05524	CMF-55-1
R602	0698-3150	1	RESISTOR 2.37K +1% .125W TF TC=0+100	05524	CMF-55-1
R603	0698-3150	1	RESISTOR 2.37K +1% .125W TF TC=0+100	05524	CMF-55-1
R701	0757-0346	1	RESISTOR 10 +1% .125W TF TC=0+100	05524	CMF-55-1
R702	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1

**HP Part Number 70004-60040
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R703	0698-3158	1	RESISTOR 23.7K +1% .125W TF TC=0+-100	05524	CMF-55-1
R704	0698-3153	1	RESISTOR 3.83K +1% .125W TF TC=0+-100	05524	CMF-55-1
R705	0698-3153	1	RESISTOR 3.83K +1% .125W TF TC=0+-100	05524	CMF-55-1
R706	0698-0083	1	RESISTOR 1.96K +1% .125W TF TC=0+-100	05524	CMF-55-1
R707	0699-0720	1	RESISTOR 61.9K +-0.1% .125W TF TC=0+-25	01074	H8
R708	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+-100	05524	CMF-55-1
R709	0698-3153	1	RESISTOR 3.83K +1% .125W TF TC=0+-100	05524	CMF-55-1
R710	0698-6360	1	RESISTOR 10K +-0.1% .125W TF TC=0+-25	05524	CMF-55-1, T-9
R711	0698-8814	1	RESISTOR 1.47 +1% .125W TF TC=0+-100	05524	CMF-55-1
R712	0757-0346	1	RESISTOR 10 +1% .125W TF TC=0+-100	05524	CMF-55-1
R713	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+-100	05524	CMF-55-1
R714	0757-0278	1	RESISTOR 1.78K +1% .125W TF TC=0+-100	05524	CMF-55-1
R715	0698-3441	1	RESISTOR 215 +1% .125W TF TC=0+-100	05524	CMF-55-1
R716	0698-6320	1	RESISTOR 5K +-0.1% .125W TF TC=0+-25	05524	CMF-55-1, T-9
R717	0698-6320	1	RESISTOR 5K +-0.1% .125W TF TC=0+-25	05524	CMF-55-1, T-9
R718	0698-6360	1	RESISTOR 10K +-0.1% .125W TF TC=0+-25	05524	CMF-55-1, T-9
R719	0698-3430	1	RESISTOR 21.5 +1% .125W TF TC=0+-100	05524	CMF-55-1
R720	0698-3430	1	RESISTOR 21.5 +1% .125W TF TC=0+-100	05524	CMF-55-1
R721	0698-8820	1	RESISTOR 4.64 +1% .125W TF TC=0+-100	05524	CMF-55-1
R722	0813-0050	1	RESISTOR 100 +5% 3W PWI TC=0+-20	02499	T2B-79
R723	0813-0050	1	RESISTOR 100 +5% 3W PWI TC=0+-20	02499	T2B-79
R724	0698-3155	1	RESISTOR 4.64K +1% .125W TF TC=0+-100	05524	CMF-55-1
R725	0698-3153	1	RESISTOR 3.83K +1% .125W TF TC=0+-100	05524	CMF-55-1
R726	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+-100	05524	CMF-55-1
R727	0757-0400	1	RESISTOR 90.9 +1% .125W TF TC=0+-100	05524	CMF-55-1
R728	2100-3252	1	RESISTOR-TRMR 5K 10% TKF TOP-ADJ 1-TRN	03744	3386P-Y46-502
R729	0698-3160	1	RESISTOR 31.6K +1% .125W TF TC=0+-100	05524	CMF-55-1
R730	0698-0083	1	RESISTOR 1.96K +1% .125W TF TC=0+-100	05524	CMF-55-1
R801	0757-0278	1	RESISTOR 1.78K +1% .125W TF TC=0+-100	05524	CMF-55-1
R802	0757-0180	1	RESISTOR 31.6 +1% .125W TF TC=0+-100	05524	CMF-55-1
R803	0698-3157	1	RESISTOR 19.6K +1% .125W TF TC=0+-100	05524	CMF-55-1
R804	0698-3160	1	RESISTOR 31.6K +1% .125W TF TC=0+-100	05524	CMF-55-1
R805	0698-3160	1	RESISTOR 31.6K +1% .125W TF TC=0+-100	05524	CMF-55-1
R806	0757-0123	1	RESISTOR 34.8K +1% .125W TF TC=0+-100	05524	CMF-55-1
R807	0757-0460	1	RESISTOR 61.9K +1% .125W TF TC=0+-100	05524	CMF-55-1

*Indicates factory-selected value

**HP Part Number 70004-60040
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R808	0757-0200	1	RESISTOR 5.62K +1% .125W TF TC=0+100	05524	CMF-55-1
R809	0698-3443	1	RESISTOR 287 +1% .125W TF TC=0+100	05524	CMF-55-1
RT1	0837-0287	1	THERMISTOR-SURGE PTCTR 5 OHM AT 25 DEG C	12830	SG-80
RT2	0837-0287	1	THERMISTOR-SURGE PTCTR 5 OHM AT 25 DEG C	12830	SG-80
RV1	0837-0401	1	VARISTOR DC VOLTAGE:350V MAX;RMS VOLTAGE	28480	0837-0401
S1	3101-2150	1	SWITCH-PB DPDTALTNG 8A 250 VAC	28480	3101-2150
S2	3101-2608	1	SWITCH-SL DPDT STD 5A 250VAC PC	28480	3101-2608
S3	3103-0117	1	SWITCH-THRM FXD +75C 1A OPN-ON-RISE	10015	TS75B
T1	9100-4377	1	TRANSFORMER-POWER TOROIDAL TRANSFORMER	11298	40/3034
T2	9100-4793	1	TRANSFORMER-PULSE; PRI IND: 840 UH	01886	V9237-A
T3	9100-4375	1	TRANSFORMER LP:3.5 MH MIN (LOW LEVEL,1	01869	PE-63509
T4	9100-4373	1	TRANSFORMER LP:1 MH MIN (LOW LEVEL, 1	01869	PE-63555
T9	9140-0876	1	INDUCTOR	04200	99ZSPA44268
T11	9140-0879	1	INDUCTOR 40MH +20% 1.95D-IN	04200	99ZSPA44267
T12	9100-4376	1	TRANSFORMER LP: 3.4 MH MIN (LOW LEVEL,1	01869	PE-98006
T90	9140-0876	1	INDUCTOR	04200	99ZSPA44268
T701	9100-4785	1	TRANSFORMER-CURRENT 1 V NORMALIZED	01886	CS 4200V
TP1	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP2	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP6	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP9	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP11	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP14	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP16	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP17	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP20	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP21	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP23	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP24	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
U1	1906-0248	1	DIODE-ARRAY 50V 500MA VF DIFF=15MV	28480	1906-0248
U2	1826-1222	1	IC OP AMP H-SLEW-RATE QUAD 14 PIN DIP-C	28480	1826-1222
U9	1826-1040	1	IC V RGLTR-SWG 4.85/5.15V 18-DIP-C PKG	28480	1826-1040
U10	1820-1366	1	IC-INTERFACE DRVR BIPOLAR CLOCK TTL TO	28480	1820-1366
U11	1820-1272	1	IC DRVR TTL/LS NOR QUAD 2-INP	28480	1820-1272
U12	1820-1212	1	IC FF TTL/LS J-K NEG-EDGE-TRIG	28480	1820-1212

**HP Part Number 70004-60040
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U13	1820-2922	1	IC GATE CMOS/HC NAND QUAD 2-INP	28480	1820-2922
U14	1820-2923	1	IC GATE CMOS/HC NAND TPL 3-INP	28480	1820-2923
U15	1826-0759	1	IC COMPARATOR GP QUAD 14 PIN DIP-C	28480	1826-0759
U69	1990-1074	1	OPTO-ISOLATOR LED-PXSTR IF=60MA-MAX	28480	1990-1074
U70	1990-1074	1	OPTO-ISOLATOR LED-PXSTR IF=60MA-MAX	28480	1990-1074
U200	1826-0412	1	IC COMPARATOR PRCN DUAL 8 PIN DIP-P	28480	1826-0412
U202	1820-3512	1	IC-INTERFACE SW BIPOLAR DUAL -888-BIT	28480	1820-3512
U300	1906-0289	1	DIODE-FW BRDG 200V 800MA	11699	CBR1F-D020
U301	1826-0393	1	IC V RGLTR-ADJ-POS 1.2/37V 3-TO-220 PKG	28480	1826-0393
U302	1826-0122	1	IC V RGLTR-FXD-POS 4.8/5.2V TO-220 PKG	28480	1826-0122
U303	1906-0289	1	DIODE-FW BRDG 200V 800MA	11699	CBR1F-D020
U701	1826-2010	1	IC OP AMP 8 PIN DIP-P	28480	1826-2010
U702	1826-1343	1	IC V RGLTR-V-REF-ADJ 2.5/36V 8-DIP-P PKG	28480	1826-1343
U703	1906-0360	1	DIODE-CT-RECT 45V 30A TO-218AC	28480	1906-0360
U801	1820-3674	1	IC DRVR CMOS/HC BUS QUAD	28480	1820-3674
U802	1826-0175	1	IC COMPARATOR GP DUAL 14 PIN DIP-P	28480	1826-0175
VR1	1902-0041	1	DIODE-ZNR 5.11V 5% DO-35 PD=.4W	02688	
VR2	1902-0041	1	DIODE-ZNR 5.11V 5% DO-35 PD=.4W	02688	
VR4	1826-0774	1	IC V RGLTR-V-REF-FXD 1.223/1.247V TO-92	28480	1826-0774
VR16	1826-0774	1	IC V RGLTR-V-REF-FXD 1.223/1.247V TO-92	28480	1826-0774
VR201	1826-0774	1	IC V RGLTR-V-REF-FXD 1.223/1.247V TO-92	28480	1826-0774
VR211	1902-0041	1	DIODE-ZNR 5.11V 5% DO-35 PD=.4W	02688	
VR701	1902-1413	1	DIODE-ZNR 36V 5% DO-35 PD=.4W TC=+.112%	02688	
XF1	2110-0714	1	FUHLR-BLK 6.3A 250V	06328	OGN 031.8101
XF2	2110-0714	1	FUHLR-BLK 6.3A 250V	06328	OGN 031.8101
XF3	2110-0554	1	FUHLR-BPN-SKT 5A 125V	04703	281005
XF701	2110-0554	1	FUHLR-BPN-SKT 5A 125V	04703	281005
XF702	2110-0554	1	FUHLR-BPN-SKT 5A 125V	04703	281005

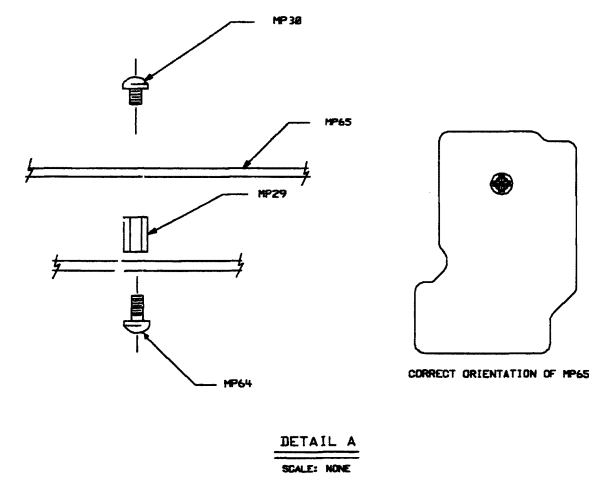
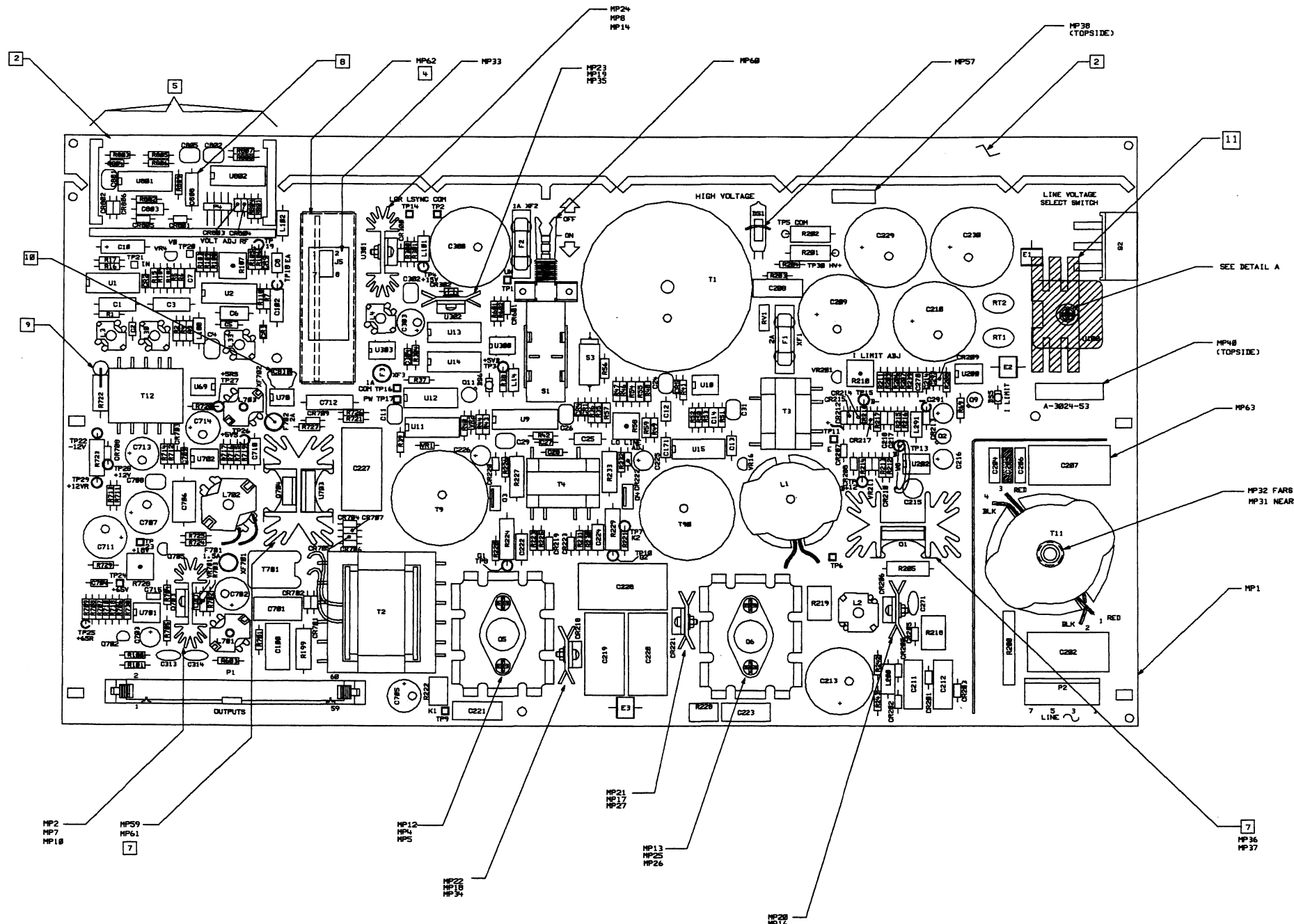
*Indicates factory-selected value

CLIP 70004-90048 11

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**SCANS
By
Artek Media**

5300		D-70004-60040-2	
SYM	REVISIONS	APPROVED	DATE
A	AS ISSUED PER PCO 53-07558		
B	CHANGE PER PCO 5300-7983 DM		



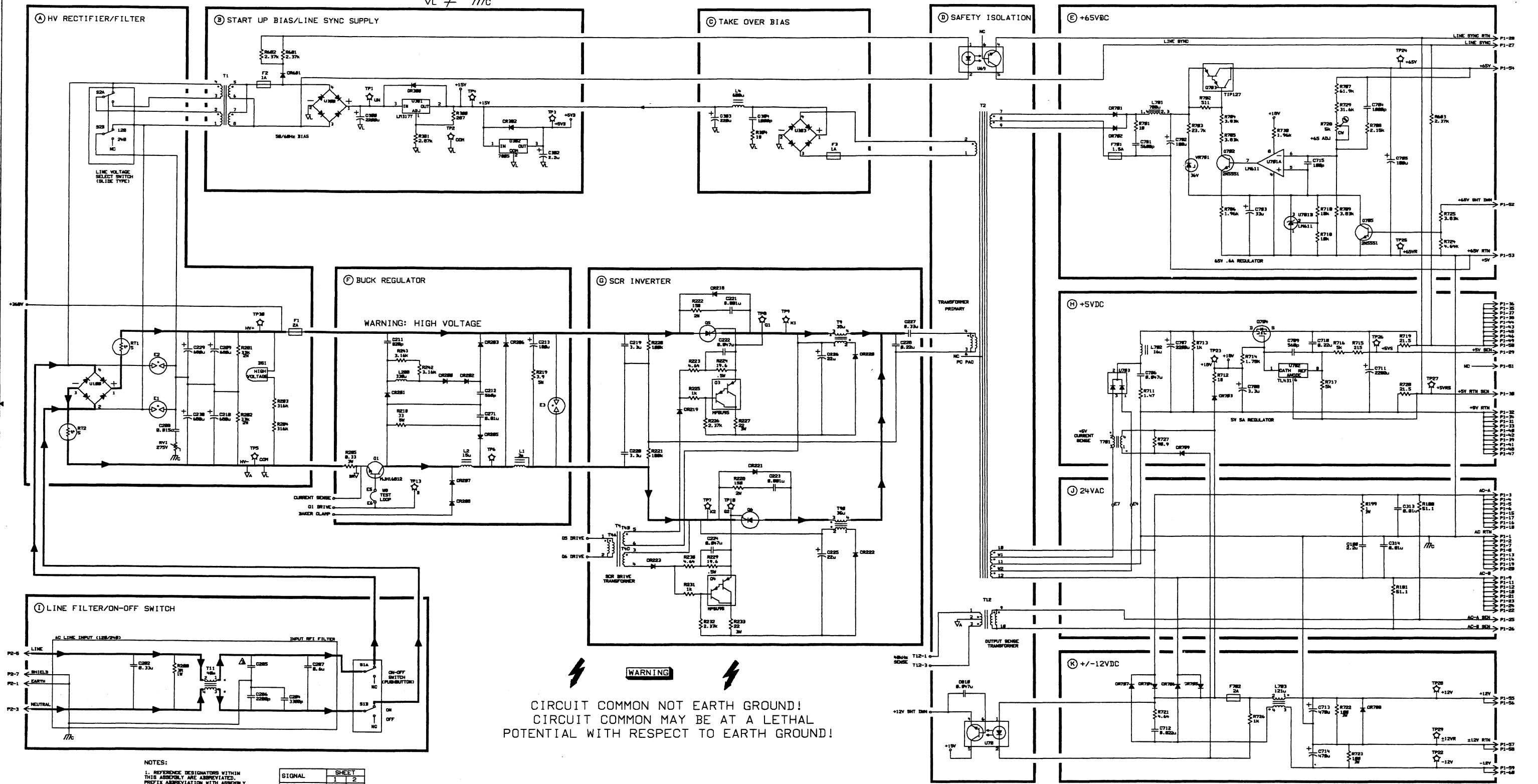
- NOTES: UNLESS OTHERWISE SPECIFIED
1. DIMENSIONS ARE IN INCHES.
 2. REMOVE TABS AFTER MACHINE SOLDER.
 3. VR4 MAX HEIGHT .350. FOR COMPONENT HEIGHT RESTRICTIONS SEE D-70004-20028-4, SHEET 2.
 4. AFTER MACHINE SOLDER, BREAK OFF THIS SECTION OF BOARD AND LOAD P4 INTO J5. INSTALL SHIELD (MP62) SOLDER SHIELD TO MAIN BOARD FROM SOLDER SIDE. SOLDER MINIMUM OF 100° OF HOLE.
 5. TRIM LEAD LENGTH TO .118
 6. T2, T3, T4, C209, C218, C219, C228, C227, C226, C229, C236, C235, C782, C785, C787, C711, C713, & C714 MUST SIT FLUSH TO BOARD SURFACE AFTER MACHINE SOLDER.
 7. USE THERMAL COMPOUND UNDER O1, U783 AND O784.
 8. C888 MUST BE LOADED AFTER WAVE SOLDER. SOLDER BY HAND USING MINIMUM HEAT.
 9. R722 CAN BE LOADED EITHER STANDING ON END AS SHOWN OR AUTO INSERTED.
 10. INSTALL O818 AS SHOWN.
 11. MP65 (PC BOARD 70004-60039) LOADED IN HATCHED AREA (U188 HAS BEEN REMOVED). MP65 MUST BE LOADED AFTER WAVE SOLDER; HANDSOLDER MP65.

SEE MATERIAL LIST 70004-60040

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	<p>TOLERANCES: XX.XXX ±.010 XX.XX ±.02</p>	<p>ENGINEER/CHECKER</p>	<p>DATE</p>		<p>SCALE NONE</p>	
	<p>THIRD ANGLE PROJECTION</p>	<p>RELEASE TO PROD.</p>	<p>DATE</p>		<p>SHEET 1 OF 1 PART NUMBER 70004-60040</p>	
	<p>DO NOT SCALE THIS DRAWING</p>	<p>SUPERSEDES DWG.</p>	<p>TITLE</p>		<p>D-70004-60040-2</p>	

WARNING
 LINE ISOLATED VARIAC
 REQUIRED FOR SERVICING!
 $V_L \neq 176$

PRIMARY CIRCUITS → SECONDARY CIRCUITS



WARNING
 CIRCUT COMMON NOT EARTH GROUND!
 CIRCUT COMMON MAY BE AT A LETHAL
 POTENTIAL WITH RESPECT TO EARTH GROUND!

NOTES:
 1. REFERENCE DESIGNATORS WITHIN THIS ASSEMBLY ARE ABBREVIATED. PREFIX ABBREVIATION WITH ASSEMBLY NUMBER FOR COMPLETE REFERENCE DESIGNATOR.
 2. UNLESS OTHERWISE INDICATED: RESISTANCE IN OHMS (Ω) CAPACITANCE IN MICROFARADS (μF) INDUCTANCE IN MICROHENRIES (μH) NOT USED

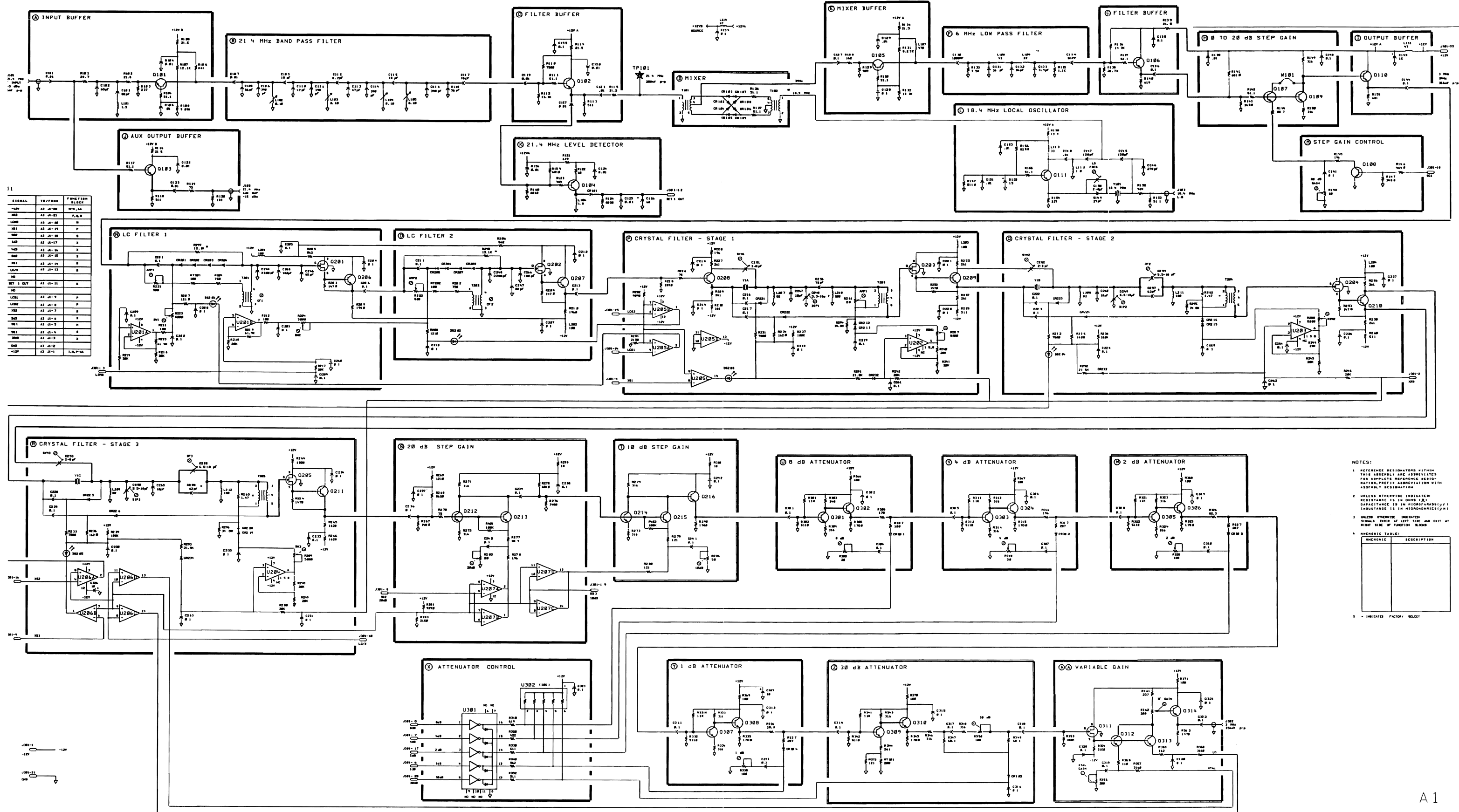
SIGNAL	SHEET
+36V	1
+12V BKT DM	A
BAKER CLAMP	D
CURRENT SENSE	F
O1 DRIVE	H
O2 DRIVE	N
O3 DRIVE	P
O4 DRIVE	P
T12-1	P
T12-3	P

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DRAWN BY	DATE
ENGINEER/CHECKER	DATE
RELEASE TO PROD.	DATE
SUPERSEDES DWG.	

SCHEMATIC, PWA
 POWER SUPPLY
 A4
 TITLE

slaad040	FILENAME	HP	HEWLETT PACKARD
SCALE	NONE		
SHEET 1 OF 2	70004-60040		PART NUMBER
	D-70004-60040-1		



SIGNAL	TO/FROM	FUNCTION BLOCK
+12V	A3 J1-20	HW, AA
REF	A3 J1-21	FL, B
LOW	A3 J1-22	B
HI	A3 J1-19	P
SD	A3 J1-18	S
LD	A3 J1-17	X
RD	A3 J1-16	X
SD	A3 J1-15	X
LD	A3 J1-14	X
RD	A3 J1-13	X
SD	A3 J1-12	X
LD	A3 J1-11	X
RD	A3 J1-10	X
LOCAL	A3 J1-9	P
LOW	A3 J1-8	P
HI	A3 J1-7	B
SD	A3 J1-6	S
LD	A3 J1-5	X
RD	A3 J1-4	X
SD	A3 J1-3	S
LD	A3 J1-2	X
RD	A3 J1-1	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22

NOTES:
1. REFERENCE DESIGNATORS WITHIN THIS ASSEMBLY ARE ASSUMED TO BE FOR COMPLETE REFERENCE DESIGNATION, PREFIX ABBREVIATION WITH ASSEMBLY DESIGNATION.
2. UNLESS OTHERWISE INDICATED, RESISTANCE IS IN OHMS (R), CAPACITANCE IS IN PICOFARADS (P), INDUCTANCE IS IN MICROHENRIES (M).
3. UNLESS OTHERWISE INDICATED, SIGNALS ENTER AT LEFT SIDE AND EXIT AT RIGHT SIDE OF FUNCTION BLOCKS.
4. ALPHABETIC TABLE:
ALPHABETIC TABLE:
ALPHABETIC TABLE:
5. * INDICATES FACTORY SELECT

A 1

DRAWN BY	DATE	BD ASS'Y. - HRIF DOWNCONVERTER (SCHEMATIC)	HEWLETT PACKARD PART NUMBER 70902-60042 SCALE NONE SHEET 1 of 1 D-70902 - 60042 - 1
ENGINEER/CHECKER			
RELEASE TO PRD			
SUPersedes DWG.			

Component-Level Information Packet

for 70004-60028

A4 Power Supply



HP Part No. 70004-90054
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1400 Fountaingrove Parkway, Santa Rosa, CA 95403-1799, USA

HP Part Number 70004-60028
A4 Power Supply

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C1	0160-0156	1	CAP-FXD 3900pF +10% 200 V POLYE-FL	02367	WMC 2D39
C2	0160-5491	1	CAP-FXD 240pF +5% 100 V CER COG	28480	0160-5491
C3	0160-0156	1	CAP-FXD 3900pF +10% 200 V POLYE-FL	02367	WMC 2D39
C4	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C5	0160-4822	1	CAP-FXD 1000pF +5% 100 V CER COG	28480	0160-4822
C6	0160-0299	1	CAP-FXD 1800pF +10% 200 V POLYE-FL	02367	WMC 2D18
C7	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C8	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C10	0180-4134	1	CAP-FXD 22uF +10% 15 V TA	28480	0180-4134
C11	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C12	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C13	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C14	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C24	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C25	0160-5098	1	CAP-FXD 0.22uF +10% 50 V CER X7R	28480	0160-5098
C26	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C27	0160-4831	1	CAP-FXD 4700pF +10% 100 V CER X7R	28480	0160-4831
C28	0160-4822	1	CAP-FXD 1000pF +5% 100 V CER COG	28480	0160-4822
C29	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C31	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C100	0160-7559	1	CAP-FXD 2.2uF +10% 250 V POLYP-MET	11892	PMR15 224K250
C102	0160-3825	1	CAP-FXD 0.039uF +10% 50 V POLYC-MET	13171	
C171	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C202	0160-5093	1	CAP-FXD 0.33uF +10% 250 V PPR-MET	28480	0160-5093
C204	0160-5044	1	CAP-FXD 3300pF +20% 250 V PPR-MET	28480	0160-5044
C206	0160-4281	1	CAP-FXD 2200pF +20% 250 V PPR-MET	28480	0160-4281
C207	0160-4413	1	CAP-FXD 0.6uF +10% 250 V PPR-MET	28480	0160-4413
C208	0160-6316	1	CAP-FXD 0.015uF +20% 250 V PPR-MET	28480	0160-6316
C209	0180-3638	1	CAP-FXD 560uF +20% 200 V AL-ELCTLT	28480	0180-3638
C210	0180-3638	1	CAP-FXD 560uF +20% 200 V AL-ELCTLT	28480	0180-3638
C211	0160-6066	1	CAP-FXD 820pF +10% 500 V POLYP-FL	05176	HEW682-2
C212	0160-6065	1	CAP-FXD 560pF +10% 500 V POLYP-FL	05176	HEW682-3
C213	0180-3432	1	CAP-FXD 180uF +20% 250 V AL-ELCTLT	28480	0180-3432
C214	0160-4825	1	CAP-FXD 560pF +5% 100 V CER COG	28480	0160-4825
C215	0180-3847	1	CAP-FXD 22uF +10% 25 V TA	28480	0180-3847

*Indicates factory-selected value

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**HP Part Number 70004-60028
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C216	0180-3847	1	CAP-FXD 22uF +10% 25 V TA	28480	0180-3847
C217	0160-4810	1	CAP-FXD 330pF +5% 100 V CER COG	28480	0160-4810
C218	0160-4801	1	CAP-FXD 100pF +5% 100 V CER COG	28480	0160-4801
C219	0160-6005	1	CAP-FXD 3.3uF +10% 160 V POLYC-MET	28480	0160-6005
C220	0160-6005	1	CAP-FXD 3.3uF +10% 160 V POLYC-MET	28480	0160-6005
C221	0160-6060	1	CAP-FXD 1000pF +10% 500 V POLYP-FL	05176	HEW682-1
C222	0160-4834	1	CAP-FXD 0.047uF +10% 100 V CER X7R	28480	0160-4834
C223	0160-6060	1	CAP-FXD 1000pF +10% 500 V POLYP-FL	05176	HEW682-1
C224	0160-4834	1	CAP-FXD 0.047uF +10% 100 V CER X7R	28480	0160-4834
C225	0180-3847	1	CAP-FXD 22uF +10% 25 V TA	28480	0180-3847
C226	0180-3847	1	CAP-FXD 22uF +10% 25 V TA	28480	0180-3847
C227	0160-6068	1	CAP-FXD 0.33uF +5% 150 V POLYP-FL	05176	HEW681-3
C228	0160-6331	1	CAP-FXD 0.22uF +5% 400 V POLYP-FL	05176	HEW681-1B
C229	0180-3638	1	CAP-FXD 560uF +20% 200 V AL-ELCTLT	28480	0180-3638
C230	0180-3638	1	CAP-FXD 560uF +20% 200 V AL-ELCTLT	28480	0180-3638
C270	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C271	0160-2055	1	CAP-FXD 0.01uF +80% -20% 100 V CER Y5V	28480	0160-2055
C291	0180-3847	1	CAP-FXD 22uF +10% 25 V TA	28480	0180-3847
C292	0160-4830	1	CAP-FXD 2200pF +10% 100 V CER X7R	28480	0160-4830
C300	0180-3433	1	CAP-FXD 2200uF +20% 63 V AL-ELCTLT	28480	0180-3433
C302	0180-3770	1	CAP-FXD 2.2uF +10% 35 V TA	28480	0180-3770
C303	0180-3336	1	CAP-FXD 220uF +20% 35 V AL-ELCTLT	28480	0180-3336
C304	0160-4822	1	CAP-FXD 1000pF +5% 100 V CER COG	28480	0160-4822
C313	0160-2055	1	CAP-FXD 0.01uF +80% -20% 100 V CER Y5V	28480	0160-2055
C314	0160-2055	1	CAP-FXD 0.01uF +80% -20% 100 V CER Y5V	28480	0160-2055
C701	0160-5770	1	CAP-FXD 5600pF +10% 1 kV POLYP-FL	11892	PHE431PB4560K
C702	0180-3186	1	CAP-FXD 100uF +20% 100 V AL-ELCTLT	28480	0180-3186
C703	0180-3848	1	CAP-FXD 33uF +10% 16 V TA	28480	0180-3848
C704	0160-4822	1	CAP-FXD 1000pF +5% 100 V CER COG	28480	0160-4822
C705	0180-3186	1	CAP-FXD 100uF +20% 100 V AL-ELCTLT	28480	0180-3186
C706	0170-0040	1	CAP-FXD 0.047uF +10% 200 V POLYE-FL	02367	WMC2S47
C707	0180-3634	1	CAP-FXD 2200uF +20% 10 V AL-ELCTLT	28480	0180-3634
C708	0180-3844	1	CAP-FXD 3.3uF +10% 35 V TA	28480	0180-3844
C709	0160-4825	1	CAP-FXD 560pF +5% 100 V CER COG	28480	0160-4825
C710	0160-5098	1	CAP-FXD 0.22uF +10% 50 V CER X7R	28480	0160-5098

**HP Part Number 70004-60028
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C711	0180-3634	1	CAP-FXD 2200uF +20% 10 V AL-ELCTLT	28480	0180-3634
C712	0160-0162	1	CAP-FXD 0.022uF +10% 200 V POLYE-FL	02367	WMC 2S22
C713	0180-3635	1	CAP-FXD 470uF +20% 25 V AL-ELCTLT	28480	0180-3635
C714	0180-3635	1	CAP-FXD 470uF +20% 25 V AL-ELCTLT	28480	0180-3635
C715	0160-4389	1	CAP-FXD 100pF +5% 200 V CER C0G	28480	0160-4389
C801	0180-3770	1	CAP-FXD 2.2nF +10% 35 V TA	28480	0180-3770
C802	0180-3770	1	CAP-FXD 2.2nF +10% 35 V TA	28480	0180-3770
C803	0160-0300	1	CAP-FXD 2700pF +10% 200 V POLYE-FL	02367	WMC 2D27
C804	0160-4787	1	CAP-FXD 22pF +5% 100 V CER C0G	28480	0160-4787
C805	0180-3770	1	CAP-FXD 2.2nF +10% 35 V TA	28480	0180-3770
C808	0160-5091	1	CAP-FXD 2200pF +2% 100 V POLYP-FL	07284	222G01PP481
C810	0160-6016	1	CAP-FXD 0.047uF +10% 100 V CER X7R	28480	0160-6016
CR1	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR2	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR3	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR4	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR5	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR9	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR200	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR201	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR202	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR203	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR205	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR206	1901-1130	1	DIODE-GEN PRP 600V 8A 50NS TO-220AC	28480	1901-1130
CR207	1901-0519	1	DIODE-SWITCHING 200V 150MA 50NS DO-34	28480	1901-0519
CR208	1901-0519	1	DIODE-SWITCHING 200V 150MA 50NS DO-34	28480	1901-0519
CR209	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR210	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR212	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR213	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR214	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR215	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR216	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR217	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR218	1901-1130	1	DIODE-GEN PRP 600V 8A 50NS TO-220AC	28480	1901-1130

*Indicates factory-selected value

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**HP Part Number 70004-60028
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
CR219	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR220	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR221	1901-1130	1	DIODE-GEN PRP 600V 8A 50NS TO-220AC	28480	1901-1130
CR222	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR223	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR300	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR302	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR601	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR701	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR702	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR703	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR704	1901-1165	1	DIODE-SCHOTTKY 60V 1A DO-41	28480	1901-1165
CR705	1901-1165	1	DIODE-SCHOTTKY 60V 1A DO-41	28480	1901-1165
CR706	1901-1165	1	DIODE-SCHOTTKY 60V 1A DO-41	28480	1901-1165
CR707	1901-1165	1	DIODE-SCHOTTKY 60V 1A DO-41	28480	1901-1165
CR708	1901-1149	1	DIODE-PWR RECT 400V 1A 50NS DO-41	28480	1901-1149
CR709	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR801	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR802	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR803	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR804	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR805	1901-0518	1	DIODE-SCHOTTKY SM SIG	12395	5082-2800
CR806	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
DS1	2140-0015	1	LAMP-GLOW C2A 115/58VDC 1.9MA T-2-BULB	04550	SELECTED NE-2H
DS5	1990-1270	1	LED-LAMP LUM-INT=500UCD IF=15MA-MAX	00746	LTZ-MR15
DS6	1990-1270	1	LED-LAMP LUM-INT=500UCD IF=15MA-MAX	00746	LTZ-MR15
E1	1970-0096	1	TUBE-ELECTRON SURGE V PTCTR	08761	Y085-230B + 10%
E2	1970-0096	1	TUBE-ELECTRON SURGE V PTCTR	08761	Y085-230B + 10%
E3	1970-0096	1	TUBE-ELECTRON SURGE V PTCTR	08761	Y085-230B + 10%
F1	2110-0710	1	FUSE (METRIC) 2A 250V NTD FE IEC	06328	SP 034.9221
F2	2110-0700	1	FUSE (METRIC) 1A 250V TD FE IEC	02805	GDB-1
F3	2110-0516	1	FUSE (INCH) 1A 125V NTD BI UL-LST CSA	04703	273001
F701	2110-0695	1	FUSE-BIPIN 1.5A 125V NTD RA UL-LST	04703	273 01.5
F702	2110-0517	1	FUSE (INCH) 2A 125V NTD BI UL-LST CSA	04703	273002
J5	1251-4789	1	CONN-POST TYPE .100-PIN-SPCG 8-CONT	28480	1251-4789

**HP Part Number 70004-60028
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
L1	9140-0871	1	ER DIVISION	04200	99ZSPA44265
L2	9140-0872	1	ER DIVISION	09507	
L3	9140-0873	1	ER DIVISION	09507	
L4	9140-0874	1	ER DIVISION	09507	
L14	9140-0858	1	INDUCTOR 22uH +10% .13D-INX.335LG-IN	28480	9140-0858
L30	9140-0873	1	ER DIVISION	09507	
L33	9140-0873	1	ER DIVISION	09507	
L100	9100-3313	1	INDUCTOR RF-CH-MLD 22UH +5%	03706	22201M-5%
L101	9100-3313	1	INDUCTOR RF-CH-MLD 22UH +5%	03706	22201M-5%
L102	9100-3313	1	INDUCTOR RF-CH-MLD 22UH +5%	03706	22201M-5%
L200	9100-1644	1	INDUCTOR RF-CH-MLD 330UH +5%	05826	2500-04
L291	9100-3313	1	INDUCTOR RF-CH-MLD 22UH +5%	03706	22201M-5%
L701	9140-1384	1	INDUCTOR 700UH +7% -7%	01886	K9673-A
L702	9140-1382	1	INDUCTOR 16UH +10% -10% 17D-MMX25.5LG-MM	01886	K9671-A
L703	9140-1383	1	INDUCTOR 500uH +7.2% -7.2%	01886	
MP2	0515-0866	7	SCREW-MACHINE ASSEMBLY M3 X 0.5 8MM-LG	05610	
MP3	70902-40001	1	SPRING BUMPON	28480	70902-40001
MP4	2360-0117	4	SCREW-MACH 6-32 .375-IN-LG PAN-HD-POZI	05610	
MP7	1205-0568	2	HEAT SINK	07179	
MP10	0535-0025	3	NUT-HEX DBL-CHAM M3 X 0.5 2.4MM-THK	06691	
MP12	1205-0735	2	HEAT SINK SGL TO-66-CS	07179	EL5201B-66-KD
MP15	1205-0567	1	HEAT SINK	07179	
MP28	1205-0566	1	HEAT SINK SGL TO-202	07179	5063B
MP29	0380-1360	1	STANDOFF-HEX 8-MM-LG M3.0 X 0.5-THD	02121	
MP30	0515-1451	1	SCREW-MACHINE ASSEMBLY M3 X 0.5 16MM-LG	01136	
MP31	0590-0523	1	NUT-SPCLY 8-32-THD .5-IN-THK .438AL	11537	
MP32	2510-0061	1	SCREW-MACH 8-32 1.25-IN-LG PAN-HD-POZI	05610	
MP59	1205-0734	2	HEAT SINK SGL PLSTC-PWR-CS	07179	A-003-875-98
MP60	70004-40015	1	CLIP-ON/OFF	28480	70004-40015
MP61	1205-0803	3	SPRING CLIP HIGH FORCE CLIP; STAINLESS	07179	KOOL KLIP #116600
MP62	70004-00016	1	SHIELD-CLOCK	28480	70004-00016
MP63	70004-00017	1	SHIELD-FILTER	28480	70004-00017
NONE	0470-0440	1	COATING DOW CORNING 3140 SIL-RBR-RTV 1P	04514	3140
P1	1251-7575	1	CONN-POST TYPE .100-PIN-SPCG 60-CONT	28480	1251-7575
P2	1251-8861	1	CONN-POST TYPE .156-PIN-SPCG 7-CONT	28480	1251-8861

*Indicates factory-selected value

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**HP Part Number 70004-60028
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
P4	1252-3411	1	CONN-POST TYPE .100-PIN-SPCG 8-CONT	28480	1252-3411
Q1	1854-1222	1	TRANSISTOR NPN SI PD=135W	28480	1854-1222
Q2	1854-0477	1	TRANSISTOR NPN 2N2222A SI TO-18 PD=500MW	28480	1854-0477
Q3	1853-0449	1	TRANSISTOR PNP SI DARL PD=1W	28480	1853-0449
Q4	1853-0449	1	TRANSISTOR PNP SI DARL PD=1W	28480	1853-0449
Q5	1884-0337	1	THYRISTOR-SCR TO-66 VRRM=600	06650	T3SMPC600VOLT
Q6	1884-0337	1	THYRISTOR-SCR TO-66 VRRM=600	06650	T3SMPC600VOLT
Q9	1853-0281	1	TRANSISTOR PNP 2N2907A SI TO-18 PD=400MW	28480	1853-0281
Q11	1853-0281	1	TRANSISTOR PNP 2N2907A SI TO-18 PD=400MW	28480	1853-0281
Q702	1854-0474	1	TRANSISTOR NPN SI PD=625MW FT=100MHZ	28480	1854-0474
Q703	1853-0468	1	TRANSISTOR PNP SI DARL TO-220AB PD=65W	28480	1853-0468
Q704	1855-0694	1	TRANSISTOR MOSFET N-CHAN TO-220 SI	28480	1855-0694
Q705	1854-0474	1	TRANSISTOR NPN SI PD=625MW FT=100MHZ	28480	1854-0474
R1	0698-6362	1	RESISTOR 1K +0.1% .125W TF TC=0+25	05524	CMF-55-1, T-9
R2	0698-6322	1	RESISTOR 4K +0.1% .125W TF TC=0+25	05524	CMF-55-1, T-9
R3	0698-3150	1	RESISTOR 2.37K +1% .125W TF TC=0+100	05524	CMF-55-1
R4	0698-6320	1	RESISTOR 5K +0.1% .125W TF TC=0+25	05524	CMF-55-1, T-9
R5	0757-0465	1	RESISTOR 100K +1% .125W TF TC=0+100	05524	CMF-55-1
R6	0757-0279	1	RESISTOR 3.16K +1% .125W TF TC=0+100	05524	CMF-55-1
R7	0757-0440	1	RESISTOR 7.5K +1% .125W TF TC=0+100	05524	CMF-55-1
R15	0757-0199	1	RESISTOR 21.5K +1% .125W TF TC=0+100	05524	CMF-55-1
R16	0757-0461	1	RESISTOR 68.1K +1% .125W TF TC=0+100	05524	CMF-55-1
R17	0757-0180	1	RESISTOR 31.6 +1% .125W TF TC=0+100	05524	CMF-55-1
R35	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R36	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R37	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R38	0698-3444	1	RESISTOR 316 +1% .125W TF TC=0+100	05524	CMF-55-1
R39	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R40	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R41	0698-8812	1	RESISTOR 1 +1% .125W TF TC=0+100	05524	CMF-55-1
R42	0757-0200	1	RESISTOR 5.62K +1% .125W TF TC=0+100	05524	CMF-55-1
R43	0757-0439	1	RESISTOR 6.81K +1% .125W TF TC=0+100	05524	CMF-55-1
R44	0698-3151	1	RESISTOR 2.87K +1% .125W TF TC=0+100	05524	CMF-55-1
R46	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R47	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1

**HP Part Number 70004-60028
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R48	0757-0465	1	RESISTOR 100K +1% .125W TF TC=0+100	05524	CMF-55-1
R49	0698-3450	1	RESISTOR 42.2K +1% .125W TF TC=0+100	05524	CMF-55-1
R50	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R51	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R52	0757-0444	1	RESISTOR 12.1K +1% .125W TF TC=0+100	05524	CMF-55-1
R53	0698-3155	1	RESISTOR 4.64K +1% .125W TF TC=0+100	05524	CMF-55-1
R54	0757-0458	1	RESISTOR 51.1K +1% .125W TF TC=0+100	05524	CMF-55-1
R55	0757-0200	1	RESISTOR 5.62K +1% .125W TF TC=0+100	05524	CMF-55-1
R56	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R57	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R58	2100-0554	1	RESISTOR-TRMR 500 10% TKF TOP-ADJ 1-TRN	03744	3386P-Y46-501
R59	0757-0279	1	RESISTOR 3.16K +1% .125W TF TC=0+100	05524	CMF-55-1
R69	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R100	0757-0394	1	RESISTOR 51.1 +1% .125W TF TC=0+100	05524	CMF-55-1
R101	0757-0394	1	RESISTOR 51.1 +1% .125W TF TC=0+100	05524	CMF-55-1
R102	0757-0461	1	RESISTOR 68.1K +1% .125W TF TC=0+100	05524	CMF-55-1
R103	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1
R104	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R105	0757-0290	1	RESISTOR 6.19K +1% .125W TF TC=0+100	05524	CMF-55-1
R106	0757-0440	1	RESISTOR 7.5K +1% .125W TF TC=0+100	05524	CMF-55-1
R107	2100-0568	1	RESISTOR-TRMR 100 10% TKF TOP-ADJ 1-TRN	03744	3386P-Y46-101
R108	0757-0424	1	RESISTOR 1.1K +1% .125W TF TC=0+100	05524	CMF-55-1
R109	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R110	0698-3136	1	RESISTOR 17.8K +1% .125W TF TC=0+100	05524	CMF-55-1
R199	0811-1732	1	RESISTOR 1 +5% 3W PWI TC=0+50	28480	0811-1732
R200	0699-0172	1	RESISTOR 3M +5% 1W TF TC=0+250	01992	FL1
R201	0764-0046	1	RESISTOR 33K +5% 2W MO TC=0+200	02499	GS-3
R202	0764-0046	1	RESISTOR 33K +5% 2W MO TC=0+200	02499	GS-3
R203	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R204	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R205	0812-0019	1	RESISTOR .33 +5% 3W PWI TC=0+90	02499	T2B-79
R206	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R207	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R208	0757-0417	1	RESISTOR 562 +1% .125W TF TC=0+100	05524	CMF-55-1
R209	0757-0439	1	RESISTOR 6.81K +1% .125W TF TC=0+100	05524	CMF-55-1

*Indicates factory-selected value

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**HP Part Number 70004-60028
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R210	2100-3252	1	RESISTOR-TRMR 5K 10% TKF TOP-ADJ 1-TRN	03744	3386P-Y46-502
R211	0757-0278	1	RESISTOR 1.78K +1% .125W TF TC=0+100	05524	CMF-55-1
R212	0698-8812	1	RESISTOR 1 +1% .125W TF TC=0+100	05524	CMF-55-1
R213	0698-3441	1	RESISTOR 215 +1% .125W TF TC=0+100	05524	CMF-55-1
R214	0757-0421	1	RESISTOR 825 +1% .125W TF TC=0+100	05524	CMF-55-1
R215	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R216	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R217	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R218	0811-3693	1	RESISTOR 33 +5% 5W PWI TC=0+400	11248	MNS05N-330-J
R219	0811-3692	1	RESISTOR 3.9 +5% 5W PWI TC=0+400	11248	MNS05N-3R9-J
R220	0757-0465	1	RESISTOR 100K +1% .125W TF TC=0+100	05524	CMF-55-1
R221	0757-0465	1	RESISTOR 100K +1% .125W TF TC=0+100	05524	CMF-55-1
R222	0811-3696	1	RESISTOR 150 +5% 2W PWI TC=0+400	11248	MNS02N-151-J
R223	0698-8820	1	RESISTOR 4.64 +1% .125W TF TC=0+100	05524	CMF-55-1
R224	0698-3390	1	RESISTOR 19.6 +1% .5W TF TC=0+100	05524	CMF-65-2
R225	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R226	0698-3150	1	RESISTOR 2.37K +1% .125W TF TC=0+100	05524	CMF-55-1
R227	0811-1084	1	RESISTOR 22 +5% 3W PWI TC=0+30	28480	0811-1084
R228	0811-3696	1	RESISTOR 150 +5% 2W PWI TC=0+400	11248	MNS02N-151-J
R229	0698-3390	1	RESISTOR 19.6 +1% .5W TF TC=0+100	05524	CMF-65-2
R230	0698-8820	1	RESISTOR 4.64 +1% .125W TF TC=0+100	05524	CMF-55-1
R231	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R232	0698-3150	1	RESISTOR 2.37K +1% .125W TF TC=0+100	05524	CMF-55-1
R233	0811-1084	1	RESISTOR 22 +5% 3W PWI TC=0+30	28480	0811-1084
R239	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R242	0757-0279	1	RESISTOR 3.16K +1% .125W TF TC=0+100	05524	CMF-55-1
R243	0757-0279	1	RESISTOR 3.16K +1% .125W TF TC=0+100	05524	CMF-55-1
R300	0698-3443	1	RESISTOR 287 +1% .125W TF TC=0+100	05524	CMF-55-1
R301	0698-3151	1	RESISTOR 2.87K +1% .125W TF TC=0+100	05524	CMF-55-1
R304	0757-0346	1	RESISTOR 10 +1% .125W TF TC=0+100	05524	CMF-55-1
R601	0698-3150	1	RESISTOR 2.37K +1% .125W TF TC=0+100	05524	CMF-55-1
R602	0698-3150	1	RESISTOR 2.37K +1% .125W TF TC=0+100	05524	CMF-55-1
R603	0698-3150	1	RESISTOR 2.37K +1% .125W TF TC=0+100	05524	CMF-55-1
R701	0757-0346	1	RESISTOR 10 +1% .125W TF TC=0+100	05524	CMF-55-1
R702	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1

**HP Part Number 70004-60028
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R703	0698-3158	1	RESISTOR 23.7K +1% .125W TF TC=0+100	05524	CMF-55-1
R704	0698-3153	1	RESISTOR 3.83K +1% .125W TF TC=0+100	05524	CMF-55-1
R705	0698-3153	1	RESISTOR 3.83K +1% .125W TF TC=0+100	05524	CMF-55-1
R706	0698-0083	1	RESISTOR 1.96K +1% .125W TF TC=0+100	05524	CMF-55-1
R707	0699-0720	1	RESISTOR 61.9K +0.1% .125W TF TC=0+25	01074	H8
R708	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+100	05524	CMF-55-1
R709	0698-3153	1	RESISTOR 3.83K +1% .125W TF TC=0+100	05524	CMF-55-1
R710	0698-6360	1	RESISTOR 10K +0.1% .125W TF TC=0+25	05524	CMF-55-1, T-9
R711	0698-8814	1	RESISTOR 1.47 +1% .125W TF TC=0+100	05524	CMF-55-1
R712	0757-0346	1	RESISTOR 10 +1% .125W TF TC=0+100	05524	CMF-55-1
R713	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R714	0757-0278	1	RESISTOR 1.78K +1% .125W TF TC=0+100	05524	CMF-55-1
R715	0698-3441	1	RESISTOR 215 +1% .125W TF TC=0+100	05524	CMF-55-1
R716	0698-6320	1	RESISTOR 5K +0.1% .125W TF TC=0+25	05524	CMF-55-1, T-9
R717	0698-6320	1	RESISTOR 5K +0.1% .125W TF TC=0+25	05524	CMF-55-1, T-9
R718	0698-6360	1	RESISTOR 10K +0.1% .125W TF TC=0+25	05524	CMF-55-1, T-9
R719	0698-3430	1	RESISTOR 21.5 +1% .125W TF TC=0+100	05524	CMF-55-1
R720	0698-3430	1	RESISTOR 21.5 +1% .125W TF TC=0+100	05524	CMF-55-1
R721	0698-8820	1	RESISTOR 4.64 +1% .125W TF TC=0+100	05524	CMF-55-1
R722	0813-0050	1	RESISTOR 100 +5% 3W PWI TC=0+20	02499	T2B-79
R723	0813-0050	1	RESISTOR 100 +5% 3W PWI TC=0+20	02499	T2B-79
R724	0698-3155	1	RESISTOR 4.64K +1% .125W TF TC=0+100	05524	CMF-55-1
R725	0698-3153	1	RESISTOR 3.83K +1% .125W TF TC=0+100	05524	CMF-55-1
R726	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R727	0757-0400	1	RESISTOR 90.9 +1% .125W TF TC=0+100	05524	CMF-55-1
R728	2100-3252	1	RESISTOR-TRMR 5K 10% TKF TOP-ADJ 1-TRN	03744	3386P-Y46-502
R729	0698-3160	1	RESISTOR 31.6K +1% .125W TF TC=0+100	05524	CMF-55-1
R730	0698-0083	1	RESISTOR 1.96K +1% .125W TF TC=0+100	05524	CMF-55-1
R801	0757-0278	1	RESISTOR 1.78K +1% .125W TF TC=0+100	05524	CMF-55-1
R802	0757-0180	1	RESISTOR 31.6 +1% .125W TF TC=0+100	05524	CMF-55-1
R803	0698-3157	1	RESISTOR 19.6K +1% .125W TF TC=0+100	05524	CMF-55-1
R804	0698-3160	1	RESISTOR 31.6K +1% .125W TF TC=0+100	05524	CMF-55-1
R805	0698-3160	1	RESISTOR 31.6K +1% .125W TF TC=0+100	05524	CMF-55-1
R806	0757-0123	1	RESISTOR 34.8K +1% .125W TF TC=0+100	05524	CMF-55-1
R807	0757-0460	1	RESISTOR 61.9K +1% .125W TF TC=0+100	05524	CMF-55-1

*Indicates factory-selected value

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**HP Part Number 70004-60028
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R808	0757-0200	1	RESISTOR 5.62K +1% .125W TF TC=0+100	05524	CMF-55-1
R809	0698-3443	1	RESISTOR 287 +1% .125W TF TC=0+100	05524	CMF-55-1
RT1	0837-0287	1	THERMISTOR-SURGE PTCTR 5 OHM AT 25 DEG C	12830	SG-80
RT2	0837-0287	1	THERMISTOR-SURGE PTCTR 5 OHM AT 25 DEG C	12830	SG-80
RV1	0837-0401	1	VARISTOR DC VOLTAGE:350V MAX;RMS VOLTAGE	28480	0837-0401
S1	3101-2150	1	SWITCH-PB DPDTALTNG 8A 250 VAC	28480	3101-2150
S2	3101-2608	1	SWITCH-SL DPDT STD 5A 250VAC PC	28480	3101-2608
S3	3103-0117	1	SWITCH-THRM FXD +75C 1A OPN-ON-RISE	10015	TS75B
T1	9100-4377	1	TRANSFORMER-POWER TOROIDAL TRANSFORMER	11298	40/3034
T2	9100-4793	1	TRANSFORMER-PULSE; PRI IND: 840 UH	01886	V9237-A
T3	9100-4375	1	TRANSFORMER LP:3.5 MH MIN (LOW LEVEL,1	01869	PE-63509
T4	9100-4373	1	TRANSFORMER LP:1 MH MIN (LOW LEVEL, 1	01869	PE-63555
T9	9140-0876	1	INDUCTOR	04200	99ZSPA44268
T11	9140-0879	1	INDUCTOR 40MH +-20% 1.95D-IN	04200	99ZSPA44267
T12	9100-4376	1	TRANSFORMER LP: 3.4 MH MIN (LOW LEVEL,1	01869	PE-98006
T90	9140-0876	1	INDUCTOR	04200	99ZSPA44268
T701	9100-4785	1	TRANSFORMER-CURRENT 1 V NORMALIZED	01886	CS 4200V
TP1	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP2	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP6	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP9	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP11	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP14	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP16	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP17	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP20	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP21	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP23	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP24	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
U1	1906-0248	1	DIODE-ARRAY 50V 500MA VF DIFF=15MV	28480	1906-0248
U2	1826-1222	1	IC OP AMP H-SLEW-RATE QUAD 14 PIN DIP-C	28480	1826-1222
U9	1826-1040	1	IC V RGLTR-SWG 4.85/5.15V 18-DIP-C PKG	28480	1826-1040
U10	1820-1366	1	IC-INTERFACE DRVR BIPOLAR CLOCK TTL TO	28480	1820-1366
U11	1820-1272	1	IC DRVR TTL/LS NOR QUAD 2-INP	28480	1820-1272
U12	1820-1212	1	IC FF TTL/LS J-K NEG-EDGE-TRIG	28480	1820-1212

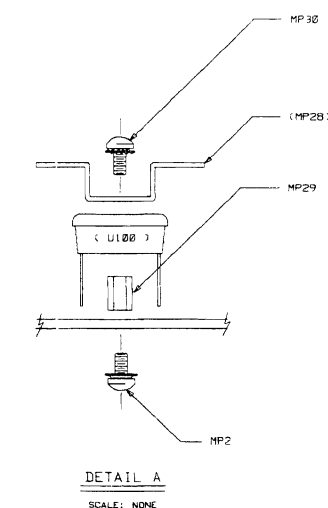
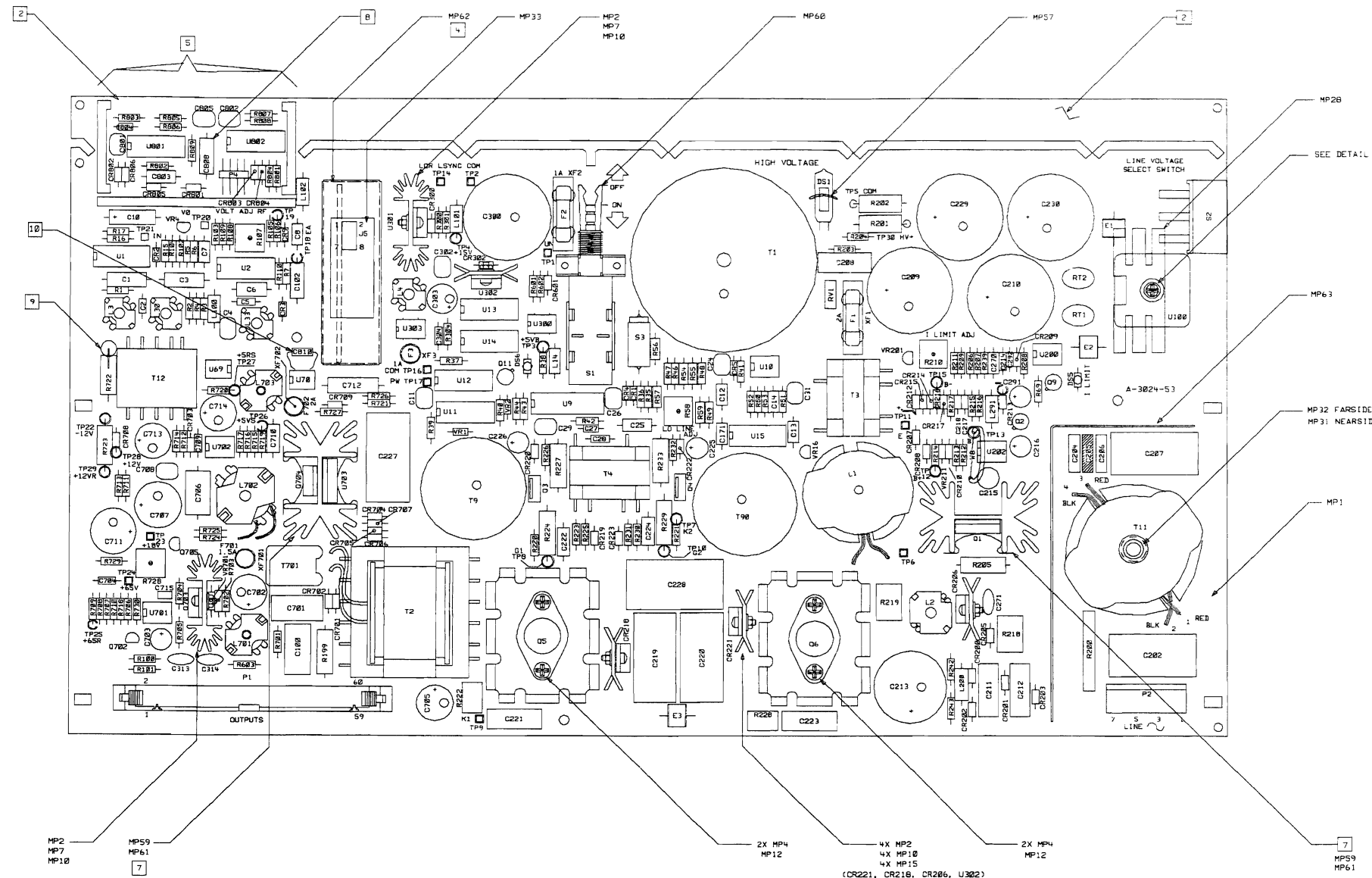
**HP Part Number 70004-60028
A4 Power Supply (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U13	1820-2922	1	IC GATE CMOS/HC NAND QUAD 2-INP	28480	1820-2922
U14	1820-2923	1	IC GATE CMOS/HC NAND TPL 3-INP	28480	1820-2923
U15	1826-0759	1	IC COMPARATOR GP QUAD 14 PIN DIP-C	28480	1826-0759
U69	1990-1074	1	OPTO-ISOLATOR LED-PXSTR IF=60MA-MAX	28480	1990-1074
U70	1990-1074	1	OPTO-ISOLATOR LED-PXSTR IF=60MA-MAX	28480	1990-1074
U100	1906-0224	1	DIODE-FW BRDG 600V 25A	28480	1906-0224
U200	1826-0412	1	IC COMPARATOR PRCN DUAL 8 PIN DIP-P	28480	1826-0412
U202	1820-3512	1	IC-INTERFACE SW BIPOLAR DUAL -888-BIT	28480	1820-3512
U300	1906-0289	1	DIODE-FW BRDG 200V 800MA	11699	CBR1F-D020
U301	1826-0393	1	IC V RGLTR-ADJ-POS 1.2/37V 3-TO-220 PKG	28480	1826-0393
U302	1826-0122	1	IC V RGLTR-FXD-POS 4.8/5.2V TO-220 PKG	28480	1826-0122
U303	1906-0289	1	DIODE-FW BRDG 200V 800MA	11699	CBR1F-D020
U701	1826-2010	1	IC OP AMP 8 PIN DIP-P	28480	1826-2010
U702	1826-1343	1	IC V RGLTR-V-REF-ADJ 2.5/36V 8-DIP-P PKG	28480	1826-1343
U703	1906-0360	1	DIODE-CT-RECT 45V 30A TO-218AC	28480	1906-0360
U801	1820-3674	1	IC DRVR CMOS/HC BUS QUAD	28480	1820-3674
U802	1826-0175	1	IC COMPARATOR GP DUAL 14 PIN DIP-P	28480	1826-0175
VR1	1902-0041	1	DIODE-ZNR 5.11V 5% DO-35 PD=.4W	02688	
VR2	1902-0041	1	DIODE-ZNR 5.11V 5% DO-35 PD=.4W	02688	
VR4	1826-0774	1	IC V RGLTR-V-REF-FXD 1.223/1.247V TO-92	28480	1826-0774
VR16	1826-0774	1	IC V RGLTR-V-REF-FXD 1.223/1.247V TO-92	28480	1826-0774
VR201	1826-0774	1	IC V RGLTR-V-REF-FXD 1.223/1.247V TO-92	28480	1826-0774
VR211	1902-0041	1	DIODE-ZNR 5.11V 5% DO-35 PD=.4W	02688	
VR701	1902-1413	1	DIODE-ZNR 36V 5% DO-35 PD=.4W TC=+.112%	02688	
XF1	2110-0714	1	FUHLR-BLK 6.3A 250V	06328	0GN 031.8101
XF2	2110-0714	1	FUHLR-BLK 6.3A 250V	06328	0GN 031.8101
XF3	2110-0554	1	FUHLR-BPN-SKT 5A 125V	04703	281005
XF701	2110-0554	1	FUHLR-BPN-SKT 5A 125V	04703	281005
XF702	2110-0554	1	FUHLR-BPN-SKT 5A 125V	04703	281005

*Indicates factory-selected value

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5300		APPROVED	DATE
SYM	REVISIONS	BRIAN AVENELL	06-13-90
A	AS ISSUED PER PCO 53-06296		
B	REVISED PER PCO 53-07259 mw	M. WEHMAN	



- NOTES: UNLESS OTHERWISE SPECIFIED
1. DIMENSIONS ARE IN INCHES.
 2. REMOVE TABS AFTER MACHINE SOLDER.
 3. VR4 MAX HEIGHT .350. FOR COMPONENT HEIGHT RESTRICTIONS SEE D-70004-20028-4, SHEET 2.
 4. AFTER MACHINE SOLDER, BREAK OFF THIS SECTION OF BOARD AND LOAD P4 INTO J5. INSTALL SHIELD (MP62) SOLDER SHIELD TO MAIN BOARD FROM SOLDER SIDE. SOLDER MINIMUM OF 180° OF HOLE.
 5. TRIM LEAD LENGTH TO .118
 6. T2, T3, T4, C209, C210, C213, C219, C220, C227, C226, C229, C230, C300, C702, C705, C707, C711, C713, & C714 MUST SIT FLUSH TO BOARD SURFACE AFTER MACHINE SOLDER.
 7. USE THERMAL COMPOUND UNDER O1, U703 AND O701
 8. C800 MUST BE LOADED AFTER WAVE SOLDER. SOLDER BY HAND USING MINIMUM HEAT.
 9. R722 CAN BE LOADED EITHER STANDING ON END AS SHOWN OR AUTO INSERTED.
 10. INSTALL C810 AS SHOWN.

SEE MATERIAL LIST 70004-60028

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DIMENSIONS ARE IN INCHES.
TOLERANCES: XX.XXX ±.010
 XX.XX ±.02
THIRD ANGLE
PROJECTION
DO NOT SCALE THIS DRAWING

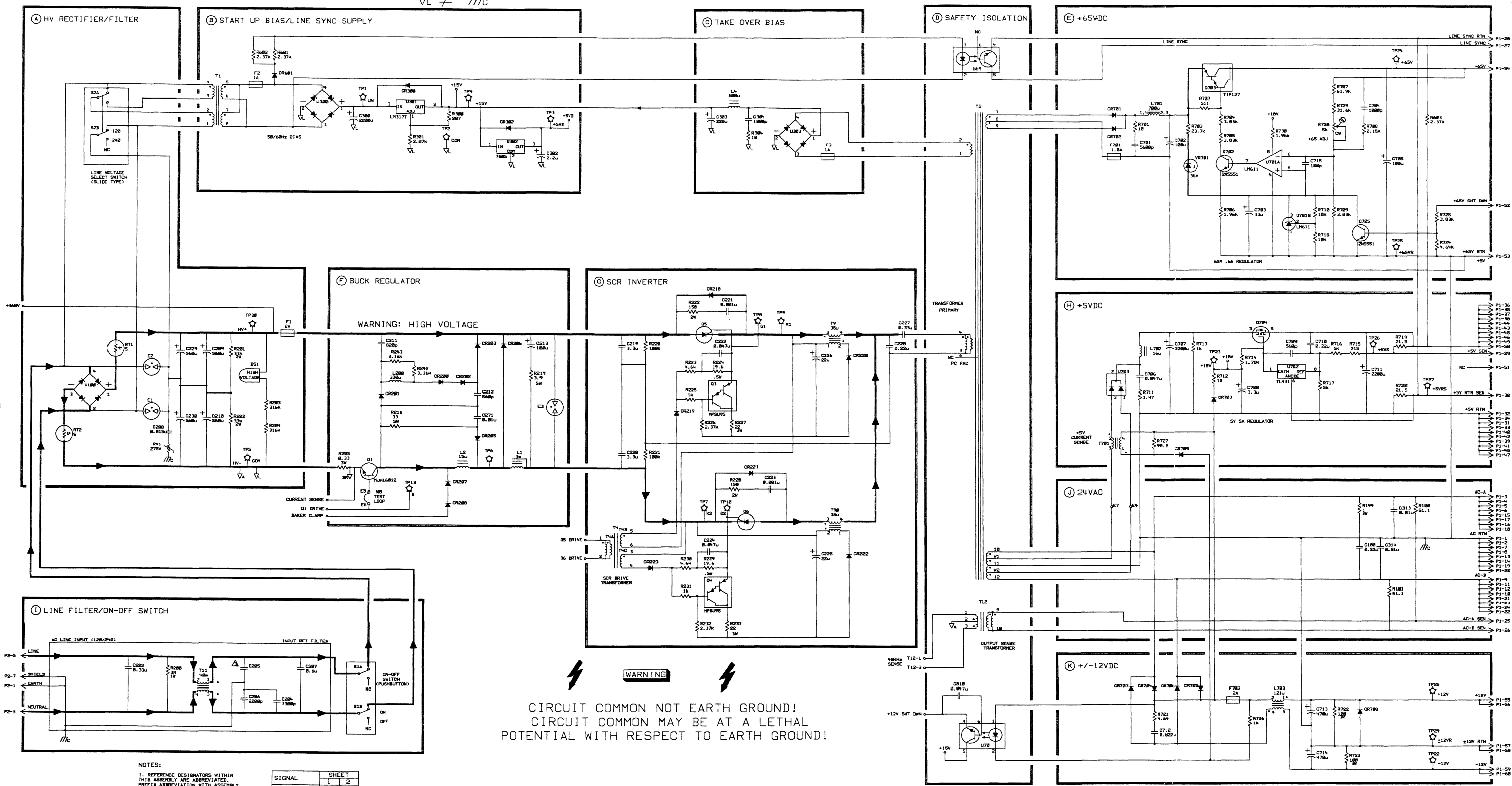
G. HUDSON
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DATE
SUPERSEDES DWG.

ASSEMBLY, PWB
POWER SUPPLY
TITLE

alag028
FILENAME
SCALE NONE
SHEET 1 OF 1
70004-60028
PART NUMBER
D-70004-20028-2

5300		D-70004-60028-1	
SYM	REVISIONS	APPROVED	DATE
A	AS ISSUED PER PCO 53-06296		8-16-90
B	REVISED PER PCO 3-07259	mlw	

WARNING
 LINE ISOLATED VARIAC
 REQUIRED FOR SERVICING!
 $V_L \neq \text{m}_c$



NOTES:
 1. REFERENCE DESIGNATORS WITHIN THIS ASSEMBLY ARE ABBREVIATED. PREFIX ABBREVIATION WITH ASSEMBLY NUMBER FOR COMPLETE REFERENCE DESIGNATOR.
 2. UNLESS OTHERWISE INDICATED: RESISTANCE IN OHMS (Ω) CAPACITANCE IN MICROFARADS (μF) INDUCTANCE IN MICROHENRIES (μH)
 Δ NOT USED

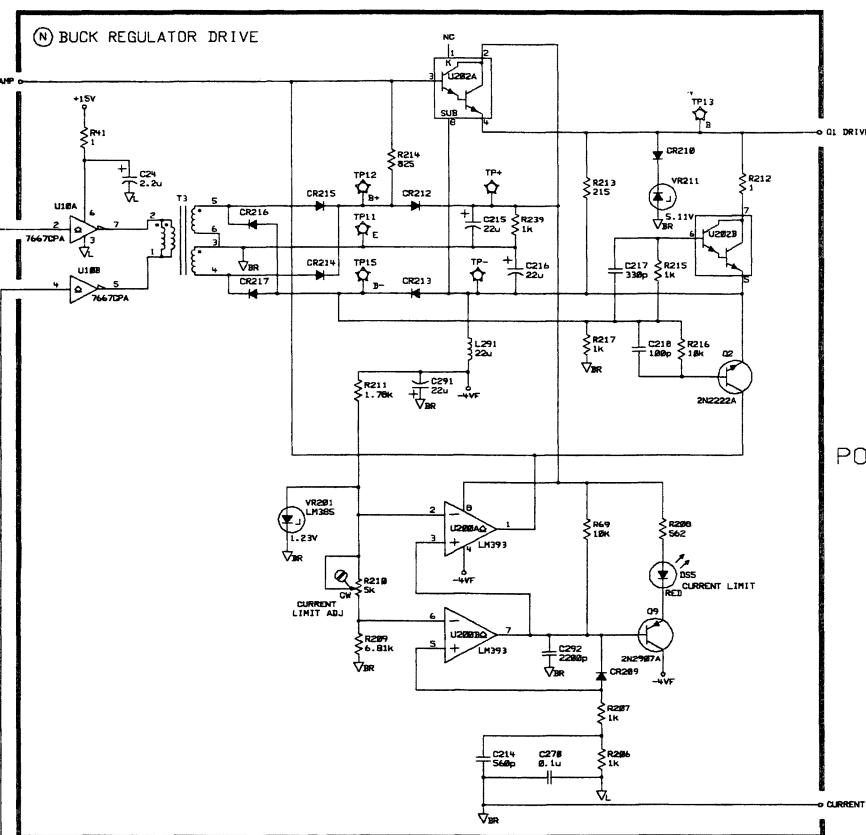
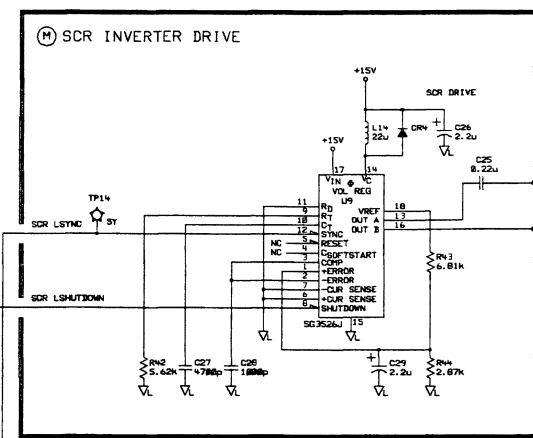
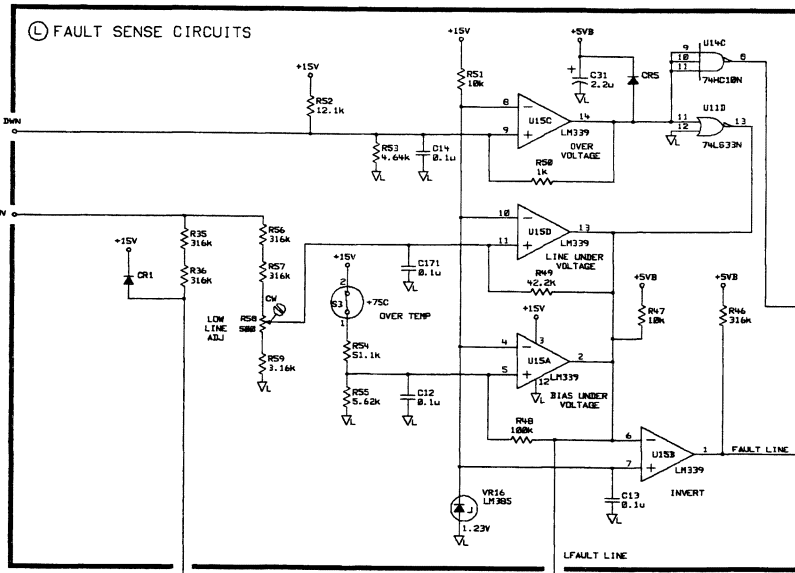
SIGNAL	SHEET
+360V	1
+12V GHT DMN	L
RANGER CLAMP	N
CURRENT SENSE	F
G1 DRIVE	F
G2 DRIVE	F
G3 DRIVE	F
T12-1	D
T12-3	D

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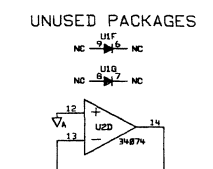
DRAWN BY	DATE
ENGINEER/CHECKER	DATE
RELEASE TO PROD.	DATE
SUPERSEDES DWG.	

SCHEMATIC, PWA
 POWER SUPPLY

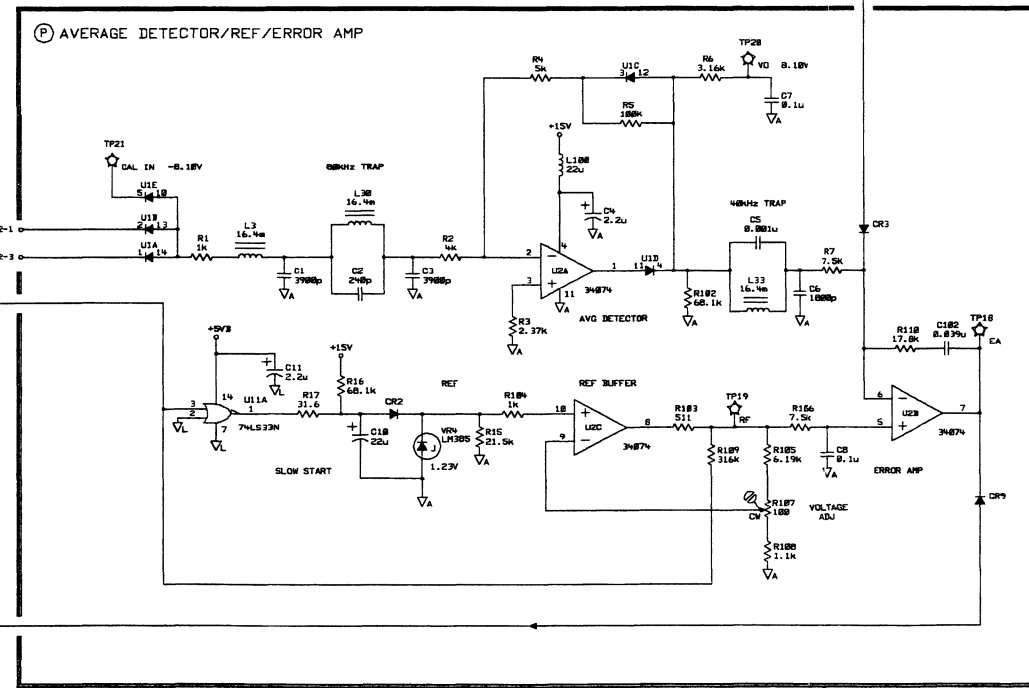
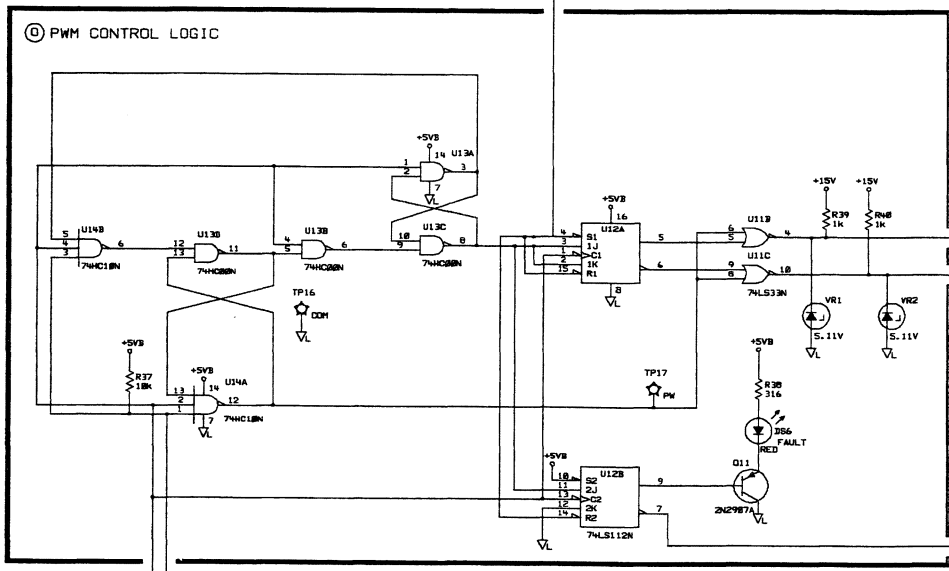
FILENAME	slaad028
SCALE	NONE
SHEET 1 OF 2	70004-60028
PART NUMBER	D-70004-60028-1



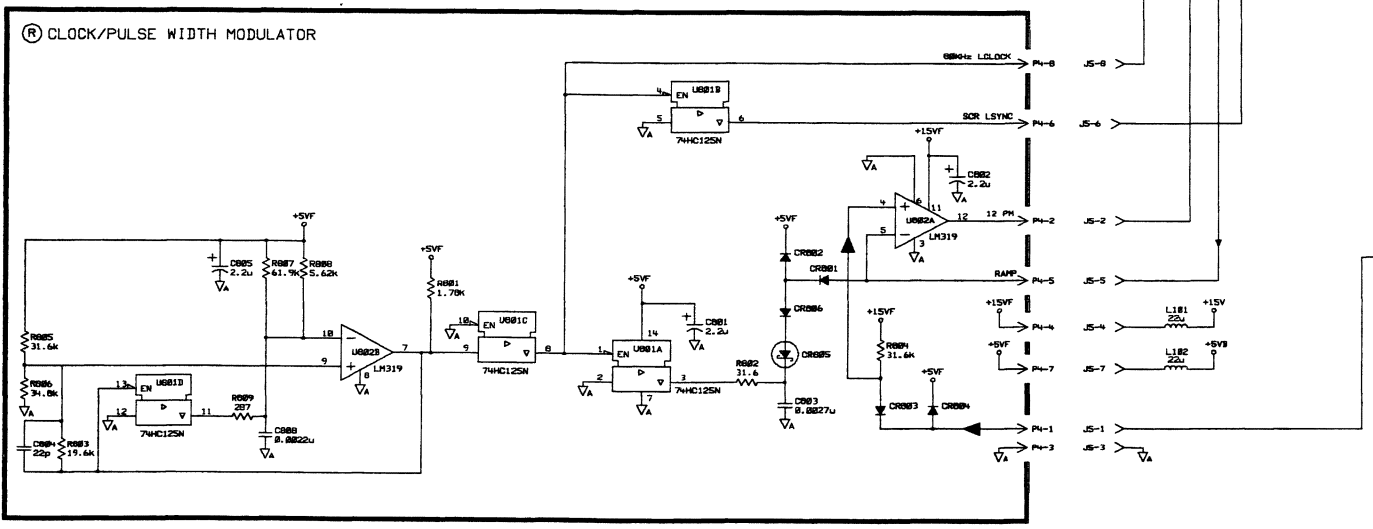
WARNING
 CIRCUIT COMMON NOT EARTH GROUND!
 CIRCUIT COMMON MAY BE AT A LETHAL
 POTENTIAL WITH RESPECT TO EARTH GROUND!



SIGNAL	SHEET
+	1
-	2



PIN	SIGNAL	TO/FROM	FUNCTION
1	SHIELD (GND)	J	J
2	AC RTN	J	J
3	AC-A	J	J
4	AC-B	J	J
5	AC-C	J	J
6	AC RTN	J	J
7	AC-A	J	J
8	AC-B	J	J
9	AC-C	J	J
10	AC RTN	J	J
11	AC-A	J	J
12	AC-B	J	J
13	AC-C	J	J
14	AC RTN	J	J
15	AC-A	J	J
16	AC-B	J	J
17	AC-C	J	J
18	AC RTN	J	J
19	AC-A	J	J
20	AC-B	J	J
21	AC-C	J	J
22	AC RTN	J	J
23	AC-A	J	J
24	AC-B	J	J
25	AC-C	J	J
26	AC RTN	J	J
27	AC-A	J	J
28	AC-B	J	J
29	AC-C	J	J
30	AC RTN	J	J
31	AC-A	J	J
32	AC-B	J	J
33	AC-C	J	J
34	AC RTN	J	J
35	AC-A	J	J
36	AC-B	J	J
37	AC-C	J	J
38	AC RTN	J	J
39	AC-A	J	J
40	AC-B	J	J
41	AC-C	J	J
42	AC RTN	J	J
43	AC-A	J	J
44	AC-B	J	J
45	AC-C	J	J
46	AC RTN	J	J
47	AC-A	J	J
48	AC-B	J	J
49	AC-C	J	J
50	AC RTN	J	J
51	AC-A	J	J
52	AC-B	J	J
53	AC-C	J	J
54	AC RTN	J	J
55	AC-A	J	J
56	AC-B	J	J
57	AC-C	J	J
58	AC RTN	J	J
59	AC-A	J	J
60	AC-B	J	J
61	AC-C	J	J
62	AC RTN	J	J
63	AC-A	J	J
64	AC-B	J	J
65	AC-C	J	J
66	AC RTN	J	J
67	AC-A	J	J
68	AC-B	J	J
69	AC-C	J	J
70	AC RTN	J	J
71	AC-A	J	J
72	AC-B	J	J
73	AC-C	J	J
74	AC RTN	J	J
75	AC-A	J	J
76	AC-B	J	J
77	AC-C	J	J
78	AC RTN	J	J
79	AC-A	J	J
80	AC-B	J	J
81	AC-C	J	J
82	AC RTN	J	J
83	AC-A	J	J
84	AC-B	J	J
85	AC-C	J	J
86	AC RTN	J	J
87	AC-A	J	J
88	AC-B	J	J
89	AC-C	J	J
90	AC RTN	J	J
91	AC-A	J	J
92	AC-B	J	J
93	AC-C	J	J
94	AC RTN	J	J
95	AC-A	J	J
96	AC-B	J	J
97	AC-C	J	J
98	AC RTN	J	J
99	AC-A	J	J
100	AC-B	J	J



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DRAWN BY	DATE
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RELEASE TO PROD.	DATE
SUPERSEDES DWG.	

S32aad028	FILENAME	HP	HEWLETT PACKARD
SCALE NONE			
SHEET 2 of 2		70004-60028	PART NUMBER
D-70004-60028-1			

Component-Level Information Packet

for 70004-60003

A4 Power Supply



HP Part No. 70004-90055
Printed in USA May 1994

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1400 Fountaingrove Parkway, Santa Rosa, CA 95403-1799, USA

Scans by Artekmedia => 2010
HP Part Number 70004-60003
A4 Power Supply

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A4	70004-60003	6	1	BD AY-PWR SPLY	28480	70004-60003
A4 C1	0160-0156	7	1	CAPACITOR-FXD 3900PF +-10% 200VDC POLYE	84411	HEW-238M
A4 C2	0160-5491	3	1	CAPACITOR-FXD 240PF +-5% 100VDC CER 0+-3	04222	SA101A241JAAH
A4 C3	0160-0156	7	1	CAPACITOR-FXD 3900PF +-10% 200VDC POLYE	84411	HEW-238M
A4 C4	0180-3770	9	1	CAPACITOR-FXD 2.2UF+-10% 35VDC TA	56289	299D225X9035BB1
A4 C5	0160-4822	2	1	CAPACITOR-FXD 1000PF +-5% 100VDC CER 0+-	04222	SA201A102JAAH
A4 C6	0160-0299	9	1	CAPACITOR-FXD 1800PF +-10% 200VDC POLYE	84411	HEW-238M
A4 C7	0160-4835	7	1	CAPACITOR-FXD .1UF +-10% 50VDC CER	04222	SA115C104KAAH
A4 C8	0160-4835	7	1	CAPACITOR-FXD .1UF +-10% 50VDC CER	04222	SA115C104KAAH
A4 C10	0180-0228	6	1	CAPACITOR-FXD 22UF+-10% 15VDC TA	56289	150D226X9015B2-DYS
A4 C11	0180-3770	9	1	CAPACITOR-FXD 2.2UF+-10% 35VDC TA	56289	299D225X9035BB1
A4 C12	0160-4835	7	1	CAPACITOR-FXD .1UF +-10% 50VDC CER	04222	SA115C104KAAH
A4 C13	0160-4835	7	1	CAPACITOR-FXD .1UF +-10% 50VDC CER	04222	SA115C104KAAH
A4 C14	0160-4835	7	1	CAPACITOR-FXD .1UF +-10% 50VDC CER	04222	SA115C104KAAH
A4 C24	0180-3770	9	1	CAPACITOR-FXD 2.2UF+-10% 35VDC TA	56289	299D225X9035BB1
A4 C25	0160-5098	6	1	CAPACITOR-FXD .22UF +-10% 50VDC CER	04222	SA405C224KAAH
A4 C26	0180-3770	9	1	CAPACITOR-FXD 2.2UF+-10% 35VDC TA	56289	299D225X9035BB1
A4 C27	0160-4831	3	1	CAPACITOR-FXD 4700PF +-10% 100VDC CER	04222	SA101C472KAAH
A4 C28	0160-4822	2	1	CAPACITOR-FXD 1000PF +-5% 100VDC CER 0+-	04222	SA201A102JAAH
A4 C29	0180-3770	9	1	CAPACITOR-FXD 2.2UF+-10% 35VDC TA	56289	299D225X9035BB1
A4 C31	0180-3770	9	1	CAPACITOR-FXD 2.2UF+-10% 35VDC TA	56289	299D225X9035BB1
A4 C100	0160-5998	5	1	CAPACITOR-FXD .22UF +-10% 200VDC MET-POL	84411	HEW-727
A4 C102	0160-3825	3	1	CAPACITOR-FXD .039UF +-10% 50VDC MET-POL	84411	HEW-249
A4 C171	0160-4835	7	1	CAPACITOR-FXD .1UF +-10% 50VDC CER	04222	SA115C104KAAH
A4 C202	0160-5093	1	1	CAPACITOR-FXD .33UF +-10% 250VAC(RMS) ME		PME271M633K
A4 C204	0160-5044	2	1	CAPACITOR-FXD 3300PF +-20% 250VAC(RMS) M		PME271Y433
A4 C206	0160-4281	7	1	CAPACITOR-FXD 2200PF +-20% 250VAC(RMS) M		PME271Y422M
A4 C207	0160-4413	7	1	CAPACITOR-FXD .6UF +-10% 250VAC(RMS) MET		PME271M660K
A4 C208	0160-6316	3	1	CAPACITOR-FXD .015UF +-20% 250VAC(RMS) M		PME271Y515M
A4 C209	0180-3638	8	1	CAPACITOR-FXD 560UF+-20% 200VDC AL		SMG200VN561M30X30SD
A4 C210	0180-3638	8	1	CAPACITOR-FXD 560UF+-20% 200VDC AL		SMG200VN561M30X30SD
A4 C211	0160-6066	0	1	CAPACITOR-FXD 820PF +-10% 500VDC POLYP	84411	HEW682-2
A4 C212	0160-6065	9	1	CAPACITOR-FXD 560PF +-10% 500VDC POLYP	84411	HEW682-3
A4 C213	0180-3432	0	1	CAPACITOR-FXD 180UF+-20% 200VDC AL		NMHR200VN181M25X30SD
A4 C214	0160-4825	5	1	CAPACITOR-FXD 560PF +-5% 100VDC CER 0+-3	04222	SA101A561JAAH
A4 C215	0180-3847	1	1	CAPACITOR-FXD 22UF+-10% 25VDC TA	56289	299D226X9025DB1
A4 C216	0180-3847	1	1	CAPACITOR-FXD 22UF+-10% 25VDC TA	56289	299D226X9025DB1
A4 C217	0160-4810	8	1	CAPACITOR-FXD 330PF +-5% 100VDC CER 0+-3	04222	SA101A331JAAH
A4 C218	0160-4801	7	1	CAPACITOR-FXD 100PF +-5% 100VDC CER 0+-3	04222	SA102A101JAAH
A4 C219	0160-6005	7	1	CAPACITOR-FXD 3.3UF +-10% 250VDC MET-POL	84411	HEW-680
A4 C220	0160-6005	7	1	CAPACITOR-FXD 3.3UF +-10% 250VDC MET-POL	84411	HEW-680
A4 C221	0160-6060	4	1	CAPACITOR-FXD 1000PF +-10% 500VDC POLYP	84411	HEW682-1
A4 C222	0160-4834	6	1	CAPACITOR-FXD .047UF +-10% 100VDC CER	04222	SA301C473KAAH
A4 C223	0160-6060	4	1	CAPACITOR-FXD 1000PF +-10% 500VDC POLYP	84411	HEW682-1
A4 C224	0160-4834	6	1	CAPACITOR-FXD .047UF +-10% 100VDC CER	04222	SA301C473KAAH
A4 C225	0180-3847	1	1	CAPACITOR-FXD 22UF+-10% 25VDC TA	56289	299D226X9025DB1
A4 C226	0180-3847	1	1	CAPACITOR-FXD 22UF+-10% 25VDC TA	56289	299D226X9025DB1
A4 C227	0160-6068	2	1	CAPACITOR-FXD .33UF +-5% 150VDC POLYP	84411	HEW681-3

*Indicates factory-selected value

**HP Part Number 70004-60003
A4 Power Supply (continued)**

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A4 C228	0160-6331	2	1	CAPACITOR-FXD .22UF +-5% 400VDC POLYP	84411	HEW681-1B
A4 C229	0180-3638	8	1	CAPACITOR-FXD 560UF+-20% 200VDC AL		SMG200VN561M30X30SD
A4 C230	0180-3638	8	1	CAPACITOR-FXD 560UF+-20% 200VDC AL		SMG200VN561M30X30SD
A4 C270	0160-4835	7	1	CAPACITOR-FXD .1UF +-10% 50VDC CER	04222	SA115C104KAAH
A4 C271	0160-2055	9	1	CAPACITOR-FXD .01UF +80-20% 100VDC CER		805-504 Y5V 103Z
A4 C291	0180-3847	1	1	CAPACITOR-FXD 22UF+-10% 25VDC TA	56289	299D226X9025DB1
A4 C292	0160-4830	2	1	CAPACITOR-FXD 2200PF +-10% 100VDC CER	04222	SA101C222KAAH
A4 C300	0180-3433	1	1	CAPACITOR-FXD 2200UF+-20% 63VDC AL		BKA63VN222M30X30SD
A4 C302	0180-3770	9	1	CAPACITOR-FXD 2.2UF+-10% 35VDC TA	56289	299D225X9035BB1
A4 C303	0180-3336	3	1	CAPACITOR-FXD 220UF+-20% 25VDC AL		SM25VB220MC
A4 C304	0160-4822	2	1	CAPACITOR-FXD 1000PF +-5% 100VDC CER 0+-	04222	SA201A102JAAH
A4 C313	0160-2055	9	1	CAPACITOR-FXD .01UF +80-20% 100VDC CER		805-504 Y5V 103Z
A4 C314	0160-2055	9	1	CAPACITOR-FXD .01UF +80-20% 100VDC CER		805-504 Y5V 103Z
A4 C701	0160-5770	1	1	CAPACITOR-FXD 5600PF +-10% 1KVDC POLYP		PHE431PB4560K
A4 C702	0180-3186	1	1	CAPACITOR-FXD 100UF+-20% 100VDC AL		SM100VB101M12X21
A4 C703	0180-3848	2	1	CAPACITOR-FXD 33UF+-10% 16VDC TA	56289	299D336X9016DB1
A4 C704	0160-4822	2	1	CAPACITOR-FXD 1000PF +-5% 100VDC CER 0+-	04222	SA201A102JAAH
A4 C705	0180-3186	1	1	CAPACITOR-FXD 100UF+-20% 100VDC AL		SM100VB101M12X21
A4 C706	0170-0040	9	1	CAPACITOR-FXD .047UF +-10% 200VDC POLYE	84411	HEW-238M
A4 C707	0180-3634	4	1	CAPACITOR-FXD 2200UF+-20% 10VDC AL		SR10VB222M16X15
A4 C708	0180-3844	8	1	CAPACITOR-FXD 3.3UF+-10% 35VDC TA	56289	299D335X9035BB1
A4 C709	0160-4825	5	1	CAPACITOR-FXD 560PF +-5% 100VDC CER 0+-3	04222	SA101A561JAAH
A4 C710	0160-5098	6	1	CAPACITOR-FXD .22UF +-10% 50VDC CER	04222	SA405C224KAAH
A4 C711	0180-3634	4	1	CAPACITOR-FXD 2200UF+-20% 10VDC AL		SR10VB222M16X15
A4 C712	0160-0162	5	1	CAPACITOR-FXD .022UF +-10% 200VDC POLYE	84411	HEW-238M
A4 C713	0180-3635	5	1	CAPACITOR-FXD 470UF+-20% 25VDC AL		SR25VB471M12.5X15
A4 C714	0180-3635	5	1	CAPACITOR-FXD 470UF+-20% 25VDC AL		SR25VB471M12.5X15
A4 C715	0160-4389	6	1	CAPACITOR-FXD 100PF +-5% 200VDC CER	04222	SR202A101JAAH
A4 C801	0180-3770	9	1	CAPACITOR-FXD 2.2UF+-10% 35VDC TA	56289	299D225X9035BB1
A4 C802	0180-3770	9	1	CAPACITOR-FXD 2.2UF+-10% 35VDC TA	56289	299D225X9035BB1
A4 C803	0160-0300	3	1	CAPACITOR-FXD 2700PF +-10% 200VDC POLYE	84411	HEW-238M
A4 C804	0160-4787	8	1	CAPACITOR-FXD 22PF +-5% 100VDC CER 0+-30	04222	SA102A220JAAH
A4 C805	0180-3770	9	1	CAPACITOR-FXD 2.2UF+-10% 35VDC TA	56289	299D225X9035BB1
A4 C808	0160-5091	9	1	CAPACITOR-FXD 2200PF +-2% 100VDC POLYP		222G01PP481
A4 CR1	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	07263	
A4 CR2	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	07263	
A4 CR3	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	07263	
A4 CR4	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	07263	
A4 CR5	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	07263	
A4 CR9	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	07263	
A4 CR200	1901-1149	3	1	DIODE-PWR RECT 400V 1A 50NS DO-41	71744	UF4004
A4 CR201	1901-1149	3	1	DIODE-PWR RECT 400V 1A 50NS DO-41	71744	UF4004
A4 CR202	1901-1149	3	1	DIODE-PWR RECT 400V 1A 50NS DO-41	71744	UF4004
A4 CR203	1901-1149	3	1	DIODE-PWR RECT 400V 1A 50NS DO-41	71744	UF4004
A4 CR205	1901-1149	3	1	DIODE-PWR RECT 400V 1A 50NS DO-41	71744	UF4004
A4 CR206	1901-1130	2	1	DIODE-GEN PRP 600V 8A 50NS TO-220AC	04713	MUR860A
A4 CR207	1901-0519	9	1	DIODE-SWITCHING 200V 150MA 50NS DO-34	9N171	1N3070

**HP Part Number 70004-60003
A4 Power Supply (continued)**

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A4 CR208	1901-0519	9	1	DIODE-SWITCHING 200V 150MA 50NS D0-34	9N171	1N3070
A4 CR209	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR210	1901-1149	3	1	DIODE-PWR RECT 400V 1A 50NS D0-41	71744	UF4004
A4 CR212	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR213	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR214	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR215	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR216	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR217	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR218	1901-1130	2	1	DIODE-GEN PRP 600V 8A 50NS T0-220AC	04713	MUR860A
A4 CR219	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR220	1901-1149	3	1	DIODE-PWR RECT 400V 1A 50NS D0-41	71744	UF4004
A4 CR221	1901-1130	2	1	DIODE-GEN PRP 600V 8A 50NS T0-220AC	04713	MUR860A
A4 CR222	1901-1149	3	1	DIODE-PWR RECT 400V 1A 50NS D0-41	71744	UF4004
A4 CR223	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR300	1901-1149	3	1	DIODE-PWR RECT 400V 1A 50NS D0-41	71744	UF4004
A4 CR302	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR601	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR701	1901-1149	3	1	DIODE-PWR RECT 400V 1A 50NS D0-41	71744	UF4004
A4 CR702	1901-1149	3	1	DIODE-PWR RECT 400V 1A 50NS D0-41	71744	UF4004
A4 CR703	1901-1149	3	1	DIODE-PWR RECT 400V 1A 50NS D0-41	71744	UF4004
A4 CR704	1901-1165	3	1	DIODE-SCHOTTKY 60V 1A D0-41	71744	SB160
A4 CR705	1901-1165	3	1	DIODE-SCHOTTKY 60V 1A D0-41	71744	SB160
A4 CR706	1901-1165	3	1	DIODE-SCHOTTKY 60V 1A D0-41	71744	SB160
A4 CR707	1901-1165	3	1	DIODE-SCHOTTKY 60V 1A D0-41	71744	SB160
A4 CR708	1901-1149	3	1	DIODE-PWR RECT 400V 1A 50NS D0-41	71744	UF4004
A4 CR709	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR801	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR802	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR803	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR804	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 CR805	1901-0518	8	1	DIODE-SCHOTTKY SM SIG		5082-2800
A4 CR806	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS D0-35	07263	
A4 DS1	2140-0015	7	1	LAMP-GLOW C2A 115/58VDC 1.9MA T-2-BULB	72799	SELECTED NE-2H
A4 DS5	1990-1270	8	1		2M627	
A4 DS6	1990-1270	8	1		2M627	
A4 E1	1970-0096	2	1	TUBE-ELECTRON SURGE V PTCTR		IVP-230B
A4 E2	1970-0096	2	1	TUBE-ELECTRON SURGE V PTCTR		IVP-230B
A4 E3	1970-0096	2	1	TUBE-ELECTRON SURGE V PTCTR		IVP-230B
A4 F1	2110-0710	6	1	FUSE 2A 250V NTD FE IEC	H9027	SP 034.9221
A4 F2	2110-0700	4	1	FUSE 1A 250V NTD FE IEC	16428	GDB-1
A4 F3	2110-0516	0	1	FUSE (INCH) 1A 125V NTD BI	75915	273001
A4 F701	2110-0695	6	1	FUSE-BIPIN 1.5A 125V NTD RA UL	75915	273 01.5
A4 F702	2110-0517	1	1	FUSE 2A 125V NTD BI	75915	273002
A4 J5	1251-4789	4	1	CONN-POST TYPE .100-PIN-SPCG 8-CONT	18873	65781-076
A4 L1	9140-0871	0	1	ER DIVISION	56289	99ZSPA44265
A4 L2	9140-0872	1	1	ER DIVISION		
A4 L3	9140-0873	2	1	ER DIVISION		

*Indicates factory-selected value

**HP Part Number 70004-60003
A4 Power Supply (continued)**

Reference Designation	HP Part Number	C	D	Qty	Description	Mfr Code	Mfr Part Number
A4 L4	9140-0874	3		1	ER DIVISION		
A4 L14	9140-0858	3		1	INDUCTOR 22UH +-10% .13D-INX.335LG-IN Q=		1537-724
A4 L30	9140-0873	2		1	ER DIVISION		
A4 L33	9140-0873	2		1	ER DIVISION		
A4 L100	9100-3313	7		1	INDUCTOR RF-CH-MLD 22UH +-5% .166D-INX.3	24226	15M222J
A4 L101	9100-3313	7		1	INDUCTOR RF-CH-MLD 22UH +-5% .166D-INX.3	24226	15M222J
A4 L102	9100-3313	7		1	INDUCTOR RF-CH-MLD 22UH +-5% .166D-INX.3	24226	15M222J
A4 L200	9100-1644	3		1	INDUCTOR RF-CH-MLD 330UH +-5% .2D-INX.45	99800	2500-04
A4 L291	9100-3313	7		1	INDUCTOR RF-CH-MLD 22UH +-5% .166D-INX.3	24226	15M222J
A4 L701	9140-1384	2		1	INDUCTOR 700UH +7% -7% 19.7W-MMX21.59LG-	02113	K9673-A
A4 L702	9140-1382	0		1	INDUCTOR 16UH +10% -10% 17D-MMX25.5LG-MM	02113	K9671-A
A4 L703	9140-1383	1		1	INDUCTOR 500UH +7.2% -7.2% 19.7W-MMX21.5	02113	
A4 P1	1251-7575	2		1	CONN-POST TYPE .100-PIN-SPCG 60-CONT	18873	65863-291
A4 P2	1251-8861	1		1	CONN-POST TYPE .156-PIN-SPCG 7-CONT	00779	641208-7
A4 P4	1252-3411	9		1	CONN-POST TYPE .100-PIN-SPCG 4-CONT	00779	
A4 Q1	1854-1222	2		1	TRANSISTOR NPN SI TO-218AC PD=135W	04713	
A4 Q2	1854-0477	7		1	TRANSISTOR NPN 2N2222A SI TO-18 PD=500MW	04713	2N2222A
A4 Q3	1853-0449	1		1	TRANSISTOR PNP SI DARL PD=1W	04713	MPS-U95
A4 Q4	1853-0449	1		1	TRANSISTOR PNP SI DARL PD=1W	04713	MPS-U95
A4 Q5	1884-0337	1		1		D1597	
A4 Q6	1884-0337	1		1		D1597	
A4 Q9	1853-0281	9		1	TRANSISTOR PNP 2N2907A SI TO-18 PD=400MW	04713	2N2907A
A4 Q11	1853-0281	9		1	TRANSISTOR PNP 2N2907A SI TO-18 PD=400MW	04713	2N2907A
A4 Q702	1854-0474	4		1	TRANSISTOR NPN SI PD=310MW FT=100MHZ	04713	2N5551
A4 Q703	1853-0468	4		1	TRANSISTOR PNP SI DARL TO-220AB PD=65W	04713	
A4 Q704	1855-0694	2		1	TRANSISTOR MOSFET N-CHAN TO-220 SI	9M011	IRFZ40
A4 Q705	1854-0474	4		1	TRANSISTOR NPN SI PD=310MW FT=100MHZ	04713	2N5551
A4 R1	0698-6362	8		1	RESISTOR 1K .1% .125W TF TC=0+-25	19701	5033R
A4 R2	0698-6322	0		1	RESISTOR 4K .1% .125W TF TC=0+-25	91637	CMF-55-1, T-9
A4 R3	0698-3150	6		1	RESISTOR 2.37K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R4	0698-6320	8		1	RESISTOR 5K .1% .125W TF TC=0+-25	91637	CMF-55-1, T-9
A4 R5	0757-0465	6		1	RESISTOR 100K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R6	0757-0279	0		1	RESISTOR 3.16K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R7	0757-0440	7		1	RESISTOR 7.5K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R15	0757-0199	3		1	RESISTOR 21.5K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R16	0757-0461	2		1	RESISTOR 68.1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R17	0757-0180	2		1	RESISTOR 31.6 1% .125W TF TC=0+-100	19701	SFR25H
A4 R35	0698-3457	6		1	RESISTOR 316K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R36	0698-3457	6		1	RESISTOR 316K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R37	0757-0442	9		1	RESISTOR 10K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R38	0698-3444	1		1	RESISTOR 316 1% .125W TF TC=0+-100	19701	SFR25H
A4 R39	0757-0280	3		1	RESISTOR 1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R40	0757-0280	3		1	RESISTOR 1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R41	0698-8812	7		1	RESISTOR 1 1% .125W TF TC=0+-100	91637	CMF-55-1
A4 R42	0757-0200	7		1	RESISTOR 5.62K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R43	0757-0439	4		1	RESISTOR 6.81K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R44	0698-3151	7		1	RESISTOR 2.87K 1% .125W TF TC=0+-100	19701	SFR25H

HP Part Number 70004-60003
A4 Power Supply (continued)

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A4 R46	0698-3457	6	1	RESISTOR 316K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R47	0757-0442	9	1	RESISTOR 10K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R48	0757-0465	6	1	RESISTOR 100K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R49	0698-3450	9	1	RESISTOR 42.2K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R50	0757-0280	3	1	RESISTOR 1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R51	0757-0442	9	1	RESISTOR 10K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R52	0757-0444	1	1	RESISTOR 12.1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R53	0698-3155	1	1	RESISTOR 4.64K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R54	0757-0458	7	1	RESISTOR 51.1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R55	0757-0200	7	1	RESISTOR 5.62K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R56	0698-3457	6	1	RESISTOR 316K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R57	0698-3457	6	1	RESISTOR 316K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R58	2100-0554	5	1	RESISTOR-TRMR 500 10% TKF TOP-ADJ 1-TRN	32997	3386P-Y46-501
A4 R59	0757-0279	0	1	RESISTOR 3.16K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R69	0757-0442	9	1	RESISTOR 10K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R100	0757-0394	0	1	RESISTOR 51.1 1% .125W TF TC=0+-100	19701	SFR25H
A4 R101	0757-0394	0	1	RESISTOR 51.1 1% .125W TF TC=0+-100	19701	SFR25H
A4 R102	0757-0461	2	1	RESISTOR 68.1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R103	0757-0416	7	1	RESISTOR 511 1% .125W TF TC=0+-100	19701	SFR25H
A4 R104	0757-0280	3	1	RESISTOR 1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R105	0757-0290	5	1	RESISTOR 6.19K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R106	0757-0440	7	1	RESISTOR 7.5K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R107	2100-0568	1	1	RESISTOR-TRMR 100 10% TKF TOP-ADJ 1-TRN	32997	3386P-Y46-101
A4 R108	0757-0424	7	1	RESISTOR 1.1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R109	0698-3457	6	1	RESISTOR 316K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R110	0698-3136	8	1	RESISTOR 17.8K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R199	0811-1732	8	1	RESISTOR 1 5% 3W PW TC=0+-50	91637	CW-2B-39
A4 R200	0699-0172	8	1	RESISTOR 3M 5% 1W TF TC=0+-250	03888	FL1
A4 R201	0764-0046	4	1	RESISTOR 33K 5% 2W MO TC=0+-200	11502	GS-3
A4 R202	0764-0046	4	1	RESISTOR 33K 5% 2W MO TC=0+-200	11502	GS-3
A4 R203	0698-3457	6	1	RESISTOR 316K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R204	0698-3457	6	1	RESISTOR 316K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R205	0812-0019	4	1	RESISTOR .33 5% 3W PW TC=0+-90	91637	CW-2B-39
A4 R206	0757-0280	3	1	RESISTOR 1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R207	0757-0280	3	1	RESISTOR 1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R208	0757-0417	8	1	RESISTOR 562 1% .125W TF TC=0+-100	19701	SFR25H
A4 R209	0757-0439	4	1	RESISTOR 6.81K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R210	2100-3252	6	1	RESISTOR-TRMR 5K 10% TKF TOP-ADJ 1-TRN	32997	3386P-Y46-502
A4 R211	0757-0278	9	1	RESISTOR 1.78K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R212	0698-8812	7	1	RESISTOR 1 1% .125W TF TC=0+-100	91637	CMF-55-1
A4 R213	0698-3441	8	1	RESISTOR 215 1% .125W TF TC=0+-100	19701	SFR25H
A4 R214	0757-0421	4	1	RESISTOR 825 1% .125W TF TC=0+-100	19701	SFR25H
A4 R215	0757-0280	3	1	RESISTOR 1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R216	0757-0442	9	1	RESISTOR 10K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R217	0757-0280	3	1	RESISTOR 1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R218	0811-3693	4	1	RESISTOR 33 +-5% 5W PWI TC=0+-400		MNS05N-330-J
A4 R219	0811-3692	3	1	RESISTOR 3.9 +-5% 5W PWI TC=0+-400		MNS05N-3R9-J
A4 R220	0757-0465	6	1	RESISTOR 100K 1% .125W TF TC=0+-100	19701	SFR25H

*Indicates factory-selected value

**HP Part Number 70004-60003
A4 Power Supply (continued)**

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A4 R221	0757-0465	6	1	RESISTOR 100K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R222	0811-3696	7	1	RESISTOR 150 +-5% 2W PWI TC=0+-400		MNS02N-151-J
A4 R223	0698-8820	7	1	RESISTOR 4.64 1% .125W TF TC=0+-100	91637	CMF-55-1
A4 R224	0698-3390	6	1	RESISTOR 19.6 1% .5W TF TC=0+-100	19701	5053R
A4 R225	0757-0280	3	1	RESISTOR 1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R226	0698-3150	6	1	RESISTOR 2.37K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R227	0811-1084	3	1	RESISTOR 22 5% 3W PW TC=0+-30	01686	T2B-79
A4 R228	0811-3696	7	1	RESISTOR 150 +-5% 2W PWI TC=0+-400		MNS02N-151-J
A4 R229	0698-3390	6	1	RESISTOR 19.6 1% .5W TF TC=0+-100	19701	5053R
A4 R230	0698-8820	7	1	RESISTOR 4.64 1% .125W TF TC=0+-100	91637	CMF-55-1
A4 R231	0757-0280	3	1	RESISTOR 1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R232	0698-3150	6	1	RESISTOR 2.37K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R233	0811-1084	3	1	RESISTOR 22 5% 3W PW TC=0+-30	01686	T2B-79
A4 R239	0757-0280	3	1	RESISTOR 1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R242	0757-0279	0	1	RESISTOR 3.16K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R243	0757-0279	0	1	RESISTOR 3.16K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R300	0698-3443	0	1	RESISTOR 287 1% .125W TF TC=0+-100	19701	SFR25H
A4 R301	0698-3151	7	1	RESISTOR 2.87K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R304	0757-0346	2	1	RESISTOR 10 1% .125W TF TC=0+-100	91637	CMF-55-1, T-1
A4 R601	0698-3150	6	1	RESISTOR 2.37K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R602	0698-3150	6	1	RESISTOR 2.37K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R603	0698-3150	6	1	RESISTOR 2.37K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R701	0757-0346	2	1	RESISTOR 10 1% .125W TF TC=0+-100	91637	CMF-55-1, T-1
A4 R702	0757-0416	7	1	RESISTOR 511 1% .125W TF TC=0+-100	19701	SFR25H
A4 R703	0698-3158	4	1	RESISTOR 23.7K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R704	0698-3153	9	1	RESISTOR 3.83K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R705	0698-3153	9	1	RESISTOR 3.83K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R706	0698-0083	8	1	RESISTOR 1.96K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R707	0699-0720	2	1	RESISTOR 61.9K .1% .125W TF TC=0+-25	K8479	H8
A4 R708	0698-0084	9	1	RESISTOR 2.15K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R709	0698-3153	9	1	RESISTOR 3.83K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R710	0698-6360	6	1	RESISTOR 10K .1% .125W TF TC=0+-25	19701	5033R
A4 R711	0698-8814	9	1	RESISTOR 1.47 1% .125W TF TC=0+-100	91637	CMF-55-1
A4 R712	0757-0346	2	1	RESISTOR 10 1% .125W TF TC=0+-100	91637	CMF-55-1, T-1
A4 R713	0757-0280	3	1	RESISTOR 1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R714	0757-0278	9	1	RESISTOR 1.78K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R715	0698-3441	8	1	RESISTOR 215 1% .125W TF TC=0+-100	19701	SFR25H
A4 R716	0698-6320	8	1	RESISTOR 5K .1% .125W TF TC=0+-25	91637	CMF-55-1, T-9
A4 R717	0698-6320	8	1	RESISTOR 5K .1% .125W TF TC=0+-25	91637	CMF-55-1, T-9
A4 R718	0698-6360	6	1	RESISTOR 10K .1% .125W TF TC=0+-25	19701	5033R
A4 R719	0698-3430	5	1	RESISTOR 21.5 1% .125W TF TC=0+-100	19701	SFR25H
A4 R720	0698-3430	5	1	RESISTOR 21.5 1% .125W TF TC=0+-100	19701	SFR25H
A4 R721	0698-8820	7	1	RESISTOR 4.64 1% .125W TF TC=0+-100	91637	CMF-55-1
A4 R722	0813-0050	5	1	RESISTOR 100 5% 3W PW TC=0+-20	91637	RS-2B
A4 R723	0813-0050	5	1	RESISTOR 100 5% 3W PW TC=0+-20	91637	RS-2B
A4 R724	0698-3155	1	1	RESISTOR 4.64K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R725	0698-3153	9	1	RESISTOR 3.83K 1% .125W TF TC=0+-100	19701	SFR25H

**HP Part Number 70004-60003
A4 Power Supply (continued)**

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A4 R726	0757-0280	3	1	RESISTOR 1K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R727	0757-0400	9	1	RESISTOR 90.9 1% .125W TF TC=0+-100	19701	SFR25H
A4 R728	2100-3252	6	1	RESISTOR-TRMR 5K 10% TKF TOP-ADJ 1-TRN	32997	3386P-Y46-502
A4 R729	0698-3160	8	1	RESISTOR 31.6K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R730	0698-0083	8	1	RESISTOR 1.96K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R801	0757-0278	9	1	RESISTOR 1.78K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R802	0757-0180	2	1	RESISTOR 31.6 1% .125W TF TC=0+-100	19701	SFR25H
A4 R803	0698-3157	3	1	RESISTOR 19.6K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R804	0698-3160	8	1	RESISTOR 31.6K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R805	0698-3160	8	1	RESISTOR 31.6K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R806	0757-0123	3	1	RESISTOR 34.8K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R807	0757-0460	1	1	RESISTOR 61.9K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R808	0757-0200	7	1	RESISTOR 5.62K 1% .125W TF TC=0+-100	19701	SFR25H
A4 R809	0698-3443	0	1	RESISTOR 287 1% .125W TF TC=0+-100	19701	SFR25H
A4 RT1	0837-0287	0	1	THERMISTOR-SURGE PTCTR 5 OHM AT 25 DEG C	6E259	SG-80
A4 RT2	0837-0287	0	1	THERMISTOR-SURGE PTCTR 5 OHM AT 25 DEG C	6E259	SG-80
A4 RV1	0837-0401	0	1	VARISTOR DC VOLTAGE:350V MAX RMS VOLTAGE	19701	
A4 S1	3101-2150	4	1	SWITCH-PB DPDT ALTN 5A 250 VAC	71468	600218-N30
A4 S2	3101-2608	7	1	SWITCH-SL DPDT STD 5A 250VAC PC	D8351	4021.4721
A4 S3	3103-0117	3	1	SWITCH-THRM FXD +75C 1A OPN-ON-RISE	50157	TS75B
A4 T1	9100-4377	5	1	TRANSFORMER-POWER TOROIDAL TRANSFORMER		40/3034
A4 T2	9100-4793	9	1		02113	J9237-A
A4 T3	9100-4375	3	1	TRANSFORMER LP:3.5 MH MIN (LOW LEVEL, 1	01961	PE-63509
A4 T4	9100-4373	1	1	TRANSFORMER LP:1 MH MIN (LOW LEVEL, 1	01961	PE-63555
A4 T9	9140-0876	5	1	ER DIVISION	28480	9140-0876
A4 T11	9140-0879	8	1	ER DIVISION	56289	99ZSPA44267
A4 T12	9100-4376	4	1	TRANSFORMER LP: 3.4 MH MIN (LOW LEVEL, 1	01961	PE-98006
A4 T90	9140-0876	5	1	ER DIVISION	28480	9140-0876
A4 T701	9100-4785	9	1	TRANSFORMER-CURRENT 1 V NORMALIZED OUTPU	02113	CS 4200V
A4 TP30	NOHPPN	4	1		28480	NOHPPN
A4 U1	1906-0248	1	1	DIODE-ARRAY 40V 400MA	07263	
A4 U2	1826-1222	3	1	IC OP AMP H-SLEW-RATE QUAD 14-DIP-C PKG	04713	MC34074AL
A4 U9	1826-1040	3	1	IC V RGLTR-SWG 4.85/5.15V 18-DIP-C PKG	34333	SG3526J
A4 U10	1820-4032	7	1	IC-INTERFACE DRVR CMOS PERIPHERAL HIGH	15818	TSC426CPA
A4 U11	1820-1272	1	1	IC BFR TTL LS NOR QUAD 2-INP	01295	SN74LS33N
A4 U12	1820-1212	9	1	IC FF TTL LS J-K NEG-EDGE-TRIG PRESET/CL	01295	SN74LS112AN
A4 U13	1820-2922	0	1	IC GATE CMOS/74HC NAND QUAD 2-INP	04713	MC74HC00N
A4 U14	1820-2923	1	1	IC GATE CMOS/74HC NAND TPL 3-INP	04713	MC74HC10N
A4 U15	1826-0759	9	1	IC COMPARATOR GP QUAD 14-DIP-C PKG	27014	LM339J
A4 U69	1990-1074	0	1	OPTO-ISOLATOR LED-PXSTR IF=60MA-MAX BVR=	04713	4N35
A4 U70	1990-1074	0	1	OPTO-ISOLATOR LED-PXSTR IF=60MA-MAX BVR=	04713	4N35
A4 U100	1906-0224	3	1	DIODE-FW BRDG 600V 25A	04713	MDA2506
A4 U200	1826-0412	1	1	IC COMPARATOR PRCN DUAL 8-DIP-P PKG	27014	LM393N
A4 U202	1820-3512	6	1	IC-INTERFACE SW BCD DUAL	56289	ULN-2061N
A4 U300	1906-0289	0	1	DIODE-FW BRDG 200V 800MA	71744	
A4 U301	1826-0393	7	1	IC V RGLTR-ADJ-POS 1.2/37V T0-220 PKG	27014	LM317T
A4 U302	1826-0122	0	1	IC V RGLTR-FXD-POS 4.8/5.2V T0-220 PKG	27014	LM340T-5
A4 U303	1906-0289	0	1	DIODE-FW BRDG 200V 800MA	71744	

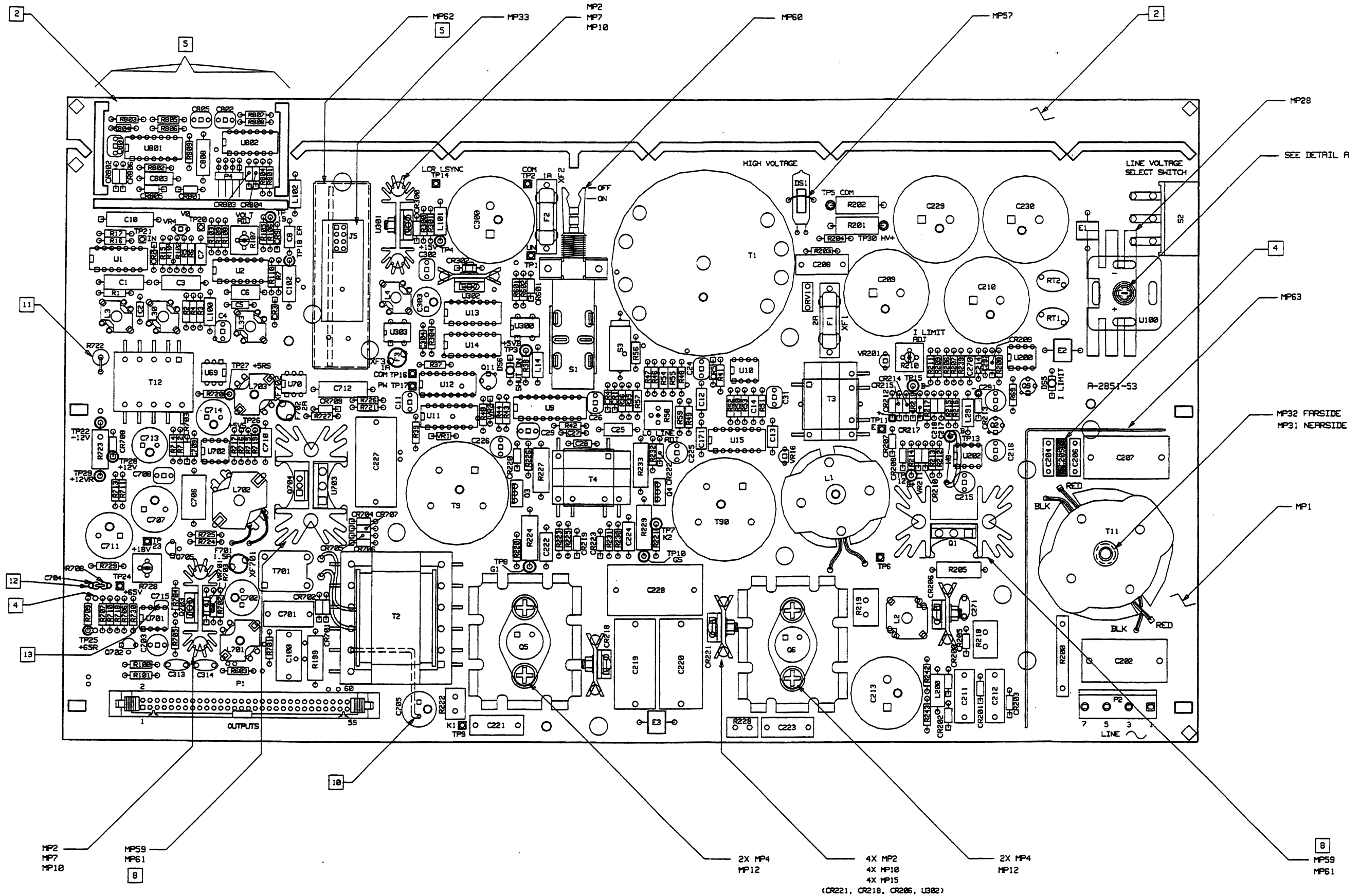
*Indicates factory-selected value

**HP Part Number 70004-60003
A4 Power Supply (continued)**

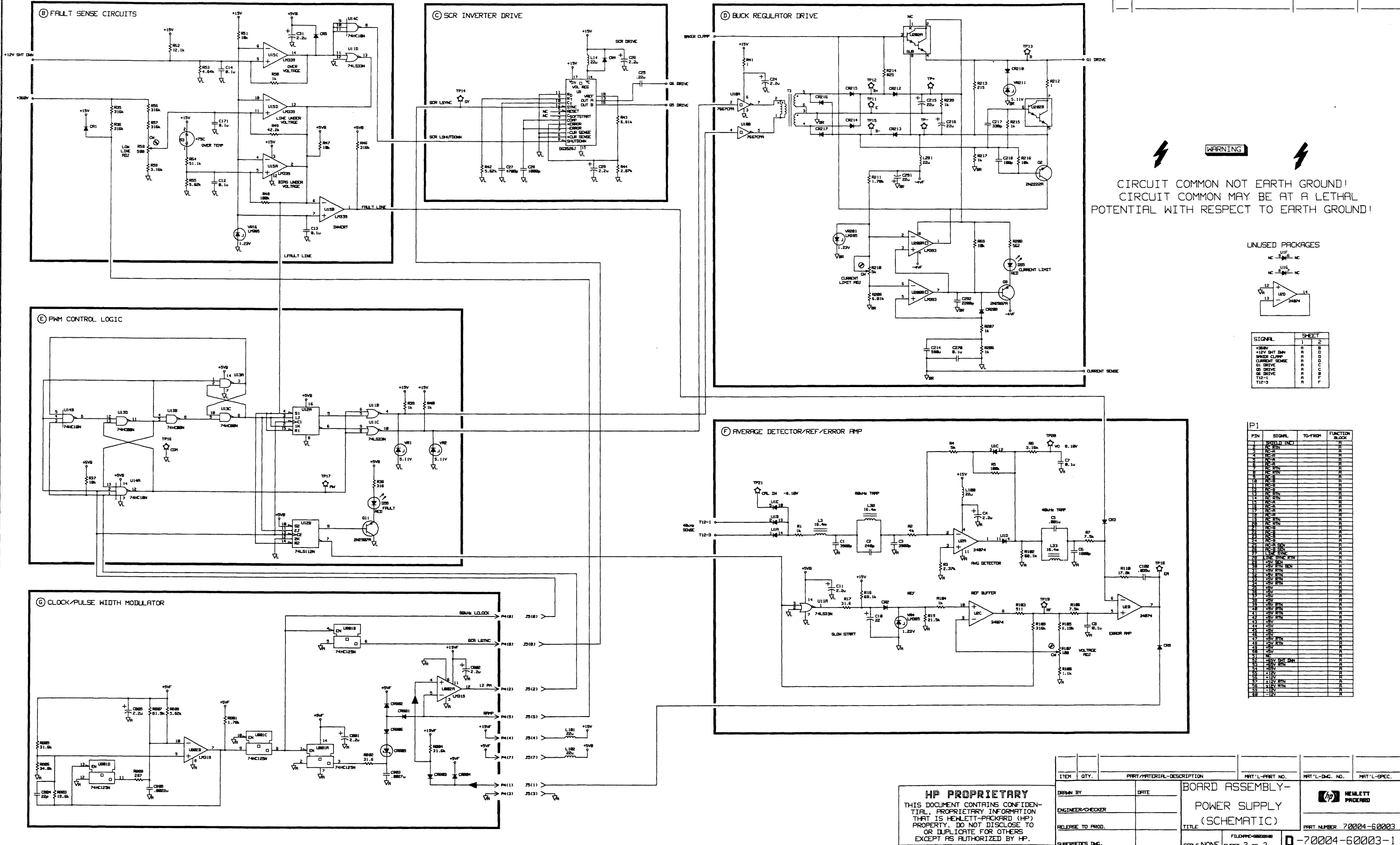
Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A4 U701	1826-2010	9	1	IC OP AMP 14-DIP-P PKG	27014	
A4 U702	1826-1343	9	1	IC V RGLTR-V-REF-ADJ 2.5/36V 8-DIP-P PKG	01295	TL431CP
A4 U703	1906-0360	8	1	DIODE-CT-RECT 45V 30A T0-218AC	04713	
A4 U801	1820-3674	1	1	IC BFR CMOS/74HC BUS QUAD	27014	MM74HC125N
A4 U802	1826-0175	3	1	IC COMPARATOR GP DUAL 14-DIP-P PKG	27014	LM319N
A4 VR1	1902-0041	4	1	DIODE-ZNR 5.11V 5% D0-35 PD=.4W	04713	
A4 VR2	1902-0041	4	1	DIODE-ZNR 5.11V 5% D0-35 PD=.4W	04713	
A4 VR4	1826-0774	8	1	IC V RGLTR-V-REF-FXD 1.22/1.24V T0-92	27014	LM385BZ-1.2
A4 VR16	1826-0774	8	1	IC V RGLTR-V-REF-FXD 1.22/1.24V T0-92	27014	LM385BZ-1.2
A4 VR201	1826-0774	8	1	IC V RGLTR-V-REF-FXD 1.22/1.24V T0-92	27014	LM385BZ-1.2
A4 VR211	1902-0041	4	1	DIODE-ZNR 5.11V 5% D0-35 PD=.4W	04713	
A4 VR701	1902-1413	6	1	DIODE-ZNR 36V 5% D0-35 PD=.4W TC=+.112%	04713	

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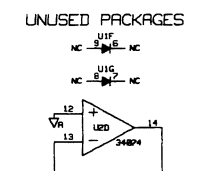
**SCANS
By
Artek Media**



SYM	REVISIONS	APPROVED	DATE
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WARNING
CIRCUIT COMMON NOT EARTH GROUND!
CIRCUIT COMMON MAY BE AT A LETHAL
POTENTIAL WITH RESPECT TO EARTH GROUND!



SIGNAL SHEET

SIGNAL	SHEET
+300V	A
+15V SHY DN	A
SPKR CLAMP	A
CURRENT SENSE	A
O1 DRIVE	A
O2 DRIVE	A
O3 DRIVE	A
T12-1	A
T12-3	A

P1

FIN	SIGNAL	TO/FROM	FUNCTION BLOCK
1	SPKR IN (TR)		
2	SPKR		
3	SPKR		
4	SPKR		
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100	SPKR		

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ITEM	QTY.	PART/MATERIAL-DESCRIPTION	PART-L-PART NO.	PART-L-DWG. NO.	PART-L-SPEC.
DRWEN BY					
ENGINEER-CHECKER					
RELEASE TO PROD.					
SUPERSEDES DWG.					

BOARD ASSEMBLY-
POWER SUPPLY
(SCHEMATIC)
TITLE
FILE NO. 70004-60003-1
SCALE NONE SHEET 2 OF 2

HEWLETT
PACKARD
PART NUMBER 70004-60003

Component-Level Information Packet
for 70004-60043
A5 Processor



HP Part No. 70004-90049
Printed in USA May 1994

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1400 Fountaingrove Parkway, Santa Rosa, CA 95403-1799, USA

HP Part Number 70004-60043
A5 Processor -

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
BT1	1420-0331	1	BATTERY 3.68V 1.75A-HR LITHIUM THIONYL	28480	1420-0331
C1	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C2	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C4	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C5	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C6	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C10	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C14	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C19	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C20	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C22	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C23	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C24	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C25	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C26	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C27	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C34	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C35	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C36	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C39	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C40	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C43	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C44	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C45	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C46	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C47	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C48	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C49	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C50	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C51	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C52	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C57	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C58	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C59	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C60	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832

*Indicates factory-selected value

**HP Part Number 70004-60043
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C65	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C67	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832
C68	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832
C69	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832
C70	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832
C71	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832
C72	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C80	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C81	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C82	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C83	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C84	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C85	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C86	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C87	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C89	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C90	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C93	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C94	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C97	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C99	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C101	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C102	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C103	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C104	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C105	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C106	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C107	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C108	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C109	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832
C111	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832
C112	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832
C113	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832
C114	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832
C116	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832

**HP Part Number 70004-60043
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C117	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C121	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C122	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C125	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C126	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C127	0160-4535	1	CAP-FXD 1uF +10% 50 V CER X7R	28480	0160-4535
C128	0160-4535	1	CAP-FXD 1uF +10% 50 V CER X7R	28480	0160-4535
C129	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C130	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C150	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C151	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C152	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C153	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C154	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C155	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C156	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C157	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C158	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C159	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C160	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C161	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C162	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C163	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C164	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C165	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C166	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C167	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C168	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C169	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C170	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C200	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C201	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C500	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C510	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
CR1	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050

*Indicates factory-selected value

**HP Part Number 70004-60043
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
CR2	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR3	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR4	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR5	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR6	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR7	1901-0518	1	DIODE-SCHOTTKY SM SIG	12395	5082-2800
CR300	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
DS1	1990-0829	1	LED-LIGHT BAR LUM-INT=600UCD IF=20MA-MAX	28480	1990-0829
DS2	1990-0829	1	LED-LIGHT BAR LUM-INT=600UCD IF=20MA-MAX	28480	1990-0829
J1	1251-7575	1	CONN-POST TYPE .100-PIN-SPCG 60-CONT	28480	1251-7575
J2	1251-8747	1	CONN-POST TYPE .100-PIN-SPCG 34-CONT	28480	1251-8747
J3	1252-3186	1	CONN-POST TYPE .100-PIN-SPCG 20-CONT	28480	1252-3186
J4	1251-8929	1	CONN-POST TYPE .100-PIN-SPCG 50-CONT	28480	1251-8929
J5	1252-2774	1	CONN-POST TYPE .100-PIN-SPCG 80-CONT	28480	1252-2774
J6	1252-0924	1	CONNECTOR-PHONO JACK RIGHT ANGLE; PC	05545	333-15
J7	1252-0924	1	CONNECTOR-PHONO JACK RIGHT ANGLE; PC	05545	333-15
J8	1252-0924	1	CONNECTOR-PHONO JACK RIGHT ANGLE; PC	05545	333-15
J9	1252-0161	1	CONN-POST TYPE .156-PIN-SPCG 2-CONT	28480	1252-0161
MP3	0515-1548	1	SCREW-MACHINE ASSEMBLY M2.5 X 0.45	01136	
MP4	0515-1548	1	SCREW-MACHINE ASSEMBLY M2.5 X 0.45	01136	
MP5	3050-0890	1	WASHER-FL MTLC 2.5 2.78-MM-ID 6.35-MM-OD	06691	
MP6	3050-0890	1	WASHER-FL MTLC 2.5 2.78-MM-ID 6.35-MM-OD	06691	
MP7	0535-0070	1	NUT-HEX DBL-CHAM M2.5 X 0.45 2MM-THK	06691	
MP8	0535-0070	1	NUT-HEX DBL-CHAM M2.5 X 0.45 2MM-THK	06691	
MP9	1251-5595	1	POLARIZING KEY-POST CONN	04726	3518
MP10	1251-5595	1	POLARIZING KEY-POST CONN	04726	3518
MP11	1251-5595	1	POLARIZING KEY-POST CONN	04726	3518
MP12	1251-5595	1	POLARIZING KEY-POST CONN	04726	3518
MP13	1400-1267	1	HOLDER-BAT .531-.656-DIA FOR AA CELLS	05535	91
MP14	0361-0026	1	RIVET-SEMITUB OVH .089DIA .125LG	02531	R-4008-1/8
MP15	0361-0026	1	RIVET-SEMITUB OVH .089DIA .125LG	02531	R-4008-1/8
Q1	1854-0215	1	TRANSISTOR NPN SI TO-92 PD=625MW	28480	1854-0215
Q2	1854-0215	1	TRANSISTOR NPN SI TO-92 PD=625MW	28480	1854-0215
R1	0757-0280	1	RESISTOR 1K +-1% .125W TF TC=0+-100	05524	CMF-55-1
R3	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1

HP Part Number 70004-60043
A5 Processor (continued)

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R4	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R5	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1
R6	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1
R7	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1
R8	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R11	0698-7198	1	RESISTOR 26.1 +1% .05W TF TC=0+100	05524	CMF-50-2
R12	0698-7203	1	RESISTOR 42.2 +1% .05W TF TC=0+100	05524	CMF-50-2
R13	0698-7210	1	RESISTOR 82.5 +1% .05W TF TC=0+100	05524	CMF-50-2
R14	0698-7198	1	RESISTOR 26.1 +1% .05W TF TC=0+100	05524	CMF-50-2
R15	0698-7203	1	RESISTOR 42.2 +1% .05W TF TC=0+100	05524	CMF-50-2
R16	0698-7210	1	RESISTOR 82.5 +1% .05W TF TC=0+100	05524	CMF-50-2
R17	0698-7198	1	RESISTOR 26.1 +1% .05W TF TC=0+100	05524	CMF-50-2
R18	0698-7203	1	RESISTOR 42.2 +1% .05W TF TC=0+100	05524	CMF-50-2
R19	0698-7210	1	RESISTOR 82.5 +1% .05W TF TC=0+100	05524	CMF-50-2
R30	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R31	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+100	05524	CMF-55-1
R32	0698-3444	1	RESISTOR 316 +1% .125W TF TC=0+100	05524	CMF-55-1
R34	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+100	05524	CMF-55-1
R35	0757-0398	1	RESISTOR 75 +1% .125W TF TC=0+100	05524	CMF-55-1
R36	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+100	05524	CMF-55-1
R37	0757-0398	1	RESISTOR 75 +1% .125W TF TC=0+100	05524	CMF-55-1
R38	0757-0398	1	RESISTOR 75 +1% .125W TF TC=0+100	05524	CMF-55-1
R39	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+100	05524	CMF-55-1
R40	0698-3444	1	RESISTOR 316 +1% .125W TF TC=0+100	05524	CMF-55-1
R41	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R43	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R46	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R48	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R49	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R50	0757-0470	1	RESISTOR 162K +1% .125W TF TC=0+100	05524	CMF-55-1
R51	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R53	0757-0200	1	RESISTOR 5.62K +1% .125W TF TC=0+100	05524	CMF-55-1
R54	0698-3444	1	RESISTOR 316 +1% .125W TF TC=0+100	05524	CMF-55-1
R55	0698-3453	1	RESISTOR 196K +1% .125W TF TC=0+100	05524	CMF-55-1
R56	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1

*Indicates factory-selected value

**HP Part Number 70004-60043
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R57	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R58	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R59	0698-3151	1	RESISTOR 2.87K +1% .125W TF TC=0+100	05524	CMF-55-1
R60	0757-0199	1	RESISTOR 21.5K +1% .125W TF TC=0+100	05524	CMF-55-1
R61	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R62	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R69	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R70	0698-3444	1	RESISTOR 316 +1% .125W TF TC=0+100	05524	CMF-55-1
R72	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1
R80	0757-0180	1	RESISTOR 31.6 +1% .125W TF TC=0+100	05524	CMF-55-1
R81	0757-0180	1	RESISTOR 31.6 +1% .125W TF TC=0+100	05524	CMF-55-1
R82	0757-0180	1	RESISTOR 31.6 +1% .125W TF TC=0+100	05524	CMF-55-1
R200	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R201	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R210	0757-0458	1	RESISTOR 51.1K +1% .125W TF TC=0+100	05524	CMF-55-1
R211	0698-8827	1	RESISTOR 1M +1% .125W TF TC=0+100	05524	CMF-55-1
R300	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R301	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R302	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1
S1	3101-2739	1	SWITCH-DIP SL 8-1A 0.1A 50VDC	02483	11P-2317
S2	3101-2094	1	SWITCH-DIP RKR 8-1A 0.15A 30VDC	28480	3101-2094
S3	3101-2719	1	SWITCH-SL SPDT SUBMIN .02A 20VAC/DC PC	02392	1101-M2AV2BE W/ORANGE ACTUATOR
S4	3101-3025	1	SWITCH-PB SPST-NO MOM .01A 50 VAC	28480	3101-3025
TP1	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP2	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP4	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP5	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP70	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP71	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP72	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP73	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP74	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP75	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP76	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP77	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED

**HP Part Number 70004-60043
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
TP500	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP510	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
U1	1820-5279	1	IC-16-BIT, 12.5MHZ PLAST. MPU 32BIT BUS	28480	1820-5279
U2	1820-1851	1	IC ENCDR TTL/LS PRIORITY 8-TO-3-LINE	28480	1820-1851
U3	1820-4053	1	IC INV CMOS/HC HEX	28480	1820-4053
U5	1820-2506	1	IC INV TTL/F HEX	28480	1820-2506
U6	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U7	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U8	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U9	1258-0177	1	SHUNT-PROGRAMMABLE 8 DBL PIN SETS; .800	05518	8136-475G8
U10	1820-2694	1	IC FF TTL/F J-K NEG-EDGE-TRIG	28480	1820-2694
U13	1820-2685	1	IC GATE TTL/F NOR QUAD 2-INP	28480	1820-2685
U14	1820-3645	1	IC CNTR TTL/F DECD SYNCHRO POS-EDGE-TRIG	28480	1820-3645
U17	1820-4057	1	IC BFR TTL/F NAND QUAD 2-INP	28480	1820-4057
U19	1818-3932	1	IC 256K-BIT SRAM 100-NS CMOS	28480	1818-3932
U20	1818-3932	1	IC 256K-BIT SRAM 100-NS CMOS	28480	1818-3932
U21	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U22	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U23	70004-80036	1	EPROM PRGM U23	28480	70004-80036
U24	70004-80037	1	EPROM PRGM U24	28480	70004-80037
U25	70004-80038	1	EPROM PRGM U25	28480	70004-80038
U26	70004-80039	1	EPROM PRGM U26	28480	70004-80039
U27	70004-80003	1	PAL-PRGMED (U27)	28480	70004-80003
U30	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U34	1826-1858	1	IC MISC 16 PIN DIP-P	12186	DS1259N
U35	1820-2861	1	IC DCDR TTL/F BIN 3-TO-8-LINE	28480	1820-2861
U36	1820-2690	1	IC GATE TTL/F OR QUAD 2-INP	28480	1820-2690
U39	1820-3224	1	IC TRANSCEIVER TTL/F BUS OCTL	28480	1820-3224
U40	1820-3224	1	IC TRANSCEIVER TTL/F BUS OCTL	28480	1820-3224
U41	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U42	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U43	1820-2548	1	IC-GENERAL PURPOSE INTERFACE BUS ADAPTER	01698	
U44	1820-6170	1	IC-INTERFACE XCVR BIPOLAR BUS OCTL	28480	1820-6170
U45	1820-6360	1	IC-INTERFACE XCVR BIPOLAR BUS OCTL	28480	1820-6360
U46	1820-3010	1	IC-ASIC GT-ARY 2.01K GATES CMOS 5220	28480	1820-3010

*Indicates factory-selected value

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**HP Part Number 70004-60043
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U47	1820-3426	1	IC TRANSCEIVER TTL/S BUS 9-BIT	28480	1820-3426
U48	70004-80012	1	EPROM-PRGMED U48	28480	70004-80012
U49	1820-2177	1	IC-INPUT/OUTPUT EXPANDER	03811	P8243
U50	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U51	1820-2694	1	IC FF TTL/F J-K NEG-EDGE-TRIG	28480	1820-2694
U52	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U53	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U54	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U55	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U57	1820-2102	1	IC LCH TTL/LS TRANSPARENT OCTL	28480	1820-2102
U58	1820-2102	1	IC LCH TTL/LS TRANSPARENT OCTL	28480	1820-2102
U59	1820-3299	1	IC DRVR CMOS/HC BUS OCTL	28480	1820-3299
U60	1820-3299	1	IC DRVR CMOS/HC BUS OCTL	28480	1820-3299
U61	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U62	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U63	1810-0273	1	NETWORK-RES 10-SIP 470.0 OHM X 9	06252	750-101
U64	1810-0273	1	NETWORK-RES 10-SIP 470.0 OHM X 9	06252	750-101
U65	1820-5384	1	IC-INTERFACE CMOS -888-BIT	28480	1820-5384
U67	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U68	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U69	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U70	1820-2075	1	IC TRANSCEIVER TTL/LS BUS OCTL	28480	1820-2075
U71	1820-2684	1	IC GATE TTL/F NAND QUAD 2-INP	28480	1820-2684
U72	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U74	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U80	1820-6081	1	IC-32-BIT GRAPHICS SYSTEM PROCESSOR	01698	TMS34010FNL-50
U81	1820-5897	1	IC-INTERFACE MISC-DGTL MISC/UNKNOWN	28480	1820-5897
U82	70004-80004	1	PAL-PRGMED (U82)	28480	70004-80004
U83	70004-80005	1	PAL-PRGMED (U83)	28480	70004-80005
U84	1810-0960	1	DELAY LINE ACTIVE DEVICE W/DUAL IN-LINE	28480	1810-0960
U85	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U86	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U87	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U88	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U89	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109

**HP Part Number 70004-60043
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U90	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U91	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U92	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U93	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U94	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U95	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U96	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U97	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U98	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U99	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U100	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U101	1818-3538	1	DRAM 64KX4 150 NS PLSTC 5V	28480	1818-3538
U102	1818-3538	1	DRAM 64KX4 150 NS PLSTC 5V	28480	1818-3538
U103	1818-3538	1	DRAM 64KX4 150 NS PLSTC 5V	28480	1818-3538
U104	1818-3538	1	DRAM 64KX4 150 NS PLSTC 5V	28480	1818-3538
U105	1820-2700	1	IC LCH TTL/F TRANSPARENT OCTL	28480	1820-2700
U106	1820-3544	1	IC LCH TTL/AS TRANSPARENT DUAL 4-BIT	28480	1820-3544
U107	1820-3224	1	IC TRANSCEIVER TTL/F BUS OCTL	28480	1820-3224
U108	1820-3224	1	IC TRANSCEIVER TTL/F BUS OCTL	28480	1820-3224
U109	1820-2700	1	IC LCH TTL/F TRANSPARENT OCTL	28480	1820-2700
U110	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U111	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U112	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U113	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U114	1820-3220	1	IC DCDR TTL/F BIN 2-TO-4-LINE DUAL	28480	1820-3220
U115	1820-2686	1	IC GATE TTL/F AND QUAD 2-INP	28480	1820-2686
U116	1820-2654	1	IC MUXR/DATA-SEL TTL/F 2-TO-1-LINE QUAD	28480	1820-2654
U117	1820-2654	1	IC MUXR/DATA-SEL TTL/F 2-TO-1-LINE QUAD	28480	1820-2654
U119	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U120	1858-0077	1	TRANSISTOR ARRAY 14-PIN PLSTC TO-116	28480	1858-0077
U121	1826-0285	1	IC V RGLTR-FXD-NEG -4.8/-5.2V 3-TO-92	28480	1826-0285
U125	1826-1533	1	IC OP AMP H-SLEW-RATE DUAL 8 PIN DIP-P	28480	1826-1533
U129	1810-0533	1	NETWORK-RES 16-DIP 33.0 OHM X 8	02483	761-3-R33
U153	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U200	1820-4784	1	IC-PERIPHERAL INTERFACE MICROCOMPUTER	28480	1820-4784

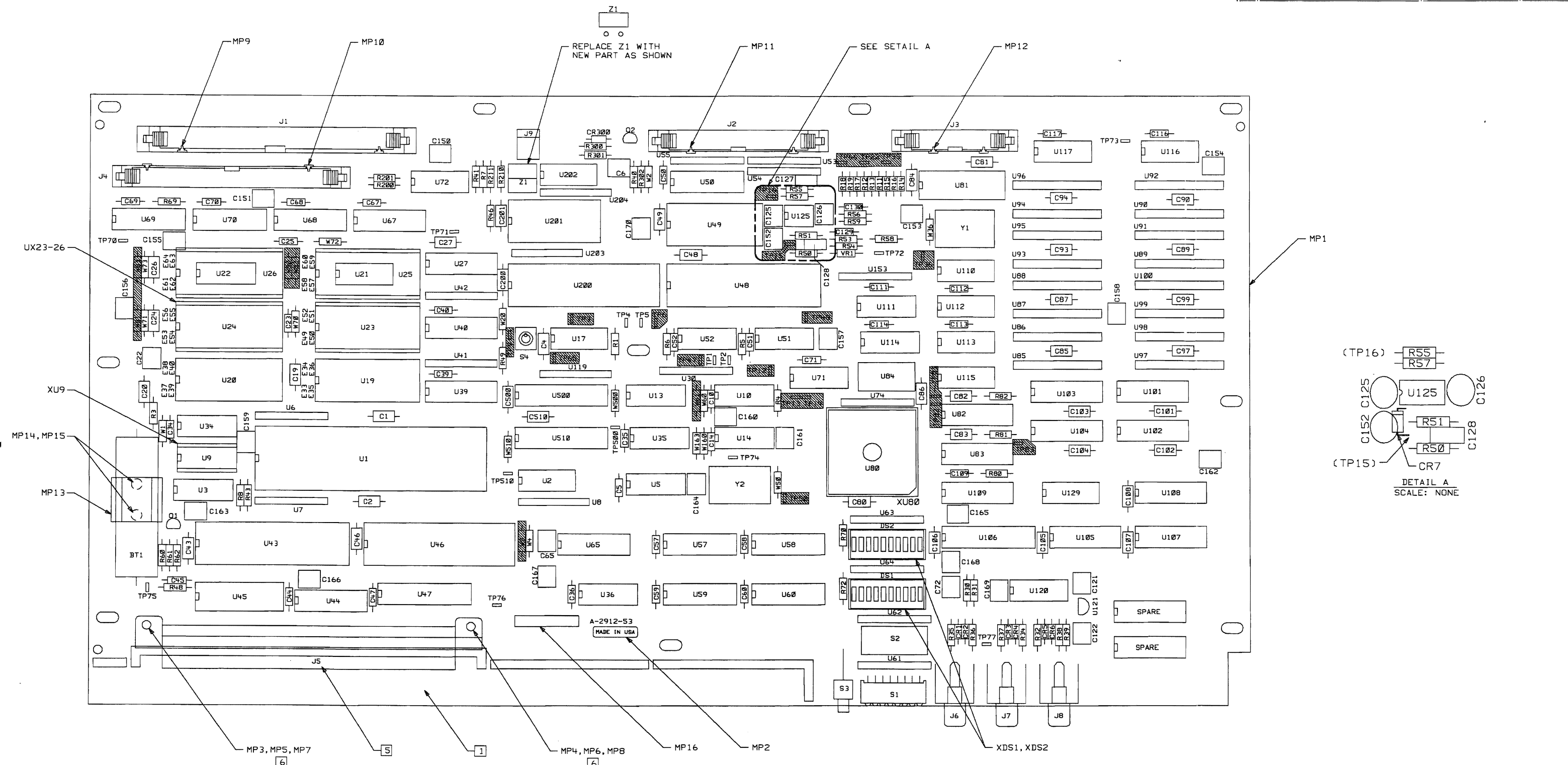
*Indicates factory-selected value

**HP Part Number 70004-60043
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U201	1RD2-6001	1	IC-CERBERUS 1RD2	28480	1RD2-6001
U202	1820-1195	1	IC FF TTL/LS D-TYPE POS-EDGE-TRIG COM	28480	1820-1195
U203	1810-0280	1	NETWORK-RES 10-SIP 10.0K OHM X 9	06252	750-101
U204	1810-0280	1	NETWORK-RES 10-SIP 10.0K OHM X 9	06252	750-101
U500	70004-80001	1	PAL-PRGMED(U500)	28480	70004-80001
U510	70004-80002	1	PAL-PRGMED(U510)	28480	70004-80002
VR1	1902-0952	1	DIODE-ZNR 5.6V 5% DO-35 PD=.4W TC=+.046%	28480	1902-0952
W1	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W2	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W4	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W20	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W36	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W50	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W60	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W70	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W71	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W72	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W73	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W160	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W500	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W510	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
XU80	1200-1274	1	SOCKET-IC-CHP-CARR 68-CONT SQUARE	28480	1200-1274
Y1	1813-0484	1	CLK-OSC-XTAL STD 35.904-MHZ 0.01%	01417	HS-100-35.904MHZ
Y2	70004-80035	1	XOSC 50 MHZ .05%	28480	70004-80035
Z1	0410-2355	1	RESONATOR-CERAMIC 8 MHz FREQUENCY; +	09939	CST8.00MTW100

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**SCANS
By
Artek Media**



NOTES: UNLESS OTHERWISE SPECIFIED

- 1 REMOVE TABS AFTER WAVE SOLDER.
2. FOR MAXIMUM HEIGHT SEE D-70004-20002-4, SHEET 2 OF 2.
3. MAXIMUM LEAD TRIM LENGTH .118
4. HATCHED COMPONENTS ARE NOT LOADED FOR THIS ASSEMBLY.
- 5 JS MUST BE FLAT TO BOARD.
- 6 MP3-8 ARE USED ON PART NO. 70004-60043 ONLY DURING SOLDER PROCESS.
7. USE RAW BOARD PART NUMBER 70004-20002.

SEE MATERIAL LIST 70004-60043

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	TOLERANCES: XX.XXX ±.010 XX.XX ±.02		ENGINEER/CHECKER	DATE		SCALE	
	THIRD ANGLE PROJECTION		RELEASE TO PROD.	DATE		SHEET 1 OF 1	
	DO NOT SCALE THIS DRAWING		SUPERSEDES DWG.			PART NUMBER	
					TITLE	D-70004-60043-2	

5300	A2912	D-70004-60043-1	
SYM	REVISIONS	APPROVED	DATE
A	AS ISSUED PER PCO 53-07784 LN		07-23-93

PIN	SIGNAL	TO/FROM	FUNCTION BLOCK
1	AC RYN		K
2	AC RYN		K
3	AC A		K
4	AC A		K
5	AC A		K
6	AC A		K
7	AC RYN		K
8	AC RYN		K
9	AC RYN		K
10	AC B		K
11	AC B		K
12	AC RYN		K
13	AC RYN		K
14	AC RYN		K
15	AD A		K
16	AD A		K
17	AD A		K
18	AD A		K
19	AD RYN		K
20	AD RYN		K
21	AD B		K
22	AD B		K
23	AD B		K
24	AD B		K
25	AD A SENSE		K
26	AD B SENSE		K
27	LINE SYNC RYN		K
28	SSV SENSE		K
29	SSV RYN SENSE		K
30	SSV RYN		K
31	SSV RYN		K
32	SSV RYN		K
33	SSV RYN		K
34	SSV RYN		K
35	SSV		K
36	SSV		K
37	SSV RYN		K
38	SSV RYN		K
39	SSV RYN		K
40	SSV RYN		K
41	SSV		K
42	SSV		K
43	SSV		K
44	SSV		K
45	SSV		K
46	SSV		K
47	SSV RYN		K
48	SSV RYN		K
49	SSV		K
50	SSV		K
51	SSV		K
52	SSV		K
53	SSV		K
54	SSV		K
55	SSV		K
56	SSV		K
57	SSV		K
58	SSV		K

PIN	SIGNAL	TO/FROM	FUNCTION BLOCK
1	SHIELD		H
2	SSV		H
3	SSV		H
4	SSV		H
5	SSV		H
6	SSV		H
7	SSV		H
8	SSV		H
9	SSV		H
10	SSV		H
11	SSV		H
12	SSV		H
13	SSV		H
14	SSV		H
15	SSV		H
16	SSV		H
17	SSV		H
18	SSV		H
19	SSV		H
20	SSV		H
21	SSV		H
22	SSV		H
23	SSV		H
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42	SSV		H
43	SSV		H
44	SSV		H
45	SSV		H
46	SSV		H
47	SSV		H
48	SSV		H
49	SSV		H
50	SSV		H
51	SSV		H
52	SSV		H
53	SSV		H
54	SSV		H
55	SSV		H
56	SSV		H
57	SSV		H
58	SSV		H

PIN	SIGNAL	TO/FROM	FUNCTION BLOCK
1	SSV RYN		O
2	SSV RYN		O
3	SSV RYN		O
4	SSV RYN		O
5	SSV RYN		O
6	SSV		O
7	CONTRAST		O
8	SSV		O
9	SSV		O
10	SSV		O
11	SSV		O
12	SSV		O
13	SSV		O
14	SSV		O
15	SSV		O
16	SSV		O
17	SSV		O
18	SSV		O
19	SSV		O
20	SSV		O

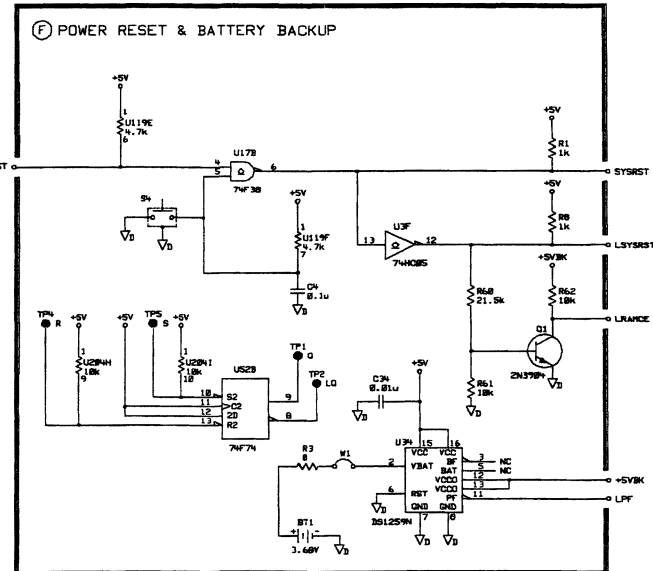
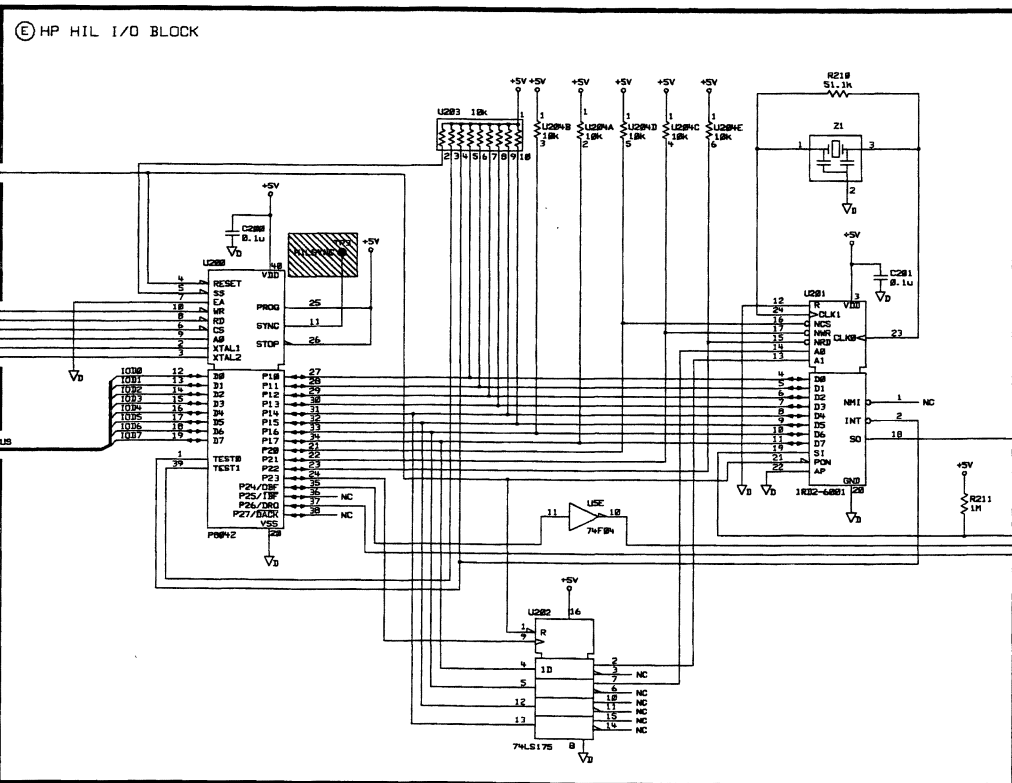
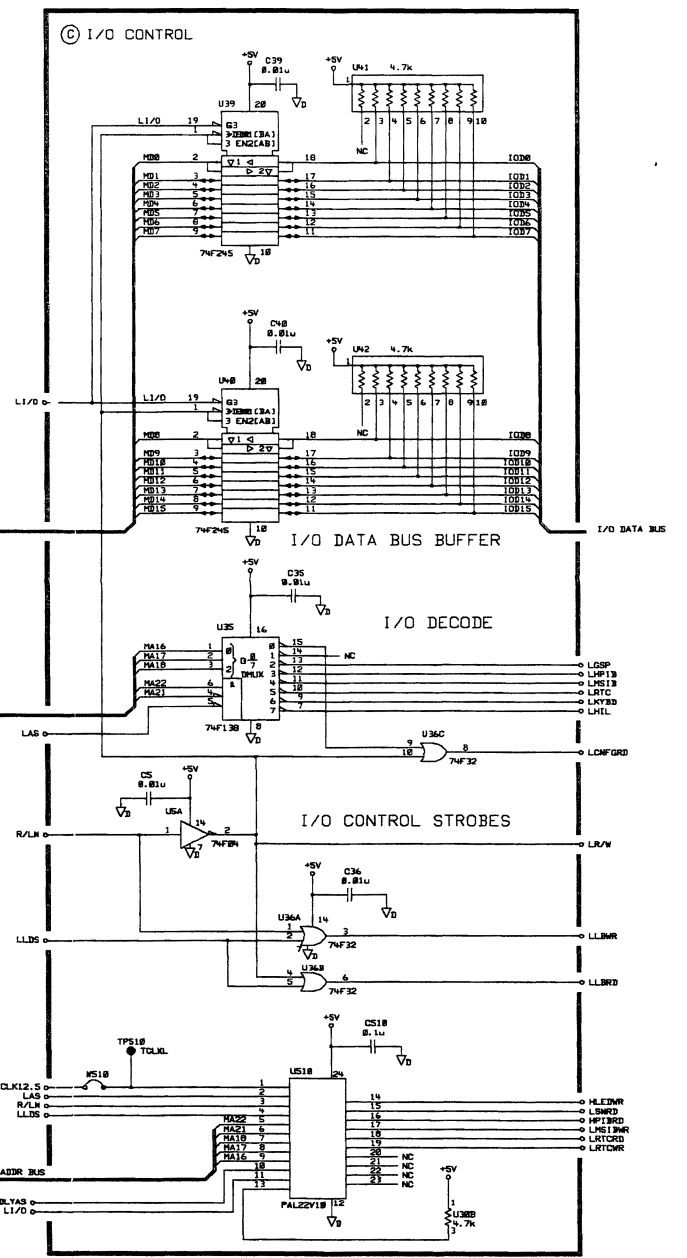
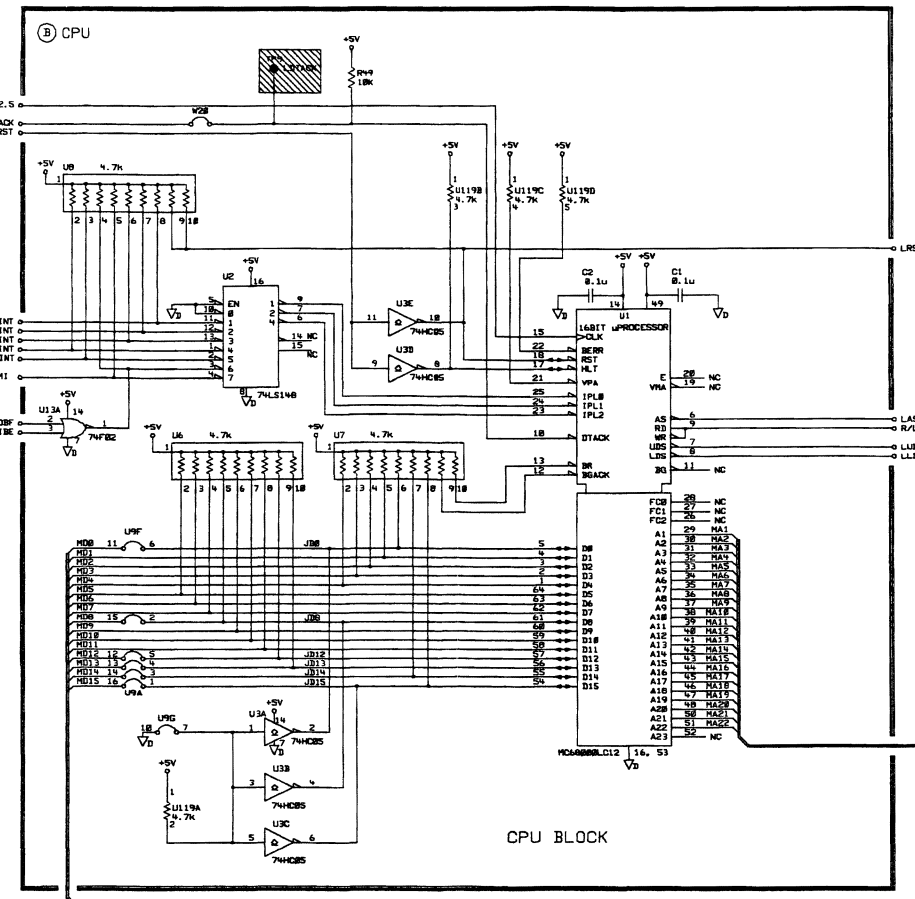
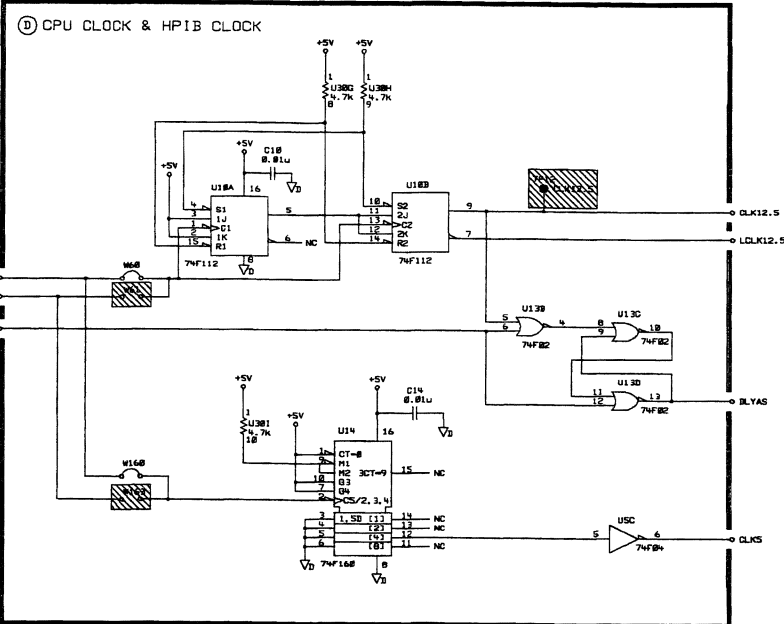
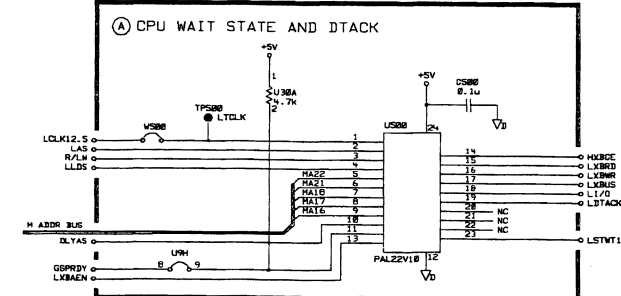
PIN	SIGNAL	TO/FROM	FUNCTION BLOCK
1	SHIELD		
2	SSV RYN		
3	SSV RYN		
4	SSV RYN		
5	SSV RYN		
6	SSV		
7	CONTRAST		
8	SSV		
9	SSV		
10	SSV		
11	SSV		
12	SSV		
13	SSV		
14	SSV		
15	SSV		
16	SSV		
17	SSV		
18	SSV		
19	SSV		
20	SSV		
21	SSV		
22	SSV		
23	SSV		
24	SSV		
25	SSV		
26	SSV		
27	SSV		
28	SSV		
29	SSV		
30	SSV		
31	SSV		
32	SSV		
33	SSV		
34	SSV		
35	SSV		
36	SSV		
37	SSV		
38	SSV		
39	SSV		
40	SSV		
41	SSV		
42	SSV		
43	SSV		
44	SSV		
45	SSV		
46	SSV		
47	SSV		
48	SSV RYN		
49	SSV RYN		
50	SSV		

PIN	SIGNAL	TO/FROM	FUNCTION BLOCK
1	SSV RYN		
2	SSV RYN		
3	SSV RYN		
4	SSV RYN		
5	SSV RYN		
6	SSV		
7	CONTRAST		
8	SSV		
9	SSV		
10	SSV		
11	SSV		
12	SSV		
13	SSV		
14	SSV		
15	SSV		
16	SSV		
17	SSV		
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41	SSV		
42	SSV		
43	SSV		
44	SSV		
45	SSV		
46	SSV		
47	SSV		
48	SSV RYN		
49	SSV RYN		
50	SSV		
51	SSV		
52	SSV		
53	SSV		
54	SSV		
55	SSV		
56	SSV		
57	SSV		
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74	SSV		
75	SSV		
76	SSV		
77	SSV		
78	SSV		
79	SSV		
80	SSV		

PIN	SIGNAL	TO/FROM	FUNCTION BLOCK
1	SSV RYN		
2	SSV RYN		
3	SSV RYN		
4	SSV RYN		
5	SSV RYN		
6	SSV		
7	CONTRAST		
8	SSV		
9	SSV		
10	SSV		
11	SSV		
12	SSV		
13	SSV		
14	SSV		
15	SSV		
16	SSV		
17	SSV		
18	SSV		
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41	SSV		
42	SSV		
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45	SSV		
46	SSV		
47	SSV		
48	SSV RYN		
49	SSV RYN		
50	SSV		

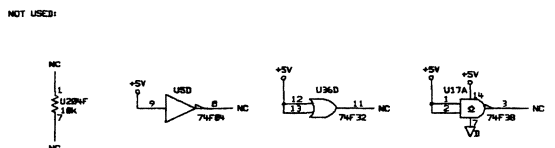
NOTE:
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 RAW BD = 70004-20002

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	ENGINEER/CHECKER _____ DATE _____		SCALE: NONE	
	RELEASE TO PROD. _____ DATE _____		SHEET 1 OF 6	
	SUPERSEDES DWG. _____		PART NUMBER: 70004-60043 TITLE: D-70004-60043-1	



MNEMONIC	2	3	4	5
+5VDC	F	H		
CLKS	D	C		
CLK12.5	B, C, D	H		
BLAS	A, C, D			
OSPRDY	A	L		
HLEDR	A	H		
HORSE	A	H		
KBI3C	A	L		
KBI3E	A	L		
LAS	A, B, C, D	H	N	
LCLK12.5	A, D	H		
LDFND	A, C	H, I		
LDTACK	A, B			
LSPINT	A, B			
LHIL	B, C, E			
LHILINT	B, C, E			
LHILM1	B, C, E			
LHILM2	B, C, E			
LHPINT	A, C	G		
L/I/O	A, C, D, E	H		
LK12B	A, C	H, J, L		
LLBR	A, C, E	G, H		
LKB	A, B, C			
LKB1	A, B, C	J, L, L		
LKB2	A, B, C	J, L, L		
LKB3	A, B, C	J, L, L		
LKB4	A, B, C	J, L, L		
LKB5	A, B, C	J, L, L		
LKB6	A, B, C	J, L, L		
LKB7	A, B, C	J, L, L		
LKB8	A, B, C	J, L, L		
LKB9	A, B, C	J, L, L		
LKB10	A, B, C	J, L, L		
LKB11	A, B, C	J, L, L		
LKB12	A, B, C	J, L, L		
LKB13	A, B, C	J, L, L		
LKB14	A, B, C	J, L, L		
LKB15	A, B, C	J, L, L		
LKB16	A, B, C	J, L, L		
LKB17	A, B, C	J, L, L		
LKB18	A, B, C	J, L, L		
LKB19	A, B, C	J, L, L		
LKB20	A, B, C	J, L, L		
LKB21	A, B, C	J, L, L		
LKB22	A, B, C	J, L, L		
LKB23	A, B, C	J, L, L		
LKB24	A, B, C	J, L, L		
LKB25	A, B, C	J, L, L		
LKB26	A, B, C	J, L, L		
LKB27	A, B, C	J, L, L		
LKB28	A, B, C	J, L, L		
LKB29	A, B, C	J, L, L		
LKB30	A, B, C	J, L, L		
LKB31	A, B, C	J, L, L		
LKB32	A, B, C	J, L, L		
LKB33	A, B, C	J, L, L		
LKB34	A, B, C	J, L, L		
LKB35	A, B, C	J, L, L		
LKB36	A, B, C	J, L, L		
LKB37	A, B, C	J, L, L		
LKB38	A, B, C	J, L, L		
LKB39	A, B, C	J, L, L		
LKB40	A, B, C	J, L, L		
LKB41	A, B, C	J, L, L		
LKB42	A, B, C	J, L, L		
LKB43	A, B, C	J, L, L		
LKB44	A, B, C	J, L, L		
LKB45	A, B, C	J, L, L		
LKB46	A, B, C	J, L, L		
LKB47	A, B, C	J, L, L		
LKB48	A, B, C	J, L, L		
LKB49	A, B, C	J, L, L		
LKB50	A, B, C	J, L, L		
LKB51	A, B, C	J, L, L		
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LKB54	A, B, C	J, L, L		
LKB55	A, B, C	J, L, L		
LKB56	A, B, C	J, L, L		
LKB57	A, B, C	J, L, L		
LKB58	A, B, C	J, L, L		
LKB59	A, B, C	J, L, L		
LKB60	A, B, C	J, L, L		
LKB61	A, B, C	J, L, L		
LKB62	A, B, C	J, L, L		
LKB63	A, B, C	J, L, L		
LKB64	A, B, C	J, L, L		
LKB65	A, B, C	J, L, L		
LKB66	A, B, C	J, L, L		
LKB67	A, B, C	J, L, L		
LKB68	A, B, C	J, L, L		
LKB69	A, B, C	J, L, L		
LKB70	A, B, C	J, L, L		
LKB71	A, B, C	J, L, L		
LKB72	A, B, C	J, L, L		
LKB73	A, B, C	J, L, L		
LKB74	A, B, C	J, L, L		
LKB75	A, B, C	J, L, L		
LKB76	A, B, C	J, L, L		
LKB77	A, B, C	J, L, L		
LKB78	A, B, C	J, L, L		
LKB79	A, B, C	J, L, L		
LKB80	A, B, C	J, L, L		
LKB81	A, B, C	J, L, L		
LKB82	A, B, C	J, L, L		
LKB83	A, B, C	J, L, L		
LKB84	A, B, C	J, L, L		
LKB85	A, B, C	J, L, L		
LKB86	A, B, C	J, L, L		
LKB87	A, B, C	J, L, L		
LKB88	A, B, C	J, L, L		
LKB89	A, B, C	J, L, L		
LKB90	A, B, C	J, L, L		
LKB91	A, B, C	J, L, L		
LKB92	A, B, C	J, L, L		
LKB93	A, B, C	J, L, L		
LKB94	A, B, C	J, L, L		
LKB95	A, B, C	J, L, L		
LKB96	A, B, C	J, L, L		
LKB97	A, B, C	J, L, L		
LKB98	A, B, C	J, L, L		
LKB99	A, B, C	J, L, L		
LKB100	A, B, C	J, L, L		

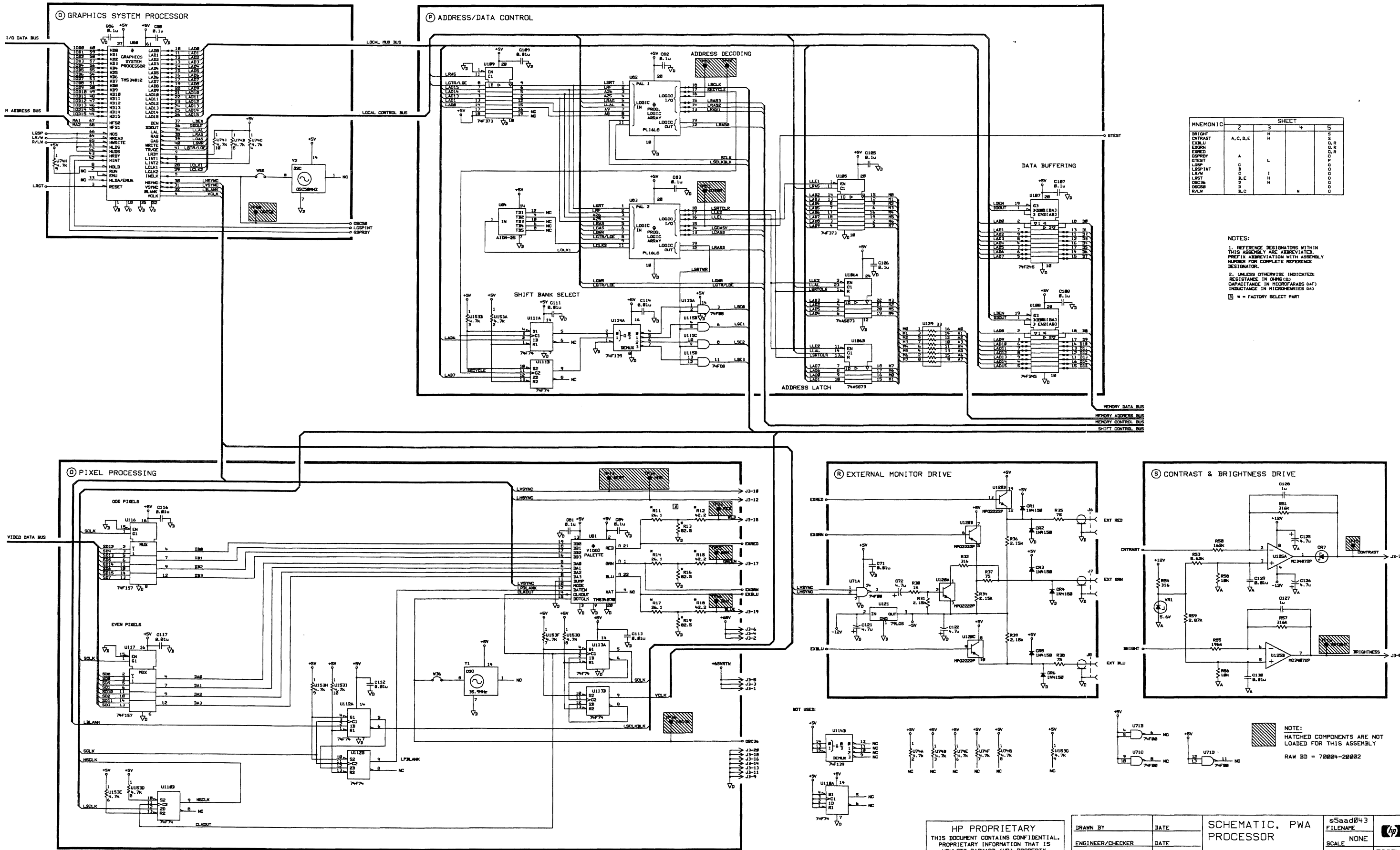
NOTE: HATCHED COMPONENTS ARE NOT LOADED FOR THIS ASSEMBLY
 RAW BD = 70004-20002



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DRAWN BY	DATE	SCHEMATIC, PWA	s2aad043
ENGINEER/CHECKER	DATE	PROCESSOR	FILENAME
RELEASE TO PROD.	DATE		SCALE NONE
SUPERSEDES DWG.			SHEET 2 OF 6
			70004-60043
			PART NUMBER
			D-70004-60043-1

5300	A2912	D-70004-60043-1
SYM	REVISIONS	APPROVED
A	AS ISSUED PER PCO 53-07784 LN	DATE
		07-23-93



MNEMONIC	2	3	4	5
BRIGHT				
CONTRAST	A,C,D,E	H		
EXBLU				
EXRDN				
EXRED				
OSPRDY				
QTEST	A	L		
LSPP	C			
LSPPINT	C			
LSPPV	C			
LRST	B,C	I	H	
OSCSB	B			
OSCSB	B			
R/LW	B,C			

NOTES:
 1. REFERENCE DESIGNATORS WITHIN THIS ASSEMBLY ARE ABBREVIATED. PREFIX ABBREVIATION WITH ASSEMBLY NUMBERS FOR COMPLETE REFERENCE DESIGNATOR.
 2. UNLESS OTHERWISE INDICATED: RESISTANCE IN OHMS (Ω) CAPACITANCE IN MICROFARADS (μF) INDUCTANCE IN MICROHENRIES (μH)
 □ = FACTORY SELECT PART

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DRAWN BY	DATE
ENGINEER/CHECKER	DATE
RELEASE TO PROD.	DATE
SUPERSEDES DWG.	

SCHEMATIC, PWA
 PROCESSOR

FILENAME	ss5ad043
SCALE	NONE
SHEET 5 OF 6	70004-60043
PART NUMBER	D-70004-60043-1

Component-Level Information Packet

for 70004-60033

A5 Processor



HP Part No. 70004-90050
Printed in USA May 1994

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1400 Fountaingrove Parkway, Santa Rosa, CA 95403-1799, USA

HP Part Number 70004-60033
A5 Processor

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
BT1	1420-0331	1	BATTERY 3.68V 1.75A-HR LITHIUM THIONYL	28480	1420-0331
C1	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C2	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C4	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C5	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C6	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C10	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C14	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C19	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C20	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C22	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C23	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C24	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C25	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C26	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C27	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C34	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C35	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C36	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C39	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C40	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C43	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C44	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C45	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C46	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C47	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C48	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C49	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C50	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C51	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C52	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C57	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C58	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C59	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C60	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832

*Indicates factory-selected value

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**HP Part Number 70004-60033
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C65	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C67	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C68	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C69	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C70	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C71	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C72	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C80	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C81	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C82	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C83	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C84	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C85	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C86	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C87	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C89	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C90	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C93	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C94	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C97	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C99	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C101	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C102	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C103	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C104	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C105	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C106	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C107	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C108	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C109	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C111	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C112	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C113	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C114	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C116	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832

**HP Part Number 70004-60033
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C117	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C121	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C122	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C125	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C126	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C127	0160-4535	1	CAP-FXD 1uF +10% 50 V CER X7R	28480	0160-4535
C128	0160-4535	1	CAP-FXD 1uF +10% 50 V CER X7R	28480	0160-4535
C129	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C130	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C150	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C151	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C152	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C153	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C154	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C155	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C156	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C157	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C158	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C159	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C160	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C161	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C162	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C163	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C164	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C165	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C166	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C167	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C168	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C169	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C170	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C200	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C201	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C500	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C510	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
CR1	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050

*Indicates factory-selected value

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**HP Part Number 70004-60033
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
CR2	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR3	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR4	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR5	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR6	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR7	1901-0518	1	DIODE-SCHOTTKY SM SIG	12395	5082-2800
CR300	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
DS1	1990-0829	1	LED-LIGHT BAR LUM-INT=600UCD IF=20MA-MAX	28480	1990-0829
DS2	1990-0829	1	LED-LIGHT BAR LUM-INT=600UCD IF=20MA-MAX	28480	1990-0829
J1	1251-7575	1	CONN-POST TYPE .100-PIN-SPCG 60-CONT	28480	1251-7575
J2	1251-8747	1	CONN-POST TYPE .100-PIN-SPCG 34-CONT	28480	1251-8747
J3	1252-3186	1	CONN-POST TYPE .100-PIN-SPCG 20-CONT	28480	1252-3186
J4	1251-8929	1	CONN-POST TYPE .100-PIN-SPCG 50-CONT	28480	1251-8929
J5	1252-2774	1	CONN-POST TYPE .100-PIN-SPCG 80-CONT	28480	1252-2774
J6	1252-0924	1	CONNECTOR-PHONO JACK RIGHT ANGLE; PC	05545	333-15
J7	1252-0924	1	CONNECTOR-PHONO JACK RIGHT ANGLE; PC	05545	333-15
J8	1252-0924	1	CONNECTOR-PHONO JACK RIGHT ANGLE; PC	05545	333-15
J9	1252-0161	1	CONN-POST TYPE .156-PIN-SPCG 2-CONT	28480	1252-0161
MP2	0515-1548	2	SCREW-MACHINE ASSEMBLY M2.5 X 0.45	01136	
MP3	3050-0890	2	WASHER-FL MTLT 2.5 2.78-MM-ID 6.35-MM-OD	06691	
MP4	0535-0070	2	NUT-HEX DBL-CHAM M2.5 X 0.45 2MM-THK	06691	
MP5	1251-5595	2	POLARIZING KEY-POST CONN	04726	3518
MP6	1400-1267	1	HOLDER-BAT .531-.656-DIA FOR AA CELLS	05535	91
MP7	0361-0026	2	RIVET-SEMITUB OVH .089DIA .125LG	02531	R-4008-1/8
Q1	1854-0215	1	TRANSISTOR NPN SI TO-92 PD=625MW	28480	1854-0215
Q2	1854-0215	1	TRANSISTOR NPN SI TO-92 PD=625MW	28480	1854-0215
R1	0757-0280	1	RESISTOR 1K +-1% .125W TF TC=0+-100	05524	CMF-55-1
R3	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
R4	0757-0280	1	RESISTOR 1K +-1% .125W TF TC=0+-100	05524	CMF-55-1
R5	0757-0416	1	RESISTOR 511 +-1% .125W TF TC=0+-100	05524	CMF-55-1
R6	0757-0416	1	RESISTOR 511 +-1% .125W TF TC=0+-100	05524	CMF-55-1
R7	0757-0416	1	RESISTOR 511 +-1% .125W TF TC=0+-100	05524	CMF-55-1
R8	0757-0280	1	RESISTOR 1K +-1% .125W TF TC=0+-100	05524	CMF-55-1
R11	0698-7198	1	RESISTOR 26.1 +-1% .05W TF TC=0+-100	05524	CMF-50-2
R12	0698-7203	1	RESISTOR 42.2 +-1% .05W TF TC=0+-100	05524	CMF-50-2

HP Part Number 70004-60033
A5 Processor (continued)

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R13	0698-7210	1	RESISTOR 82.5 +1% .05W TF TC=0+-100	05524	CMF-50-2
R14	0698-7198	1	RESISTOR 26.1 +1% .05W TF TC=0+-100	05524	CMF-50-2
R15	0698-7203	1	RESISTOR 42.2 +1% .05W TF TC=0+-100	05524	CMF-50-2
R16	0698-7210	1	RESISTOR 82.5 +1% .05W TF TC=0+-100	05524	CMF-50-2
R17	0698-7198	1	RESISTOR 26.1 +1% .05W TF TC=0+-100	05524	CMF-50-2
R18	0698-7203	1	RESISTOR 42.2 +1% .05W TF TC=0+-100	05524	CMF-50-2
R19	0698-7210	1	RESISTOR 82.5 +1% .05W TF TC=0+-100	05524	CMF-50-2
R30	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+-100	05524	CMF-55-1
R31	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+-100	05524	CMF-55-1
R32	0698-3444	1	RESISTOR 316 +1% .125W TF TC=0+-100	05524	CMF-55-1
R34	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+-100	05524	CMF-55-1
R35	0757-0398	1	RESISTOR 75 +1% .125W TF TC=0+-100	05524	CMF-55-1
R36	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+-100	05524	CMF-55-1
R37	0757-0398	1	RESISTOR 75 +1% .125W TF TC=0+-100	05524	CMF-55-1
R38	0757-0398	1	RESISTOR 75 +1% .125W TF TC=0+-100	05524	CMF-55-1
R39	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+-100	05524	CMF-55-1
R40	0698-3444	1	RESISTOR 316 +1% .125W TF TC=0+-100	05524	CMF-55-1
R41	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+-100	05524	CMF-55-1
R43	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+-100	05524	CMF-55-1
R46	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+-100	05524	CMF-55-1
R48	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+-100	05524	CMF-55-1
R49	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+-100	05524	CMF-55-1
R50	0757-0470	1	RESISTOR 162K +1% .125W TF TC=0+-100	05524	CMF-55-1
R51	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+-100	05524	CMF-55-1
R53	0757-0200	1	RESISTOR 5.62K +1% .125W TF TC=0+-100	05524	CMF-55-1
R54	0698-3444	1	RESISTOR 316 +1% .125W TF TC=0+-100	05524	CMF-55-1
R55	0698-3453	1	RESISTOR 196K +1% .125W TF TC=0+-100	05524	CMF-55-1
R56	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+-100	05524	CMF-55-1
R57	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+-100	05524	CMF-55-1
R58	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+-100	05524	CMF-55-1
R59	0698-3151	1	RESISTOR 2.87K +1% .125W TF TC=0+-100	05524	CMF-55-1
R60	0757-0199	1	RESISTOR 21.5K +1% .125W TF TC=0+-100	05524	CMF-55-1
R61	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+-100	05524	CMF-55-1
R62	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+-100	05524	CMF-55-1
R69	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+-100	05524	CMF-55-1

*Indicates factory-selected value

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**HP Part Number 70004-60033
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Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R70	0698-3444	1	RESISTOR 316 +1% .125W TF TC=0+100	05524	CMF-55-1
R72	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1
R80	0757-0180	1	RESISTOR 31.6 +1% .125W TF TC=0+100	05524	CMF-55-1
R81	0757-0180	1	RESISTOR 31.6 +1% .125W TF TC=0+100	05524	CMF-55-1
R82	0757-0180	1	RESISTOR 31.6 +1% .125W TF TC=0+100	05524	CMF-55-1
R200	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R201	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R210	0757-0458	1	RESISTOR 51.1K +1% .125W TF TC=0+100	05524	CMF-55-1
R211	0698-8827	1	RESISTOR 1M +1% .125W TF TC=0+100	05524	CMF-55-1
R300	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R301	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R302	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1
S1	3101-2739	1	SWITCH-DIP SL 8-1A 0.1A 50VDC	02483	11P-2317
S2	3101-2094	1	SWITCH-DIP RKR 8-1A 0.15A 30VDC	28480	3101-2094
S3	3101-2719	1	SWITCH-SL SPDT SUBMIN .02A 20VAC/DC PC	02392	1101-M2AV2BE W/ORANGE ACTUATOR
S4	3101-3025	1	SWITCH-PB SPST-NO MOM .01A 50 VAC	28480	3101-3025
TP1	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP2	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP4	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP5	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP70	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP71	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP72	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP73	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP74	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP75	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP76	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP77	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP500	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP510	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
U1	1820-5279	1	IC-16-BIT, 12.5MHZ PLAST. MPU 32BIT BUS	28480	1820-5279
U2	1820-1851	1	IC ENCDR TTL/LS PRIORITY 8-TO-3-LINE	28480	1820-1851
U3	1820-4053	1	IC INV CMOS/HC HEX	28480	1820-4053
U5	1820-2506	1	IC INV TTL/F HEX	28480	1820-2506
U6	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101

**HP Part Number 70004-60033
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U7	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U8	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U9	1258-0177	1	SHUNT-PROGRAMMABLE 8 DBL PIN SETS; .800	05518	8136-475G8
U10	1820-2694	1	IC FF TTL/F J-K NEG-EDGE-TRIG	28480	1820-2694
U13	1820-2685	1	IC GATE TTL/F NOR QUAD 2-INP	28480	1820-2685
U14	1820-3645	1	IC CNTR TTL/F DECD SYNCHRO POS-EDGE-TRIG	28480	1820-3645
U17	1820-4057	1	IC BFR TTL/F NAND QUAD 2-INP	28480	1820-4057
U19	1818-3932	1	IC 256K-BIT SRAM 100-NS CMOS	28480	1818-3932
U20	1818-3932	1	IC 256K-BIT SRAM 100-NS CMOS	28480	1818-3932
U21	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U22	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U23	70004-80031	1		28480	70004-80031
U24	70004-80032	1		28480	70004-80032
U25	70004-80033	1		28480	70004-80033
U26	70004-80034	1		28480	70004-80034
U27	70004-80003	1	PAL-PRGMED (U27)	28480	70004-80003
U30	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U34	1826-1858	1	IC MISC 16 PIN DIP-P	12186	DS1259N
U35	1820-2861	1	IC DCDR TTL/F BIN 3-TO-8-LINE	28480	1820-2861
U36	1820-2690	1	IC GATE TTL/F OR QUAD 2-INP	28480	1820-2690
U39	1820-3224	1	IC TRANSCEIVER TTL/F BUS OCTL	28480	1820-3224
U40	1820-3224	1	IC TRANSCEIVER TTL/F BUS OCTL	28480	1820-3224
U41	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U42	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U43	1820-2548	1	IC-GENERAL PURPOSE INTERFACE BUS ADAPTER	01698	
U44	1820-6170	1	IC-INTERFACE XCVR BIPOLAR BUS OCTL	28480	1820-6170
U45	1820-6360	1	IC-INTERFACE XCVR BIPOLAR BUS OCTL	28480	1820-6360
U46	1820-3010	1	IC-ASIC GT-ARY 2.01K GATES CMOS 5220	28480	1820-3010
U47	1820-3426	1	IC TRANSCEIVER TTL/S BUS 9-BIT	28480	1820-3426
U48	70004-80012	1	EPROM-PRGMED U48	28480	70004-80012
U49	1820-2177	1	IC-INPUT/OUTPUT EXPANDER	03811	P8243
U50	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U51	1820-2694	1	IC FF TTL/F J-K NEG-EDGE-TRIG	28480	1820-2694
U52	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U53	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101

*Indicates factory-selected value

CLIP 70004-90050 7

**HP Part Number 70004-60033
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U54	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U55	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U57	1820-2102	1	IC LCH TTL/LS TRANSPARENT OCTL	28480	1820-2102
U58	1820-2102	1	IC LCH TTL/LS TRANSPARENT OCTL	28480	1820-2102
U59	1820-3299	1	IC DRVR CMOS/HC BUS OCTL	28480	1820-3299
U60	1820-3299	1	IC DRVR CMOS/HC BUS OCTL	28480	1820-3299
U61	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U62	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U63	1810-0273	1	NETWORK-RES 10-SIP 470.0 OHM X 9	06252	750-101
U64	1810-0273	1	NETWORK-RES 10-SIP 470.0 OHM X 9	06252	750-101
U65	1820-5384	1	IC-INTERFACE CMOS -888-BIT	28480	1820-5384
U67	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U68	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U69	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U70	1820-2075	1	IC TRANSCEIVER TTL/LS BUS OCTL	28480	1820-2075
U71	1820-2684	1	IC GATE TTL/F NAND QUAD 2-INP	28480	1820-2684
U72	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U74	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U80	1820-6081	1	IC-32-BIT GRAPHICS SYSTEM PROCESSOR	01698	TMS34010FNL-50
U81	1820-5897	1	IC-INTERFACE MISC-DGTL MISC/UNKNOWN	28480	1820-5897
U82	70004-80004	1	PAL-PRGMED (U82)	28480	70004-80004
U83	70004-80005	1	PAL-PRGMED (U83)	28480	70004-80005
U84	1810-0960	1	DELAY LINE ACTIVE DEVICE W/DUAL IN-LINE	28480	1810-0960
U85	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U86	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U87	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U88	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U89	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U90	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U91	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U92	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U93	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U94	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U95	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U96	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109

**HP Part Number 70004-60033
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U97	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U98	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U99	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U100	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U101	1818-3538	1	DRAM 64KX4 150 NS PLSTC 5V	28480	1818-3538
U102	1818-3538	1	DRAM 64KX4 150 NS PLSTC 5V	28480	1818-3538
U103	1818-3538	1	DRAM 64KX4 150 NS PLSTC 5V	28480	1818-3538
U104	1818-3538	1	DRAM 64KX4 150 NS PLSTC 5V	28480	1818-3538
U105	1820-2700	1	IC LCH TTL/F TRANSPARENT OCTL	28480	1820-2700
U106	1820-3544	1	IC LCH TTL/AS TRANSPARENT DUAL 4-BIT	28480	1820-3544
U107	1820-3224	1	IC TRANSCEIVER TTL/F BUS OCTL	28480	1820-3224
U108	1820-3224	1	IC TRANSCEIVER TTL/F BUS OCTL	28480	1820-3224
U109	1820-2700	1	IC LCH TTL/F TRANSPARENT OCTL	28480	1820-2700
U110	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U111	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U112	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U113	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U114	1820-3220	1	IC DCDR TTL/F BIN 2-TO-4-LINE DUAL	28480	1820-3220
U115	1820-2686	1	IC GATE TTL/F AND QUAD 2-INP	28480	1820-2686
U116	1820-2654	1	IC MUXR/DATA-SEL TTL/F 2-TO-1-LINE QUAD	28480	1820-2654
U117	1820-2654	1	IC MUXR/DATA-SEL TTL/F 2-TO-1-LINE QUAD	28480	1820-2654
U119	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U120	1858-0077	1	TRANSISTOR ARRAY 14-PIN PLSTC TO-116	28480	1858-0077
U121	1826-0285	1	IC V RGLTR-FXD-NEG -4.8/-5.2V 3-TO-92	28480	1826-0285
U125	1826-1533	1	IC OP AMP H-SLEW-RATE DUAL 8 PIN DIP-P	28480	1826-1533
U129	1810-0533	1	NETWORK-RES 16-DIP 33.0 OHM X 8	02483	761-3-R33
U153	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U200	1820-4784	1	IC-PERIPHERAL INTERFACE MICROCOMPUTER	28480	1820-4784
U201	1RD2-6001	1	IC-CERBERUS 1RD2	28480	1RD2-6001
U202	1820-1195	1	IC FF TTL/LS D-TYPE POS-EDGE-TRIG COM	28480	1820-1195
U203	1810-0280	1	NETWORK-RES 10-SIP 10.0K OHM X 9	06252	750-101
U204	1810-0280	1	NETWORK-RES 10-SIP 10.0K OHM X 9	06252	750-101
U500	70004-80001	1	PAL-PRGMED(U500)	28480	70004-80001
U510	70004-80002	1	PAL-PRGMED(U510)	28480	70004-80002
VR1	1902-0952	1	DIODE-ZNR 5.6V 5% DO-35 PD=.4W TC=+.046%	02688	1N752AD035

*Indicates factory-selected value

CLIP 70004-90050 9

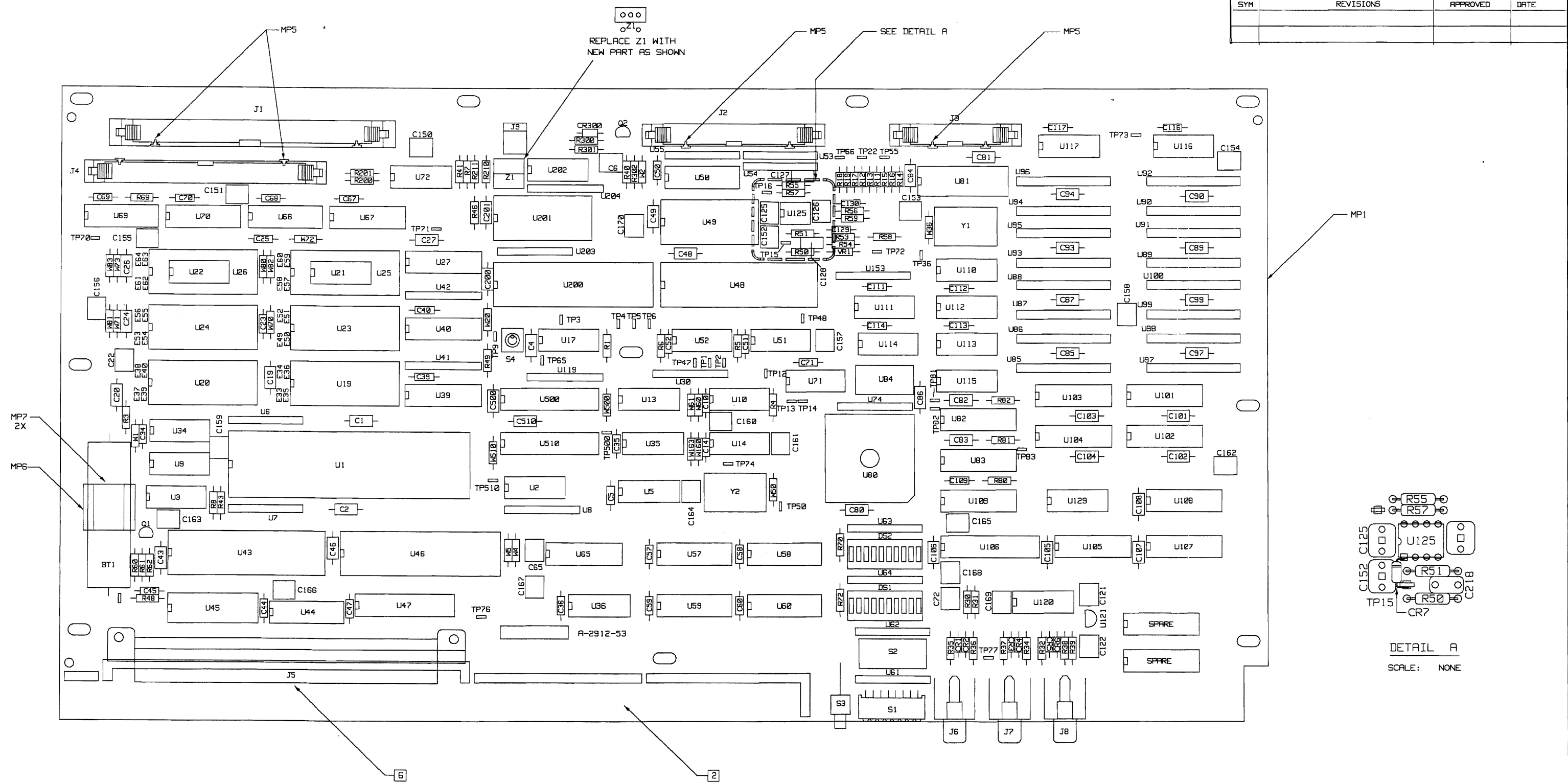
**HP Part Number 70004-60033
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
W1	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W2	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W4	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W20	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W36	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W50	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W60	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W70	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W71	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W72	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W73	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W160	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W500	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W510	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
XU80	1200-1274	1	SOCKET-IC-CHP-CARR 68-CONT SQUARE	28480	1200-1274
Y1	1813-0484	1	CLK-OSC-XTAL STD 35.904-MHZ 0.01%	01417	HS-100-35.904MHZ
Y2	70004-80035	1	XOSC 50 MHZ .05%	28480	70004-80035
Z1	0410-2355	1	RESONATOR-CERAMIC 8 MHz FREQUENCY; +-	09939	CST8.00MTW100

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**SCANS
By
Artek Media**

SYM	REVISIONS	APPROVED	DATE



- NOTES: UNLESS OTHERWISE SPECIFIED
1. ALL DIMENSIONS ARE IN INCHES.
 2. REMOVE TABS AFTER WAVE SOLDER.
 3. FOR MAXIMUM COMPONENT HEIGHT SEE D-70004-20002-4, SHEET 2 OF 2.
 4. MAXIMUM LEAD TRIM LENGTH .118
 5. DO NOT LOAD TP3, 6, 9, 12 THRU 16, 22, 36, 47, 48, 50, 55, 65, 86, AND TP81 THRU 83. LEAVE HOLES UNSOLDERED.
 6. J5 MUST BE FLAT TO BOARD.
 7. MP2, MP3 AND MP4 ARE USED ON PART NO. 70004-60002 ONLY DURING SOLDERING PROCESS.

SEE MATERIAL LIST 70004-60033

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 OTHERS EXCEPT AS AUTHORIZED BY HP.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.	DRAWN BY	DATE	BD-ASSEMBLY PROCESSOR	HEWLETT PACKARD
TOLERANCES: XX.XXX ±.015	ENGINEER/CHECKER			
SEE CORP. STD. 608	RELEASED TO PROD.		SCALE	NONE
	SUPERSEDES DWG.		SHEET	1
			OF	1
				D-70004-60033-2

SYM	REVISIONS	APPROVED	DATE
A	AS ISSUED PER PCO 53-07175 DC		

PIN	SIGNAL	TO/FROM	FUNCTION BLOCK
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24	PC B		K
25	PC B SENSE		K
26	PC B SENSE		K
27	LINE SYNC		K
28	LINE SYNC RYN		K
29	SV SENSE		K
30	SV RYN SENSE		K
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PIN	SIGNAL	TO/FROM	FUNCTION BLOCK
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PIN	SIGNAL	TO/FROM	FUNCTION BLOCK
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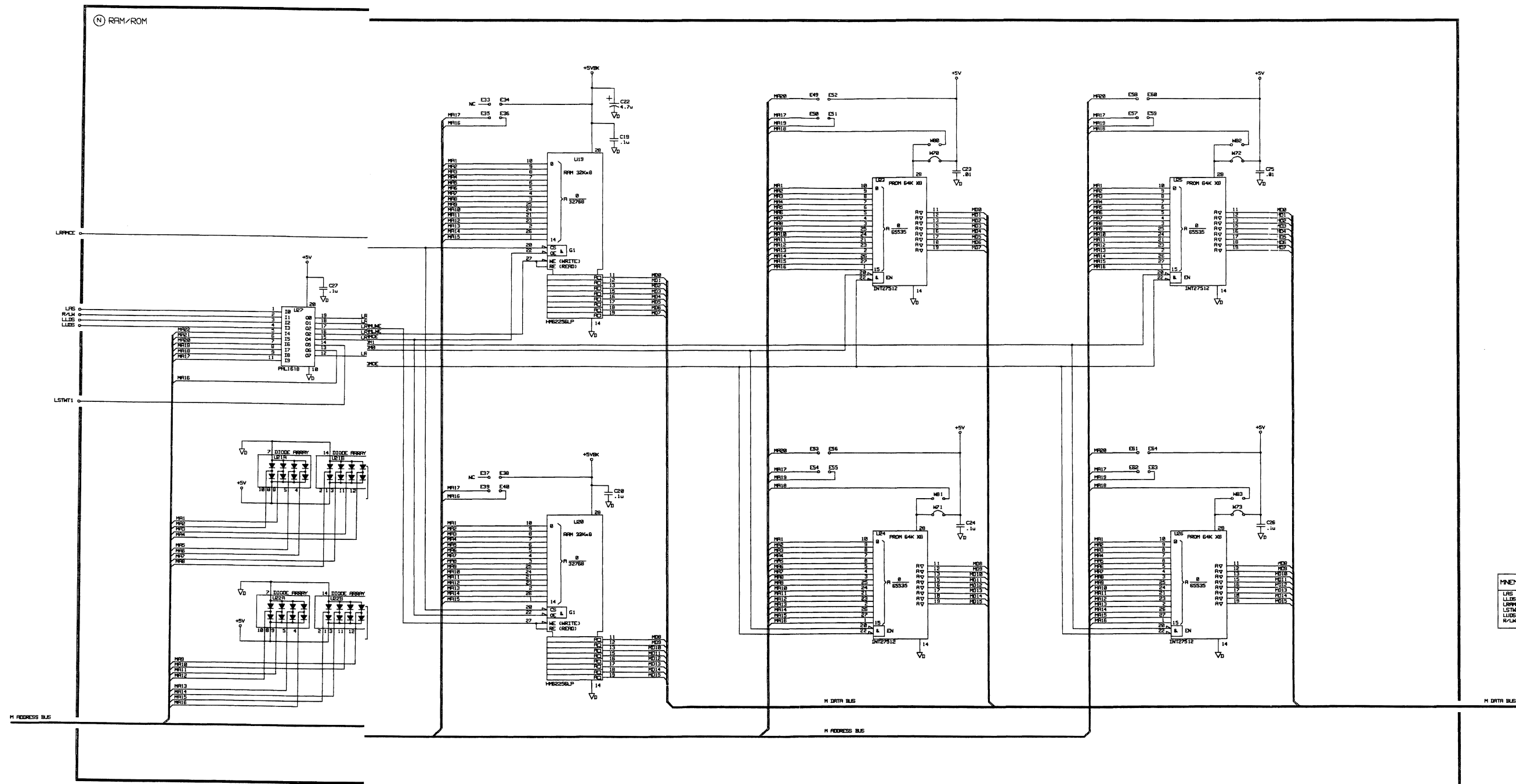
PIN	SIGNAL	TO/FROM	FUNCTION BLOCK
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58	SV		H

ITEM	QTY.	PART/MATERIAL-DESCRIPTION	MAT'L-PART NO.	MAT'L-DWG. NO.	MAT'L-SPEC.
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DRAWN BY		DATE	BOARD ASSEMBLY-PROCESSOR		
ENGINEER/CHECKER			TITLE (SCHEMATIC)		
RELEASE TO PROD.			PART NUMBER 70004-60033		
SUPERSEDES DWG.			SCALE NONE SHEET 1 OF 6		
			D -70004-60033-1		

SYM	REVISIONS	APPROVED	DATE
A	AS ISSUED PER PCO 53-07175 DC		



MNEMONIC	SHEET				
	2	3	4	5	
LAS	A,B,C,D	N	N	N	
LUB	A,B,C	N	N	N	
LURK	F	N	N	N	
LSTMT1	A	N	N	N	
LUBS	B	N	N	N	
KLAM	A,B,C	N	N	0	

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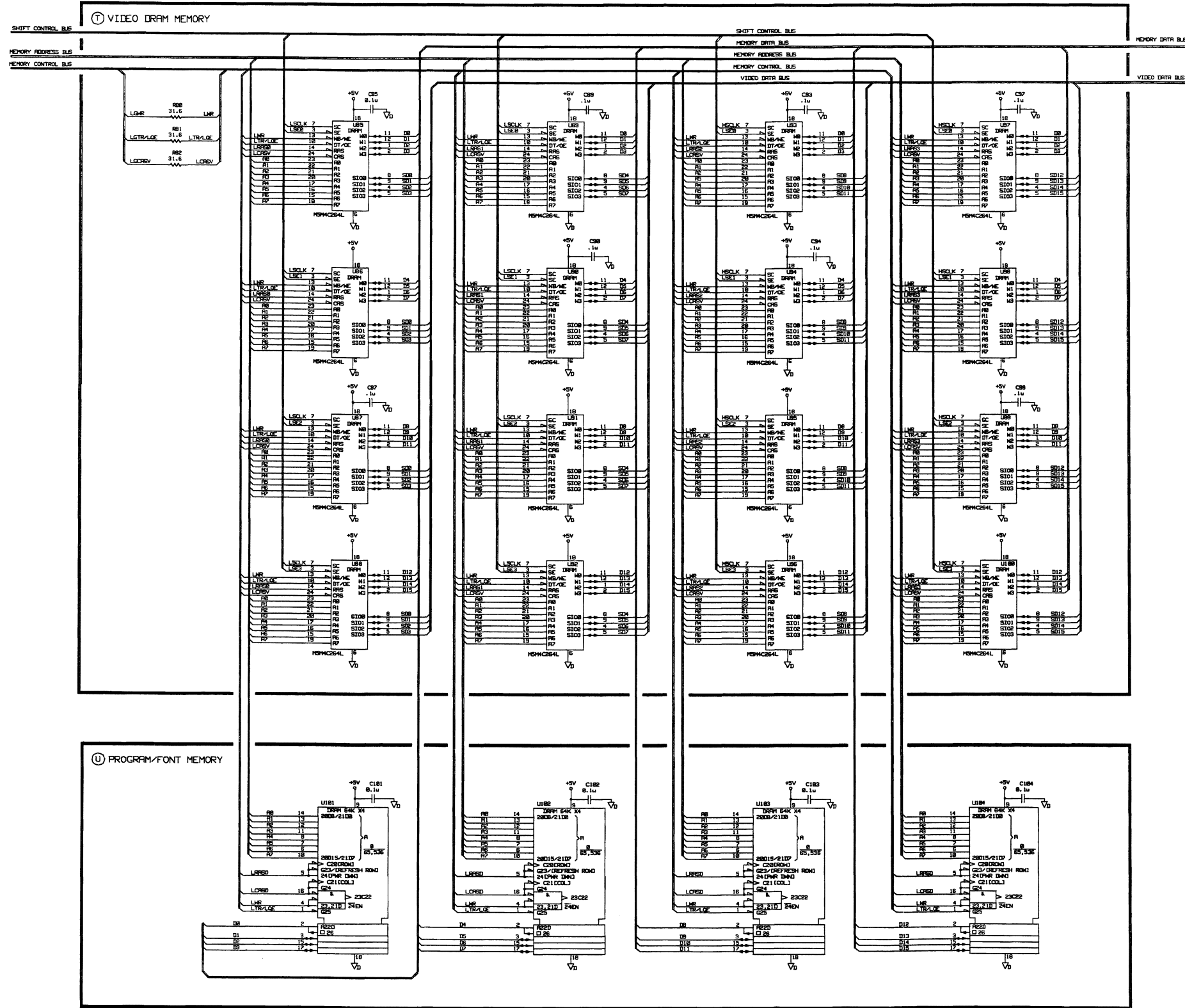
ITEM	QTY.	PART/MATERIAL-DESCRIPTION	MAT'L-PART NO.	MAT'L-ENG. NO.	MAT'L-SPEC.
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		(SCHEMATIC)			
		PART NUMBER 70004-60033			
		SCALE NONE SHEET 4 OF 6			



HEWLETT
PACKARD

D-70004-60033-1

SYM	REVISONS	APPROVED	DATE
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ITEM	QTY.	PART/MATERIAL-DESCRIPTION	MAT'L-PART NO.	MAT'L-ENG. NO.	MAT'L-SPEC.
DRWN BY		DATE	BOARD ASSEMBLY-PROCESSOR		
ENGINEER-CHECKER			TITLE (SCHEMATIC)		
RELEASE TO PROD.			PART NUMBER 70004-60033		
SUPERSEDES ENG.			FILENAME-80033A SHEET 6 OF 6		

Component-Level Information Packet
for 70004-60002
A5 Processor



HP Part No. 70004-90027
Printed in USA May 1994

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1400 Fountaingrove Parkway, Santa Rosa, CA 95403-1799, USA

**HP Part Number 70004-60002
A5 Processor**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
BT1	1420-0331	1	BATTERY 3.68V 1.75A-HR LITHIUM THIONYL	28480	1420-0331
C1	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C2	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C4	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C5	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C6	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C10	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C14	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C19	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C20	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C22	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C23	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C24	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C25	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C26	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C27	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C34	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C35	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C36	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C39	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C40	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C43	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C44	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C45	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C46	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C47	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C48	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C49	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C50	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C51	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C52	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C57	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C58	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C59	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C60	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832

*Indicates factory-selected value

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**HP Part Number 70004-60002
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C65	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C67	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C68	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C69	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C70	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C71	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C72	0180-3845	1	CAP-FXD 4.7uF +10% 35 V TA	28480	0180-3845
C80	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C81	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C82	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C83	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C84	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C85	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C86	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C87	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C89	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C90	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C93	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C94	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C97	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C99	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C101	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C102	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C103	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C104	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C105	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C106	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C107	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C108	0160-4835	1	CAP-FXD 0.1uF +10% 50 V CER X7R	28480	0160-4835
C109	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C111	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C112	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C113	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C114	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832
C116	0160-4832	1	CAP-FXD 0.01uF +10% 100 V CER X7R	28480	0160-4832

HP Part Number 70004-60002
A5 Processor (continued)

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C117	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832
C121	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C122	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C125	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C126	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C127	0160-4535	1	CAP-FXD 1uF +-10% 50 V CER X7R	28480	0160-4535
C128	0160-4535	1	CAP-FXD 1uF +-10% 50 V CER X7R	28480	0160-4535
C129	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832
C130	0160-4832	1	CAP-FXD 0.01uF +-10% 100 V CER X7R	28480	0160-4832
C150	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C151	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C152	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C153	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C154	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C155	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C156	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C157	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C158	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C159	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C160	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C161	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C162	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C163	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C164	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C165	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C166	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C167	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C168	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C169	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C170	0180-3845	1	CAP-FXD 4.7uF +-10% 35 V TA	28480	0180-3845
C200	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C201	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C500	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
C510	0160-4835	1	CAP-FXD 0.1uF +-10% 50 V CER X7R	28480	0160-4835
CR1	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050

*Indicates factory-selected value

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**HP Part Number 70004-60002
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
CR2	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR3	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR4	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR5	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR6	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR300	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
DS1	1990-0829	1	LED-LIGHT BAR LUM-INT=600UCD IF=20MA-MAX	28480	1990-0829
DS2	1990-0829	1	LED-LIGHT BAR LUM-INT=600UCD IF=20MA-MAX	28480	1990-0829
J1	1251-7575	1	CONN-POST TYPE .100-PIN-SPCG 60-CONT	28480	1251-7575
J2	1251-8747	1	CONN-POST TYPE .100-PIN-SPCG 34-CONT	28480	1251-8747
J3	1252-3186	1	CONN-POST TYPE .100-PIN-SPCG 20-CONT	28480	1252-3186
J4	1251-8929	1	CONN-POST TYPE .100-PIN-SPCG 50-CONT	28480	1251-8929
J5	1252-2774	1	CONN-POST TYPE .100-PIN-SPCG 80-CONT	28480	1252-2774
J6	1252-0924	1	CONNECTOR-PHONO JACK RIGHT ANGLE; PC	05545	333-15
J7	1252-0924	1	CONNECTOR-PHONO JACK RIGHT ANGLE; PC	05545	333-15
J8	1252-0924	1	CONNECTOR-PHONO JACK RIGHT ANGLE; PC	05545	333-15
J9	1252-0161	1	CONN-POST TYPE .156-PIN-SPCG 2-CONT	28480	1252-0161
MP2	0515-1548	2	SCREW-MACHINE ASSEMBLY M2.5 X 0.45	01136	
MP3	3050-0890	2	WASHER-FL MTLC 2.5 2.78-MM-ID 6.35-MM-OD	06691	
MP4	0535-0070	2	NUT-HEX DBL-CHAM M2.5 X 0.45 2MM-THK	06691	
MP5	1251-5595	2	POLARIZING KEY-POST CONN	04726	3518
MP6	1400-1267	1	HOLDER-BAT .531-.656-DIA FOR AA CELLS	05535	91
MP7	0361-0026	2	RIVET-SEMITUB OVH .089DIA .125LG	02531	R-4008-1/8
NONE	1901-0518	1	DIODE-SCHOTTKY SM SIG	12395	5082-2800
NONE	70004-68002	1		28480	70004-68002
Q1	1854-0215	1	TRANSISTOR NPN SI TO-92 PD=625MW	28480	1854-0215
Q2	1854-0215	1	TRANSISTOR NPN SI TO-92 PD=625MW	28480	1854-0215
R1	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R3	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
R4	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R5	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1
R6	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1
R7	0757-0416	1	RESISTOR 511 +1% .125W TF TC=0+100	05524	CMF-55-1
R8	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R11	0698-7194	1	RESISTOR 17.8 +1% .05W TF TC=0+100	05524	CMF-50-2

**HP Part Number 70004-60002
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R12	0698-7204	1	RESISTOR 46.4 +1% .05W TF TC=0+100	05524	CMF-50-2
R13	0698-7213	1	RESISTOR 110 +1% .05W TF TC=0+100	05524	CMF-50-2
R14	0698-7194	1	RESISTOR 17.8 +1% .05W TF TC=0+100	05524	CMF-50-2
R15	0698-7204	1	RESISTOR 46.4 +1% .05W TF TC=0+100	05524	CMF-50-2
R16	0698-7213	1	RESISTOR 110 +1% .05W TF TC=0+100	05524	CMF-50-2
R17	0698-7194	1	RESISTOR 17.8 +1% .05W TF TC=0+100	05524	CMF-50-2
R18	0698-7204	1	RESISTOR 46.4 +1% .05W TF TC=0+100	05524	CMF-50-2
R19	0698-7213	1	RESISTOR 110 +1% .05W TF TC=0+100	05524	CMF-50-2
R30	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R31	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+100	05524	CMF-55-1
R32	0698-3444	1	RESISTOR 316 +1% .125W TF TC=0+100	05524	CMF-55-1
R34	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+100	05524	CMF-55-1
R35	0757-0398	1	RESISTOR 75 +1% .125W TF TC=0+100	05524	CMF-55-1
R36	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+100	05524	CMF-55-1
R37	0757-0398	1	RESISTOR 75 +1% .125W TF TC=0+100	05524	CMF-55-1
R38	0757-0398	1	RESISTOR 75 +1% .125W TF TC=0+100	05524	CMF-55-1
R39	0698-0084	1	RESISTOR 2.15K +1% .125W TF TC=0+100	05524	CMF-55-1
R40	0698-3444	1	RESISTOR 316 +1% .125W TF TC=0+100	05524	CMF-55-1
R41	0757-0280	1	RESISTOR 1K +1% .125W TF TC=0+100	05524	CMF-55-1
R43	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R46	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R48	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R49	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R50	0757-0470	1	RESISTOR 162K +1% .125W TF TC=0+100	05524	CMF-55-1
R51	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R53	0757-0200	1	RESISTOR 5.62K +1% .125W TF TC=0+100	05524	CMF-55-1
R54	0698-3444	1	RESISTOR 316 +1% .125W TF TC=0+100	05524	CMF-55-1
R55	0698-3453	1	RESISTOR 196K +1% .125W TF TC=0+100	05524	CMF-55-1
R56	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R57	0698-3457	1	RESISTOR 316K +1% .125W TF TC=0+100	05524	CMF-55-1
R58	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R59	0698-3151	1	RESISTOR 2.87K +1% .125W TF TC=0+100	05524	CMF-55-1
R60	0757-0199	1	RESISTOR 21.5K +1% .125W TF TC=0+100	05524	CMF-55-1
R61	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1
R62	0757-0442	1	RESISTOR 10K +1% .125W TF TC=0+100	05524	CMF-55-1

*Indicates factory-selected value

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HP Part Number 70004-60002
A5 Processor (continued) -

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R69	0757-0442	1	RESISTOR 10K +-1% .125W TF TC=0+-100	05524	CMF-55-1
R70	0698-3444	1	RESISTOR 316 +-1% .125W TF TC=0+-100	05524	CMF-55-1
R72	0757-0416	1	RESISTOR 511 +-1% .125W TF TC=0+-100	05524	CMF-55-1
R80	0757-0180	1	RESISTOR 31.6 +-1% .125W TF TC=0+-100	05524	CMF-55-1
R81	0757-0180	1	RESISTOR 31.6 +-1% .125W TF TC=0+-100	05524	CMF-55-1
R82	0757-0180	1	RESISTOR 31.6 +-1% .125W TF TC=0+-100	05524	CMF-55-1
R200	0757-0280	1	RESISTOR 1K +-1% .125W TF TC=0+-100	05524	CMF-55-1
R201	0757-0280	1	RESISTOR 1K +-1% .125W TF TC=0+-100	05524	CMF-55-1
R210	0757-0458	1	RESISTOR 51.1K +-1% .125W TF TC=0+-100	05524	CMF-55-1
R211	0698-8827	1	RESISTOR 1M +-1% .125W TF TC=0+-100	05524	CMF-55-1
R300	0757-0280	1	RESISTOR 1K +-1% .125W TF TC=0+-100	05524	CMF-55-1
R301	0757-0442	1	RESISTOR 10K +-1% .125W TF TC=0+-100	05524	CMF-55-1
R302	0757-0416	1	RESISTOR 511 +-1% .125W TF TC=0+-100	05524	CMF-55-1
S1	3101-2739	1	SWITCH-DIP SL 8-1A 0.1A 50VDC	02483	11P-2317
S2	3101-2094	1	SWITCH-DIP RKR 8-1A 0.15A 30VDC	28480	3101-2094
S3	3101-2719	1	SWITCH-SL SPDT SUBMIN .02A 20VAC/DC PC	02392	1101-M2AV2BE W/ORANGE ACTUATOR
S4	3101-3025	1	SWITCH-PB SPST-NO MOM .01A 50 VAC	28480	3101-3025
TP1	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP2	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP4	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP5	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP70	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP71	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP72	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP73	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP74	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP75	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP76	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP77	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP500	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
TP510	0360-0535	1	CONNECTOR-SGL CONT TML-TS-PT	13296	330.100-TIN PLATED
U1	1820-5296	1	IC-16-BIT MPU CERAMIC PCKG 12.5MHZ	28480	1820-5296
U2	1820-1851	1	IC ENCDR TTL/LS PRIORITY 8-TO-3-LINE	28480	1820-1851
U3	1820-4053	1	IC INV CMOS/HC HEX	28480	1820-4053
U5	1820-2506	1	IC INV TTL/F HEX	28480	1820-2506

**HP Part Number 70004-60002
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U6	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U7	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U8	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U9	1258-0177	1	SHUNT-PROGRAMMABLE 8 DBL PIN SETS; .800	05518	8136-475G8
U10	1820-2694	1	IC FF TTL/F J-K NEG-EDGE-TRIG	28480	1820-2694
U13	1820-2685	1	IC GATE TTL/F NOR QUAD 2-INP	28480	1820-2685
U14	1820-3645	1	IC CNTR TTL/F DECD SYNCHRO POS-EDGE-TRIG	28480	1820-3645
U17	1820-4057	1	IC BFR TTL/F NAND QUAD 2-INP	28480	1820-4057
U19	1818-3932	1	IC 256K-BIT SRAM 100-NS CMOS	28480	1818-3932
U20	1818-3932	1	IC 256K-BIT SRAM 100-NS CMOS	28480	1818-3932
U21	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U22	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U23	70004-80031	1		28480	70004-80031
U24	70004-80032	1		28480	70004-80032
U25	70004-80033	1		28480	70004-80033
U26	70004-80034	1		28480	70004-80034
U27	70004-80003	1	PAL-PRGMED (U27)	28480	70004-80003
U30	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U34	1826-1858	1	IC MISC 16 PIN DIP-P	12186	DS1259N
U35	1820-2861	1	IC DCDR TTL/F BIN 3-TO-8-LINE	28480	1820-2861
U36	1820-2690	1	IC GATE TTL/F OR QUAD 2-INP	28480	1820-2690
U39	1820-3224	1	IC TRANSCEIVER TTL/F BUS OCTL	28480	1820-3224
U40	1820-3224	1	IC TRANSCEIVER TTL/F BUS OCTL	28480	1820-3224
U41	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U42	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U43	1820-2548	1	IC-GENERAL PURPOSE INTERFACE BUS ADAPTER	01698	
U44	1820-6170	1	IC-INTERFACE XCVR BIPOLAR BUS OCTL	28480	1820-6170
U45	1820-6360	1	IC-INTERFACE XCVR BIPOLAR BUS OCTL	28480	1820-6360
U46	1820-3010	1	IC-ASIC GT-ARY 2.01K GATES CMOS 5220	28480	1820-3010
U47	1820-3426	1	IC TRANSCEIVER TTL/S BUS 9-BIT	28480	1820-3426
U48	70004-80012	1	EPROM-PRGMED U48	28480	70004-80012
U49	1820-2177	1	IC-INPUT/OUTPUT EXPANDER	03811	P8243
U50	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U51	1820-2694	1	IC FF TTL/F J-K NEG-EDGE-TRIG	28480	1820-2694
U52	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691

*Indicates factory-selected value

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**HP Part Number 70004-60002
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U53	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U54	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U55	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U57	1820-2102	1	IC LCH TTL/LS TRANSPARENT OCTL	28480	1820-2102
U58	1820-2102	1	IC LCH TTL/LS TRANSPARENT OCTL	28480	1820-2102
U59	1820-3299	1	IC DRVR CMOS/HC BUS OCTL	28480	1820-3299
U60	1820-3299	1	IC DRVR CMOS/HC BUS OCTL	28480	1820-3299
U61	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U62	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U63	1810-0273	1	NETWORK-RES 10-SIP 470.0 OHM X 9	06252	750-101
U64	1810-0273	1	NETWORK-RES 10-SIP 470.0 OHM X 9	06252	750-101
U65	1820-5384	1	IC-INTERFACE CMOS -888-BIT	28480	1820-5384
U67	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U68	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U69	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U70	1820-2075	1	IC TRANSCEIVER TTL/LS BUS OCTL	28480	1820-2075
U71	1820-2684	1	IC GATE TTL/F NAND QUAD 2-INP	28480	1820-2684
U72	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U74	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U80	1820-6081	1	IC-32-BIT GRAPHICS SYSTEM PROCESSOR	01698	TMS34010FNL-50
U81	1820-5897	1	IC-INTERFACE MISC-DGTL MISC/UNKNOWN	28480	1820-5897
U82	70004-80004	1	PAL-PRGMED (U82)	28480	70004-80004
U83	70004-80005	1	PAL-PRGMED (U83)	28480	70004-80005
U84	1810-0960	1	DELAY LINE ACTIVE DEVICE W/DUAL IN-LINE	28480	1810-0960
U85	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U86	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U87	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U88	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U89	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U90	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U91	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U92	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U93	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U94	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U95	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109

**HP Part Number 70004-60002
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U96	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U97	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U98	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U99	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U100	1818-4109	1	64KX4 120 NS P-ZIP SER/RNDM 5V	28480	1818-4109
U101	1818-3538	1	DRAM 64KX4 150 NS PLSTC 5V	28480	1818-3538
U102	1818-3538	1	DRAM 64KX4 150 NS PLSTC 5V	28480	1818-3538
U103	1818-3538	1	DRAM 64KX4 150 NS PLSTC 5V	28480	1818-3538
U104	1818-3538	1	DRAM 64KX4 150 NS PLSTC 5V	28480	1818-3538
U105	1820-2700	1	IC LCH TTL/F TRANSPARENT OCTL	28480	1820-2700
U106	1820-3544	1	IC LCH TTL/AS TRANSPARENT DUAL 4-BIT	28480	1820-3544
U107	1820-3224	1	IC TRANSCEIVER TTL/F BUS OCTL	28480	1820-3224
U108	1820-3224	1	IC TRANSCEIVER TTL/F BUS OCTL	28480	1820-3224
U109	1820-2700	1	IC LCH TTL/F TRANSPARENT OCTL	28480	1820-2700
U110	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U111	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U112	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U113	1820-2691	1	IC FF TTL/F D-TYPE POS-EDGE-TRIG	28480	1820-2691
U114	1820-3220	1	IC DCDR TTL/F BIN 2-TO-4-LINE DUAL	28480	1820-3220
U115	1820-2686	1	IC GATE TTL/F AND QUAD 2-INP	28480	1820-2686
U116	1820-2654	1	IC MUXR/DATA-SEL TTL/F 2-TO-1-LINE QUAD	28480	1820-2654
U117	1820-2654	1	IC MUXR/DATA-SEL TTL/F 2-TO-1-LINE QUAD	28480	1820-2654
U119	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U120	1858-0077	1	TRANSISTOR ARRAY 14-PIN PLSTC TO-116	28480	1858-0077
U121	1826-0285	1	IC V RGLTR-FXD-NEG -4.8/-5.2V 3-TO-92	28480	1826-0285
U125	1826-1533	1	IC OP AMP H-SLEW-RATE DUAL 8 PIN DIP-P	28480	1826-1533
U129	1810-0533	1	NETWORK-RES 16-DIP 33.0 OHM X 8	02483	761-3-R33
U153	1810-0279	1	NETWORK-RES 10-SIP 4.7K OHM X 9	06252	750-101
U200	1820-4784	1	IC-PERIPHERAL INTERFACE MICROCOMPUTER	28480	1820-4784
U201	1RD2-6001	1	IC-CERBERUS 1RD2	28480	1RD2-6001
U202	1820-1195	1	IC FF TTL/LS D-TYPE POS-EDGE-TRIG COM	28480	1820-1195
U203	1810-0280	1	NETWORK-RES 10-SIP 10.0K OHM X 9	06252	750-101
U204	1810-0280	1	NETWORK-RES 10-SIP 10.0K OHM X 9	06252	750-101
U500	70004-80001	1	PAL-PRGMED(U500)	28480	70004-80001
U510	70004-80002	1	PAL-PRGMED(U510)	28480	70004-80002

*Indicates factory-selected value

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**HP Part Number 70004-60002
A5 Processor (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
VR1	1902-0952	1	DIODE-ZNR 5.6V 5% DO-35 PD=.4W TC=+.046%	28480	1902-0952
W1	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W2	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W4	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W20	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W36	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W50	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W60	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W70	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W71	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W72	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W73	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W160	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W500	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W510	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
XU80	1200-1274	1	SOCKET-IC-CHP-CARR 68-CONT SQUARE	28480	1200-1274
Y1	1813-0484	1	CLK-OSC-XTAL STD 35.904-MHZ 0.01%	01417	HS-100-35.904MHZ
Y2	1813-0537	1	CLK-OSC-XTAL STD 50.00-MHZ 0.05%	01417	HS-509-50MHZ
Z1	0410-1556	1	RESONATOR-CERAMIC RESONATOR: 8.0 MHZ	09939	KMFC1034T

Component-Level Information Packet

for 70004-60042

A6 HP-MSIB



**HP Part No. 70004-90051
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**HP Part Number 70004-60042
A6 HP-MSIB**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C1	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C2	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C3	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C4	0180-4136	1	CAP-FXD 10uF +10% 20 V TA	28480	0180-4136
C5	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C6	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C7	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C8	0180-2618	1	CAP-FXD 33uF +10% 10 V TA	01760	202L1002-336-K0-552
C9	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C10	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C11	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C12	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C13	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C14	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C15	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C16	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C17	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C18	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C19	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C20	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C21	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C22	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	09939	RPA10X7R103M50V
C23	0160-4491	1	CAP-FXD 8.2pF +6.1% 200 V CER C0G	09939	RPE121-105C0G8R2D200V
C24	0160-4491	1	CAP-FXD 8.2pF +6.1% 200 V CER C0G	09939	RPE121-105C0G8R2D200V
C25	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	09939	RPE121-105X7R103M100V
C26	0160-4617	1	CAP-FXD 180pF +5% 200 V CER C0G	09939	RPE121-105C0G181J200V
C27	0160-4386	1	CAP-FXD 33pF +5% 200 V CER C0G	09939	RPE121-105C0G330J200V
C28	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	09939	RPA10C0G8R2D100
C29	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	09939	RPA10C0G8R2D100
C31	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	09939	RPA10C0G8R2D100
C32	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	09939	RPA10C0G8R2D100
CR1	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR2	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR3	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR4	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050

*Indicates factory-selected value

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**HP Part Number 70004-60042
A6 HP-MSIB (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
CR5	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR6	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR7	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
DS1	1990-0485	1	LED-LAMP LUM-INT=2MCD IF=30MA-MAX BVR=5V	28480	1990-0485
J1	1251-8995	1	CONN-RECT D-SUBMIN 37-CKT 37-CONT	01380	747375-2
J2	1252-0057	1	CONN-RECT D-SUBMIN 37-CKT 37-CONT	01380	747481-2
J11	1252-2980	1	CONN-POST TYPE .100-PIN-SPCG 50-CONT	03206	68779-650
L1	9100-2261	1	INDUCTOR RF-CH-MLD 2.7UH +10%	05826	1025-30
L2	9100-2261	1	INDUCTOR RF-CH-MLD 2.7UH +10%	05826	1025-30
L3	9100-2261	1	INDUCTOR RF-CH-MLD 2.7UH +10%	05826	1025-30
L4	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L5	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L6	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L7	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L8	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L9	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
Q1	1853-0281	1	TRANSISTOR PNP 2N2907A SI TO-18 PD=400MW	28480	1853-0281
Q2	1855-0278	1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE	28480	1855-0278
Q3	1855-0278	1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE	28480	1855-0278
Q4	1855-0278	1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE	28480	1855-0278
R1	0698-7239	1	RESISTOR 1.33K +1% .05W TF TC=0+100	05524	CMF-50-2
R2	0698-7240	1	RESISTOR 1.47K +1% .05W TF TC=0+100	05524	CMF-50-2
R3	0698-7279	1	RESISTOR 61.9K +1% .05W TF TC=0+100	05524	CMF-50-2
R4	0698-7238	1	RESISTOR 1.21K +1% .05W TF TC=0+100	05524	CMF-50-2
R5	0698-7279	1	RESISTOR 61.9K +1% .05W TF TC=0+100	05524	CMF-50-2
R6	0698-7239	1	RESISTOR 1.33K +1% .05W TF TC=0+100	05524	CMF-50-2
R7	0698-7244	1	RESISTOR 2.15K +1% .05W TF TC=0+100	05524	CMF-50-2
R8	0698-7260	1	RESISTOR 10K +1% .05W TF TC=0+100	05524	CMF-50-2
R9	0698-7228	1	RESISTOR 464 +1% .05W TF TC=0+100	05524	CMF-50-2
R10	0698-7219	1	RESISTOR 196 +1% .05W TF TC=0+100	05524	CMF-50-2
R11	0698-7260	1	RESISTOR 10K +1% .05W TF TC=0+100	05524	CMF-50-2
R12	0698-7228	1	RESISTOR 464 +1% .05W TF TC=0+100	05524	CMF-50-2
R13	0698-7238	1	RESISTOR 1.21K +1% .05W TF TC=0+100	05524	CMF-50-2
R14	0698-7238	1	RESISTOR 1.21K +1% .05W TF TC=0+100	05524	CMF-50-2
R15	0698-8866	1	RESISTOR 4.1K +0.1% .125W TF TC=0+25	05524	CMF-55-1

**HP Part Number 70004-60042
A6 HP-MSIB (continued)**

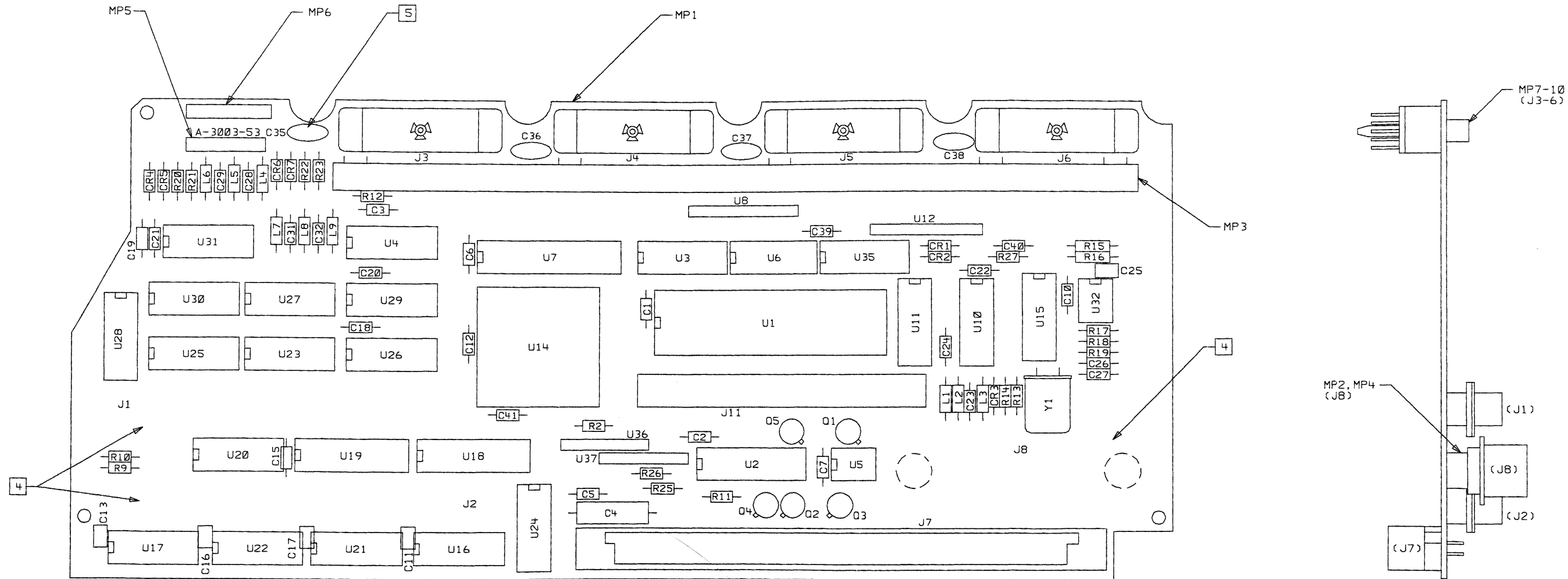
Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R16	0698-6631	1	RESISTOR 2.5K +0.1% .125W TF TC=0+-25	05524	CMF-55-1, T-9
R17	0698-7272	1	RESISTOR 31.6K +-1% .05W TF TC=0+-100	05524	CMF-50-2
R18	0699-0127	1	RESISTOR 464K +-1% .05W TF TC=0+-100	02499	RG-1/8-T050
R19	0698-7223	1	RESISTOR 287 +-1% .05W TF TC=0+-100	05524	CMF-50-2
R20	0698-7245	1	RESISTOR 2.37K +-1% .05W TF TC=0+-100	05524	CMF-50-2
R21	0698-7238	1	RESISTOR 1.21K +-1% .05W TF TC=0+-100	05524	CMF-50-2
R22	0698-7245	1	RESISTOR 2.37K +-1% .05W TF TC=0+-100	05524	CMF-50-2
R23	0698-7238	1	RESISTOR 1.21K +-1% .05W TF TC=0+-100	05524	CMF-50-2
U1	1820-3009	1	IC-ASIC GT-ARY 880 GATES CMOS 5220	10407	LSI5080
U2	70001-80032	1	IC ARGMD C PAL	28480	70001-80032
U3	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U4	1820-1568	1	IC DRVR TTL/LS BUS QUAD	28480	1820-1568
U5	1826-0544	1	IC V RGLTR-V-REF-FXD 2.5V 8-DIP-C PKG	28480	1826-0544
U6	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U7	1820-3426	1	IC TRANSCEIVER TTL/S BUS 9-BIT	28480	1820-3426
U8	1810-0275	1	NETWORK-RES 10-SIP 1.0K OHM X 9	06252	750-101
U9	1826-0412	1	IC COMPARATOR PRCN DUAL 8 PIN DIP-P	28480	1826-0412
U10	1820-2922	1	IC GATE CMOS/HC NAND QUAD 2-INP	28480	1820-2922
U11	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U12	1810-0275	1	NETWORK-RES 10-SIP 1.0K OHM X 9	06252	750-101
U14	1820-8730	1	IC-ASIC GT-ARY 2.01K GATES CMOS 5220	10407	LSI5220
U15	1820-2921	1	IC INV CMOS/HC HEX	28480	1820-2921
U16	1820-2144	1	IC-INTERFACE RCVR BIPOLAR LINE QUAD	28480	1820-2144
U17	1820-2144	1	IC-INTERFACE RCVR BIPOLAR LINE QUAD	28480	1820-2144
U18	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U19	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U20	1810-0573	1	NETWORK-RES 14-DIP 100.0 OHM X 7	02483	760-3-R100
U21	1820-2144	1	IC-INTERFACE RCVR BIPOLAR LINE QUAD	28480	1820-2144
U22	1820-2144	1	IC-INTERFACE RCVR BIPOLAR LINE QUAD	28480	1820-2144
U23	1810-0450	1	NETWORK-RES 14-DIP 47.0 OHM X 7	02483	760-3-R47
U24	1810-0573	1	NETWORK-RES 14-DIP 100.0 OHM X 7	02483	760-3-R100
U25	1810-0450	1	NETWORK-RES 14-DIP 47.0 OHM X 7	02483	760-3-R47
U26	1820-2145	1	IC-INTERFACE DRVR BIPOLAR LINE QUAD	28480	1820-2145
U27	1810-0450	1	NETWORK-RES 14-DIP 47.0 OHM X 7	02483	760-3-R47
U28	1820-2145	1	IC-INTERFACE DRVR BIPOLAR LINE QUAD	28480	1820-2145

*Indicates factory-selected value

**HP Part Number 70004-60042
A6 HP-MSIB (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U29	1820-2145	1	IC-INTERFACE DRVR BIPOLAR LINE QUAD	28480	1820-2145
U30	1810-0450	1	NETWORK-RES 14-DIP 47.0 OHM X 7	02483	760-3-R47
U31	1820-2145	1	IC-INTERFACE DRVR BIPOLAR LINE QUAD	28480	1820-2145
U32	1826-1543	1	IC OP AMP HS DUAL 8 PIN DIP-C	28480	1826-1543
W1	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
W2	8159-0005	1	RESISTOR 0 CWM	01339	L-2007-1
Y1	0410-1849	1	CRYSTAL-QUARTZ 6.200 MHZ HC-49/U-HLDR	02483	R1235-6BC-6.2MHZ

5300		D-70004-60042-2	
SYM	REVISIONS	APPROVED	DATE
A	AS ISSUED PER PCD 53-07758 LN		



NOTES: UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS ARE IN INCHES.
2. FOR MAXIMUM COMPONENT HEIGHTS SEE SHEET 2 OF C-70004-20029-4.
3. MAXIMUM LEAD TRIM LENGTH .118.
- 4 J1, J2, J8 ARE MOUNTED ON THE SOLDER SIDE OF THE P.C. BOARD.
- 5 MAXIMUM ALLOWABLE HEIGHT C35-C38, NOT TO EXCEED .280, OR CAPACITORS MUST BE BENT OVER.
6. HATCHED COMPONENTS ARE NOT LOADED FOR THIS ASSEMBLY.
7. USE RAW BOARD PART NUMBER 70004-20029.

SEE MATERIAL LIST 70004-60042

HP PROPRIETARY
THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
HEWLETT-PACKARD (HP) PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR
OTHERS EXCEPT AS AUTHORIZED BY HP.

UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE IN INCHES.
TOLERANCES: XX.XXX ±.010
 XX.XX ±.02
THIRD ANGLE
PROJECTION
DO NOT SCALE THIS DRAWING

DRAWN BY	DATE
ENGINEER/CHECKER	DATE
RELEASE TO PROD.	DATE
SUPERSEDES DWG.	

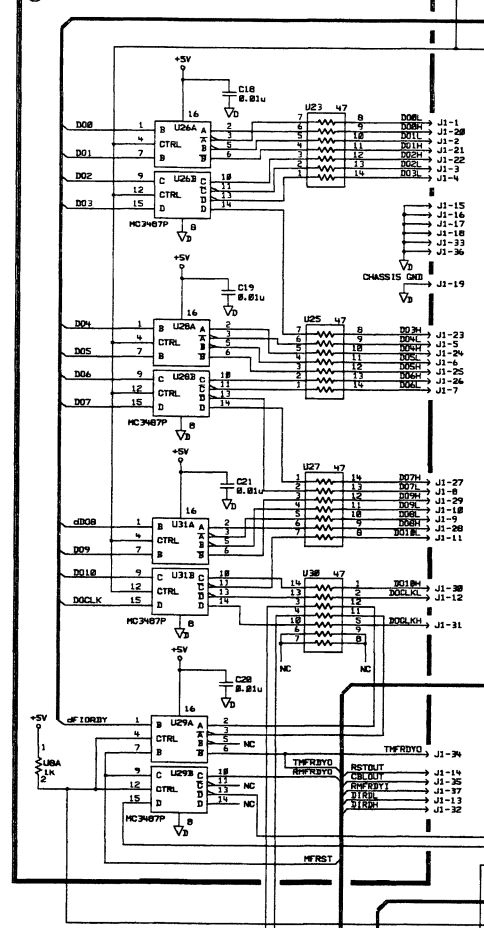
ASSEMBLY, PWB
MSIB
INTERCONNECT
TITLE

FILENAME	HEWLETT PACKARD
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SHEET 1 OF 1	70004-60042 PART NUMBER
D-70004-60042-2	

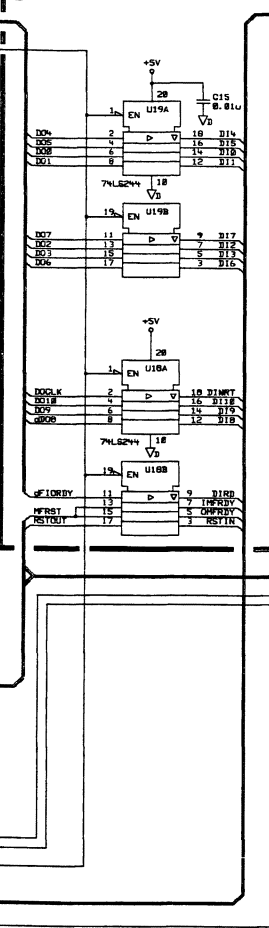
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3	27 VAC C	A	
4	27 VAC D	A	
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5300	A3003	D-70004-60042-1
SYM	REVISIONS	APPROVED
A	AS ISSUED PER PCO 53-07758 LN	DATE
B	CHG U14 PER PCO 53-08005 /DM	07-12-93
		10-08-93

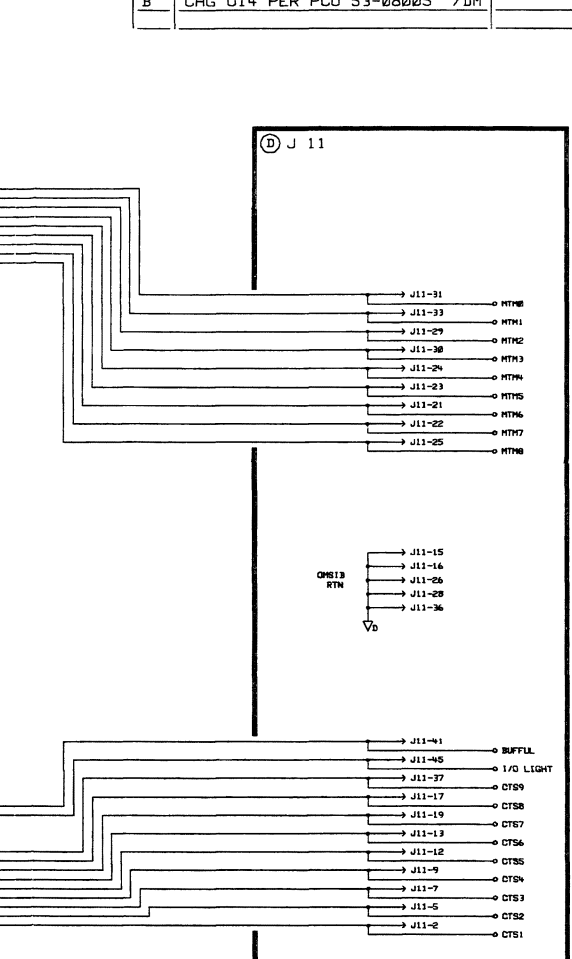
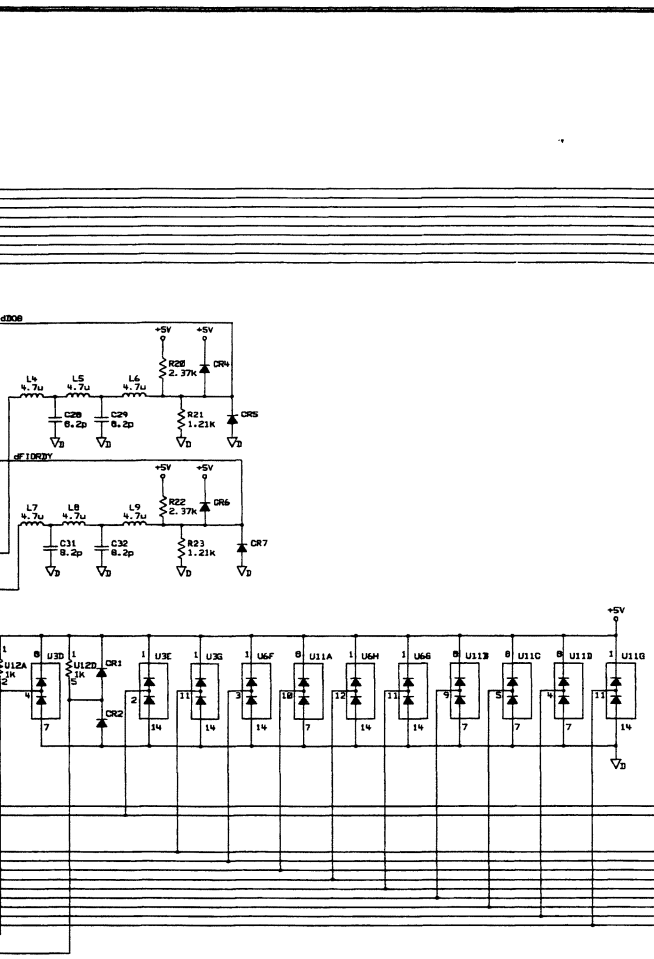
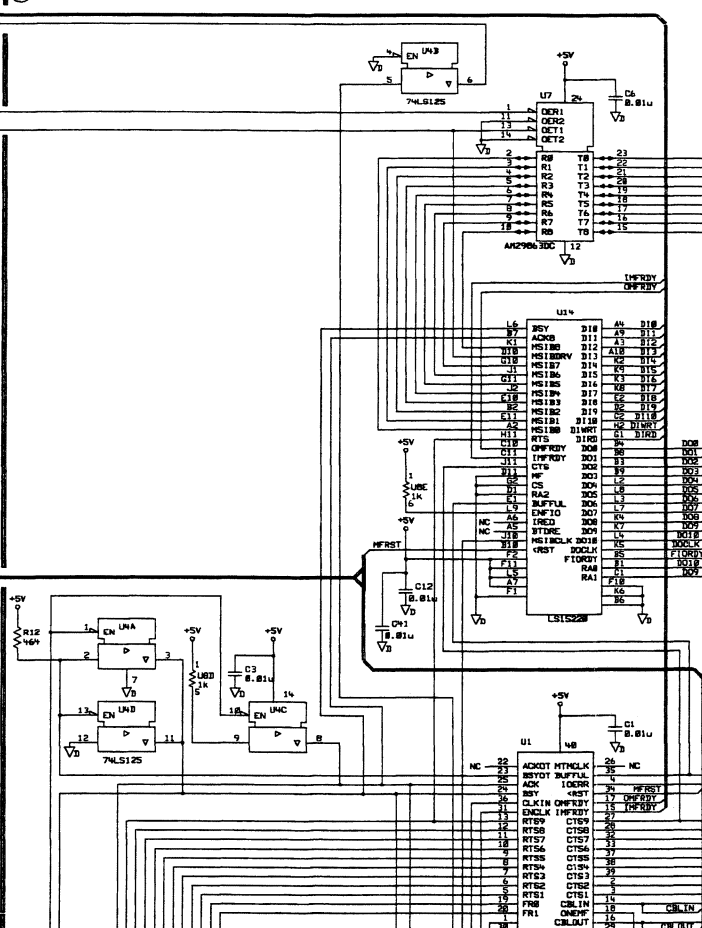
EXTERNAL DRIVERS



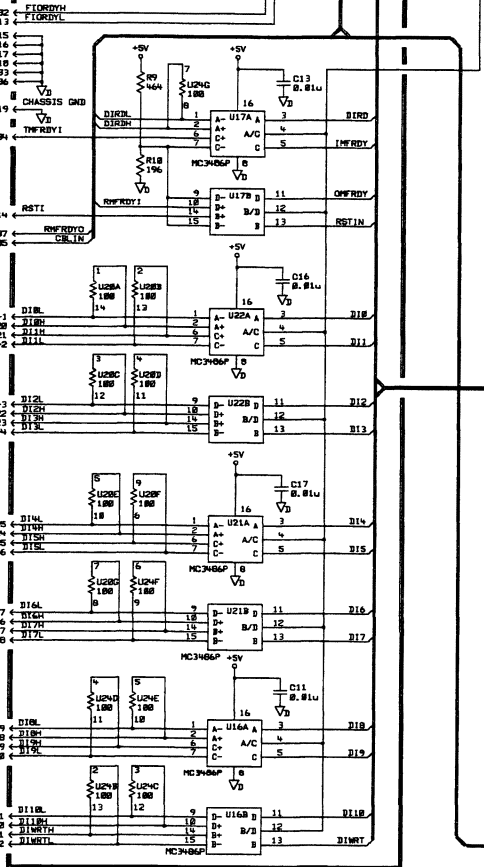
EXTERNAL LOOP CONTROL



MSIB CONTROL LOGIC AND BUFFERS

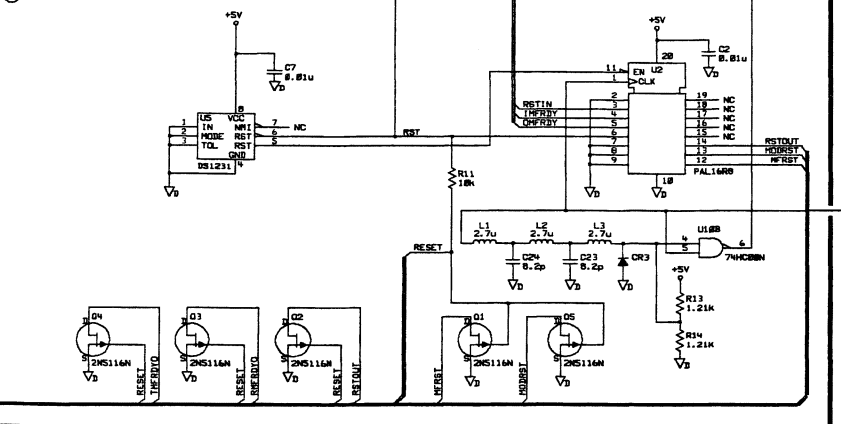


EXTERNAL RECEIVERS

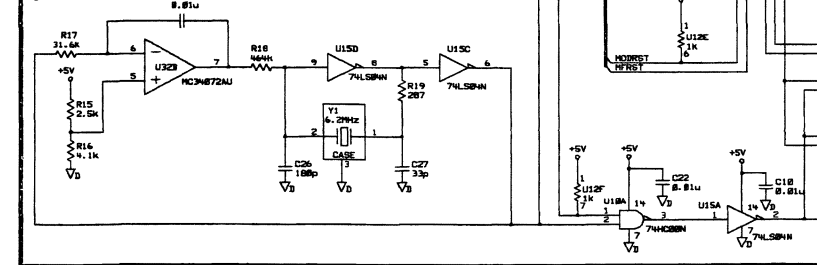


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CTS9		H
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I/O LIGHT		H
MSIB CLK		H
MSIB RESET		H
RTN		H
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RTS8		H
RTS9		H

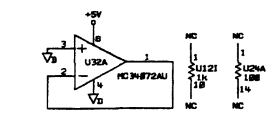
RESET



CLOCK



UNUSED PACKAGES



NOTE: HATCHED COMPONENTS ARE NOT LOADED FOR THIS ASSEMBLY
RAW BD = 70004-20029

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DRAWN BY	DATE
ENGINEER/CHECKER	DATE
RELEASE TO PROD.	DATE
SUPERSEDES DWG.	

SCHEMATIC, PWA
MSIB
INTERCONNECT
TITLE

s2aad042	FILENAME	HEWLETT PACKARD
NONE	SCALE	
2 OF 3	SHEET	70004-60042
	PART NUMBER	D-70004-60042-1

Component-Level Information Packet

for 70004-60029

A6 HP-MSIB



HP Part No. 70004-90052
Printed in USA May 1994

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HP Part Number 70004-60029
A6 HP-MSIB

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
C1	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C2	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C3	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C4	0180-4136	1	CAP-FXD 10uF +10% 20 V TA	28480	0180-4136
C5	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C6	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C7	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C10	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C11	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	28480	0160-3879
C12	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C13	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	28480	0160-3879
C15	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C16	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	28480	0160-3879
C17	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	28480	0160-3879
C18	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C19	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C20	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C21	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C22	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C23	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	28480	0160-4792
C24	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	28480	0160-4792
C25	0160-3879	1	CAP-FXD 0.01uF +20% 100 V CER X7R	28480	0160-3879
C26	0160-4813	1	CAP-FXD 180pF +5% 100 V CER C0G	28480	0160-4813
C27	0160-4807	1	CAP-FXD 33pF +5% 100 V CER C0G	28480	0160-4807
C28	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	28480	0160-4792
C29	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	28480	0160-4792
C31	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	28480	0160-4792
C32	0160-4792	1	CAP-FXD 8.2pF +6.1% 100 V CER C0G	28480	0160-4792
C35	0160-3451	1	CAP-FXD 0.01uF +80% -20% 100 V CER Y5V	28480	0160-3451
C36	0160-3451	1	CAP-FXD 0.01uF +80% -20% 100 V CER Y5V	28480	0160-3451
C37	0160-3451	1	CAP-FXD 0.01uF +80% -20% 100 V CER Y5V	28480	0160-3451
C38	0160-3451	1	CAP-FXD 0.01uF +80% -20% 100 V CER Y5V	28480	0160-3451
C39	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554
C40	0160-4791	1	CAP-FXD 10pF +5% 100 V CER C0G	28480	0160-4791
C41	0160-4554	1	CAP-FXD 0.01uF +20% 50 V CER X7R	28480	0160-4554

*Indicates factory-selected value

CLIP 70004-90052 1

**HP Part Number 70004-60029
A6 HP-MSIB (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
CR1	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR2	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR3	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR4	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR5	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR6	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
CR7	1901-0050	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
J1	1251-8995	1	CONN-RECT D-SUBMIN 37-CKT 37-CONT	28480	1251-8995
J2	1252-0057	1	CONN-RECT D-SUBMIN 37-CKT 37-CONT	28480	1252-0057
J3	70001-20005	1	CONN HDR 50 M5R	28480	70001-20005
J4	70001-20005	1	CONN HDR 50 M5R	28480	70001-20005
J5	70001-20005	1	CONN HDR 50 M5R	28480	70001-20005
J6	70001-20005	1	CONN HDR 50 M5R	28480	70001-20005
J7	1252-2775	1	CONN-POST TYPE .100-PIN-SPCG 80-CONT	28480	1252-2775
J8	1251-8061	1	CONN-RECT MICRORBN 24-CKT 24-CONT	28480	1251-8061
J11	1251-5926	1	CONN-POST TYPE .100-PIN-SPCG 50-CONT	28480	1251-5926
L1	9100-2261	1	INDUCTOR RF-CH-MLD 2.7UH +10%	05826	1025-30
L2	9100-2261	1	INDUCTOR RF-CH-MLD 2.7UH +10%	05826	1025-30
L3	9100-2261	1	INDUCTOR RF-CH-MLD 2.7UH +10%	05826	1025-30
L4	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L5	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L6	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L7	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L8	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
L9	9140-0144	1	INDUCTOR RF-CH-MLD 4.7UH +10%	05826	1025-36
MP2	0380-2001	2	SPACER-PRS-IN .187-IN-LG .192-IN-ID	02121	AL6318B-0.187-23
MP3	0360-2385	1	BUS BAR-MULTILAYER COPPER CONDUCTOR	02022	
MP10	70001-20024	4	STDF-CONN SUP	28480	70001-20024
Q1	1855-0278	1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE	28480	1855-0278
Q2	1855-0278	1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE	28480	1855-0278
Q3	1855-0278	1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE	28480	1855-0278
Q4	1855-0278	1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE	28480	1855-0278
Q5	1855-0278	1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE	28480	1855-0278
R2	0698-7238	1	RESISTOR 1.21K +1% .05W TF TC=0+100	05524	CMF-50-2
R9	0698-7228	1	RESISTOR 464 +1% .05W TF TC=0+100	05524	CMF-50-2

**HP Part Number 70004-60029
A6 HP-MSIB (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R10	0698-7219	1	RESISTOR 196 +1% .05W TF TC=0+100	05524	CMF-50-2
R11	0698-7260	1	RESISTOR 10K +1% .05W TF TC=0+100	05524	CMF-50-2
R12	0698-7228	1	RESISTOR 464 +1% .05W TF TC=0+100	05524	CMF-50-2
R13	0698-7238	1	RESISTOR 1.21K +1% .05W TF TC=0+100	05524	CMF-50-2
R14	0698-7238	1	RESISTOR 1.21K +1% .05W TF TC=0+100	05524	CMF-50-2
R15	0698-6631	1	RESISTOR 2.5K +0.1% .125W TF TC=0+25	05524	CMF-55-1, T-9
R16	0698-8866	1	RESISTOR 4.1K +0.1% .125W TF TC=0+25	05524	CMF-55-1
R17	0698-7272	1	RESISTOR 31.6K +1% .05W TF TC=0+100	05524	CMF-50-2
R18	0699-0127	1	RESISTOR 464K +1% .05W TF TC=0+100	02499	RG-1/8-T050
R19	0698-7223	1	RESISTOR 287 +1% .05W TF TC=0+100	05524	CMF-50-2
R20	0698-7245	1	RESISTOR 2.37K +1% .05W TF TC=0+100	05524	CMF-50-2
R21	0698-7238	1	RESISTOR 1.21K +1% .05W TF TC=0+100	05524	CMF-50-2
R22	0698-7245	1	RESISTOR 2.37K +1% .05W TF TC=0+100	05524	CMF-50-2
R23	0698-7238	1	RESISTOR 1.21K +1% .05W TF TC=0+100	05524	CMF-50-2
R25	0698-7236	1	RESISTOR 1K +1% .05W TF TC=0+100	05524	CMF-50-2
R26	0698-7236	1	RESISTOR 1K +1% .05W TF TC=0+100	05524	CMF-50-2
R27	0698-7212	1	RESISTOR 100 +1% .05W TF TC=0+100	05524	CMF-50-2
U1	1820-3009	1	IC-ASIC GT-ARY 880 GATES CMOS 5220	28480	1820-3009
U2	70001-80002	1	IC ARGMD C PAL	28480	70001-80002
U3	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U4	1820-1568	1	IC DRVR TTL/LS BUS QUAD	28480	1820-1568
U5	1820-6401	1	IC-INTERFACE MISC-DGTL CMOS POWER	28480	1820-6401
U6	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U7	1820-3426	1	IC TRANSCEIVER TTL/S BUS 9-BIT	28480	1820-3426
U8	1810-0275	1	NETWORK-RES 10-SIP 1.0K OHM X 9	06252	750-101
U10	1820-2922	1	IC GATE CMOS/HC NAND QUAD 2-INP	28480	1820-2922
U11	1906-0229	1	DIODE-ARRAY 50V 400MA TO-116	28480	1906-0229
U12	1810-0275	1	NETWORK-RES 10-SIP 1.0K OHM X 9	06252	750-101
U14	1820-8730	1	IC-ASIC GT-ARY 2.01K GATES CMOS 5220	28480	1820-8730
U15	1820-2921	1	IC INV CMOS/HC HEX	28480	1820-2921
U16	1820-2144	1	IC-INTERFACE RCVR BIPOLAR LINE QUAD	28480	1820-2144
U17	1820-2144	1	IC-INTERFACE RCVR BIPOLAR LINE QUAD	28480	1820-2144
U18	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U19	1820-2024	1	IC DRVR TTL/LS BUS OCTL	28480	1820-2024
U20	1810-0573	1	NETWORK-RES 14-DIP 100.0 OHM X 7	02483	760-3-R100

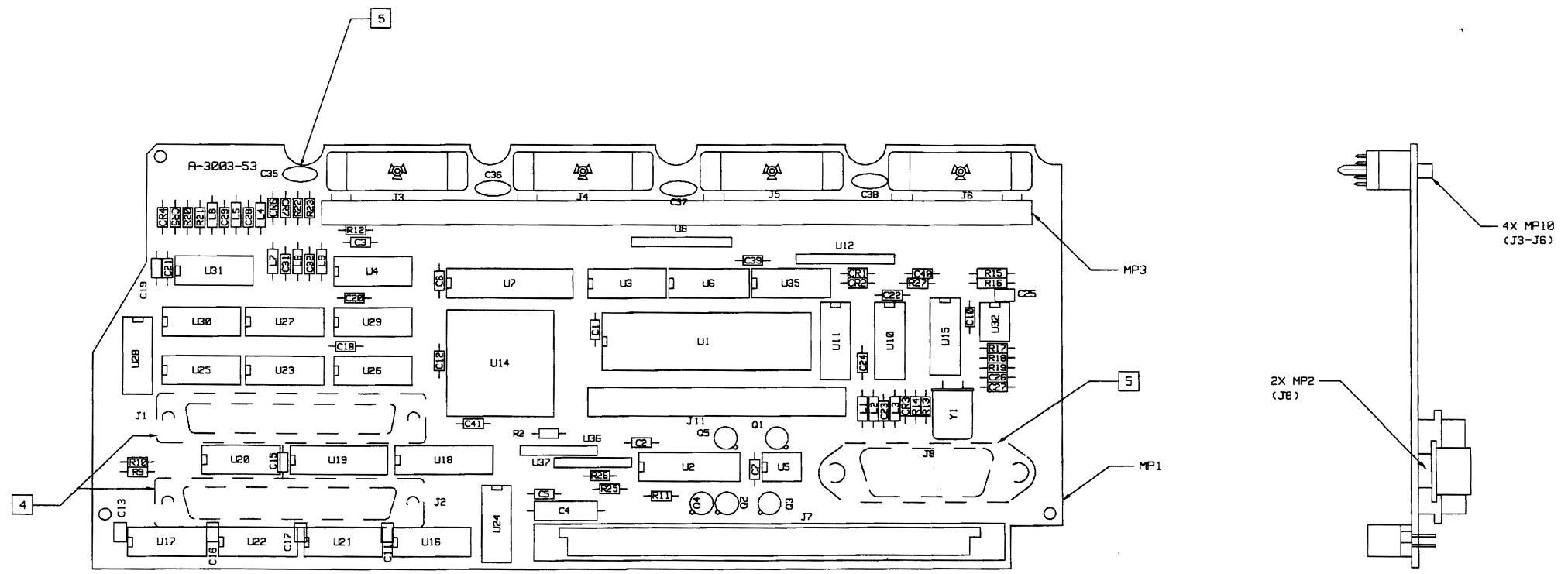
*Indicates factory-selected value

CLIP 70004-90052 3

**HP Part Number 70004-60029
A6 HP-MSIB (continued)**

Reference Designator	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U21	1820-2144	1	IC-INTERFACE RCVR BIPOLAR LINE QUAD	28480	1820-2144
U22	1820-2144	1	IC-INTERFACE RCVR BIPOLAR LINE QUAD	28480	1820-2144
U23	1810-0450	1	NETWORK-RES 14-DIP 47.0 OHM X 7	02483	760-3-R47
U24	1810-0573	1	NETWORK-RES 14-DIP 100.0 OHM X 7	02483	760-3-R100
U25	1810-0450	1	NETWORK-RES 14-DIP 47.0 OHM X 7	02483	760-3-R47
U26	1820-2145	1	IC-INTERFACE DRVR BIPOLAR LINE QUAD	28480	1820-2145
U27	1810-0450	1	NETWORK-RES 14-DIP 47.0 OHM X 7	02483	760-3-R47
U28	1820-2145	1	IC-INTERFACE DRVR BIPOLAR LINE QUAD	28480	1820-2145
U29	1820-2145	1	IC-INTERFACE DRVR BIPOLAR LINE QUAD	28480	1820-2145
U30	1810-0450	1	NETWORK-RES 14-DIP 47.0 OHM X 7	02483	760-3-R47
U31	1820-2145	1	IC-INTERFACE DRVR BIPOLAR LINE QUAD	28480	1820-2145
U32	1826-1543	1	IC OP AMP HS DUAL 8 PIN DIP-C	28480	1826-1543
U35	1820-2921	1	IC INV CMOS/HC HEX	28480	1820-2921
U36	1810-1324	1	NETWORK-RES 8-SIP MULTI-VALUE	05524	MSP08A-05-331-391G
U37	1810-1324	1	NETWORK-RES 8-SIP MULTI-VALUE	05524	MSP08A-05-331-391G
Y1	0410-1849	1	CRYSTAL-QUARTZ 6.200 MHZ HC-49/U-HLDR	02483	R1235-6BC-6.2MHZ

SYN		REVISIONS	E-70004-60029-2
A	RS	ISSUED PER PCO 53-06327	APPROVED DATE



- NOTES: UNLESS OTHERWISE SPECIFIED
1. DIMENSIONS ARE IN INCHES.
 2. FOR MAXIMUM COMPONENT HEIGHTS SEE SHEET 2 OF C-70004-20029-4.
 3. MAXIMUM LEAD TRIM LENGTH .118.
 - 4 J1, J2, J8 ARE MOUNTED ON THE SOLDER SIDE OF THE P.C. BOARD.
 - 5 MAXIMUM ALLOWABLE HEIGHT C35-C38 NOT TO EXCEED .280 OR CAPACITORS MUST BE BENT OVER.

SEE 70004-60029 MATERIAL LIST

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UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.	DESIGNED BY	DATE	BOARD ASSEMBLY MSIB	HEWLETT PACKARD
TOLERANCES: .01, .005, .001	ENGINEER-CHECKER		INTERCONNECT	
SEE GEN. STD. 688	RELEASED TO PROD.		TITLE	70004-60029
	APPROVED BY		NONE	1 of 1 E-70004-60029-2

SYM	REVISIONS	APPROVED	DATE
A	AS ISSUED PER PCO 06327		

J1

PIN	SIGNAL	TO-FROM	FUNCTION BLOCK
1	DATA		
2	DATA		
3	DATA		
4	DATA		
5	DATA		
6	DATA		
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37	DATA		

J2

PIN	SIGNAL	TO-FROM	FUNCTION BLOCK
1	DATA		
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8	DATA		
9	DATA		
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J3

PIN	SIGNAL	TO-FROM	FUNCTION BLOCK
1	DATA		
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J4

PIN	SIGNAL	TO-FROM	FUNCTION BLOCK
1	DATA		
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J5

PIN	SIGNAL	TO-FROM	FUNCTION BLOCK
1	DATA		
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37	DATA		

J6

PIN	SIGNAL	TO-FROM	FUNCTION BLOCK
1	DATA		
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J7

PIN	SIGNAL	TO-FROM	FUNCTION BLOCK
1	DATA		
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J8

PIN	SIGNAL	TO-FROM	FUNCTION BLOCK
1	DATA		
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J11

PIN	SIGNAL	TO-FROM	FUNCTION BLOCK
1	DATA		
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34	DATA		
35	DATA		
36	DATA		
37	DATA		

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ITEM	QTY.	PART/MATERIAL-DESCRIPTION	PART/L-PART NO.	PART/L-DWG. NO.	PART/L-SPEC.										
<table border="0"> <tr> <td>DRAWN BY</td> <td>DATE</td> <td rowspan="3"> BOARD ASSEMBLY- MSIB INTERCONNECT (SCHEMATIC) </td> <td rowspan="3"> </td> </tr> <tr> <td>ENGINEER-CHECKER</td> <td></td> <td>70004-60029</td> </tr> <tr> <td>RELEASE TO PROD.</td> <td></td> <td>PART NUMBER</td> </tr> </table>						DRAWN BY	DATE	BOARD ASSEMBLY- MSIB INTERCONNECT (SCHEMATIC)		ENGINEER-CHECKER		70004-60029	RELEASE TO PROD.		PART NUMBER
DRAWN BY	DATE	BOARD ASSEMBLY- MSIB INTERCONNECT (SCHEMATIC)													
ENGINEER-CHECKER				70004-60029											
RELEASE TO PROD.				PART NUMBER											
SCALE NONE		FILENAME=msib	D-70004-60029-1												
SHEET 1 OF 3															

Component-Level Information Packet

for 70004-60004

A6 HP-MSIB



HP Part No. 70004-90053
Printed in USA May 1994

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1400 Fountaingrove Parkway, Santa Rosa, CA 95403-1799, USA

**HP Part Number 70004-60004
A6 HP-MSIB**

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A6	70004-60004	7	1	BD AY-MSIB	28480	70004-60004
A6 C1	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C2	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C3	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C4	0180-0374	3	1	CAPACITOR-FXD 10UF+-10% 20VDC TA	56289	150D106X902082-DYS
A6 C5	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C6	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C7	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C10	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C11	0160-3879	7	1	CAPACITOR-FXD .01UF +-20% 100VDC CER	04222	SR201C103MAAH
A6 C12	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C13	0160-3879	7	1	CAPACITOR-FXD .01UF +-20% 100VDC CER	04222	SR201C103MAAH
A6 C15	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C16	0160-3879	7	1	CAPACITOR-FXD .01UF +-20% 100VDC CER	04222	SR201C103MAAH
A6 C17	0160-3879	7	1	CAPACITOR-FXD .01UF +-20% 100VDC CER	04222	SR201C103MAAH
A6 C18	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C19	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C20	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C21	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C22	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C23	0160-4792	5	1	CAPACITOR-FXD 8.2PF +- .5PF 100VDC CER 0+	04222	SA102A8R2DAAH
A6 C24	0160-4792	5	1	CAPACITOR-FXD 8.2PF +- .5PF 100VDC CER 0+	04222	SA102A8R2DAAH
A6 C25	0160-3879	7	1	CAPACITOR-FXD .01UF +-20% 100VDC CER	04222	SR201C103MAAH
A6 C26	0160-4813	1	1	CAPACITOR-FXD 180PF +-5% 100VDC CER 0+-3	04222	SA101A181JAAH
A6 C27	0160-4807	3	1	CAPACITOR-FXD 33PF +-5% 100VDC CER 0+-30	04222	SA102A330JAAH
A6 C28	0160-4792	5	1	CAPACITOR-FXD 8.2PF +- .5PF 100VDC CER 0+	04222	SA102A8R2DAAH
A6 C29	0160-4792	5	1	CAPACITOR-FXD 8.2PF +- .5PF 100VDC CER 0+	04222	SA102A8R2DAAH
A6 C31	0160-4792	5	1	CAPACITOR-FXD 8.2PF +- .5PF 100VDC CER 0+	04222	SA102A8R2DAAH
A6 C32	0160-4792	5	1	CAPACITOR-FXD 8.2PF +- .5PF 100VDC CER 0+	04222	SA102A8R2DAAH
A6 C35	0160-3451	1	1	CAPACITOR-FXD .01UF +80-20% 100VDC CER		805-508 Y5V 103Z
A6 C36	0160-3451	1	1	CAPACITOR-FXD .01UF +80-20% 100VDC CER		805-508 Y5V 103Z
A6 C37	0160-3451	1	1	CAPACITOR-FXD .01UF +80-20% 100VDC CER		805-508 Y5V 103Z
A6 C38	0160-3451	1	1	CAPACITOR-FXD .01UF +80-20% 100VDC CER		805-508 Y5V 103Z
A6 C39	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 C40	0160-4791	4	1	CAPACITOR-FXD 10PF +-5% 100VDC CER 0+-30	04222	SA102A100JAAH
A6 C41	0160-4554	7	1	CAPACITOR-FXD .01UF +-20% 50VDC CER	04222	SA105C103MAAH
A6 CR1	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	07263	
A6 CR2	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	07263	
A6 CR3	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	07263	
A6 CR4	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	07263	
A6 CR5	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	07263	
A6 CR6	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	07263	
A6 CR7	1901-0050	3	1	DIODE-SWITCHING 80V 200MA 2NS DO-35	07263	
A6 J1	1251-8995	2	1	CONN-RECT D-SUBMIN 37-CKT 37-CONT	00779	747375-2
A6 J2	1252-0057	3	1	CONN-RECT D-SUBMIN 37-CKT 37-CONT	00779	747481-2
A6 J3	70001-20005	1	1		28480	70001-20005
A6 J4	70001-20005	1	1		28480	70001-20005
A6 J5	70001-20005	1	1		28480	70001-20005

*Indicates factory-selected value

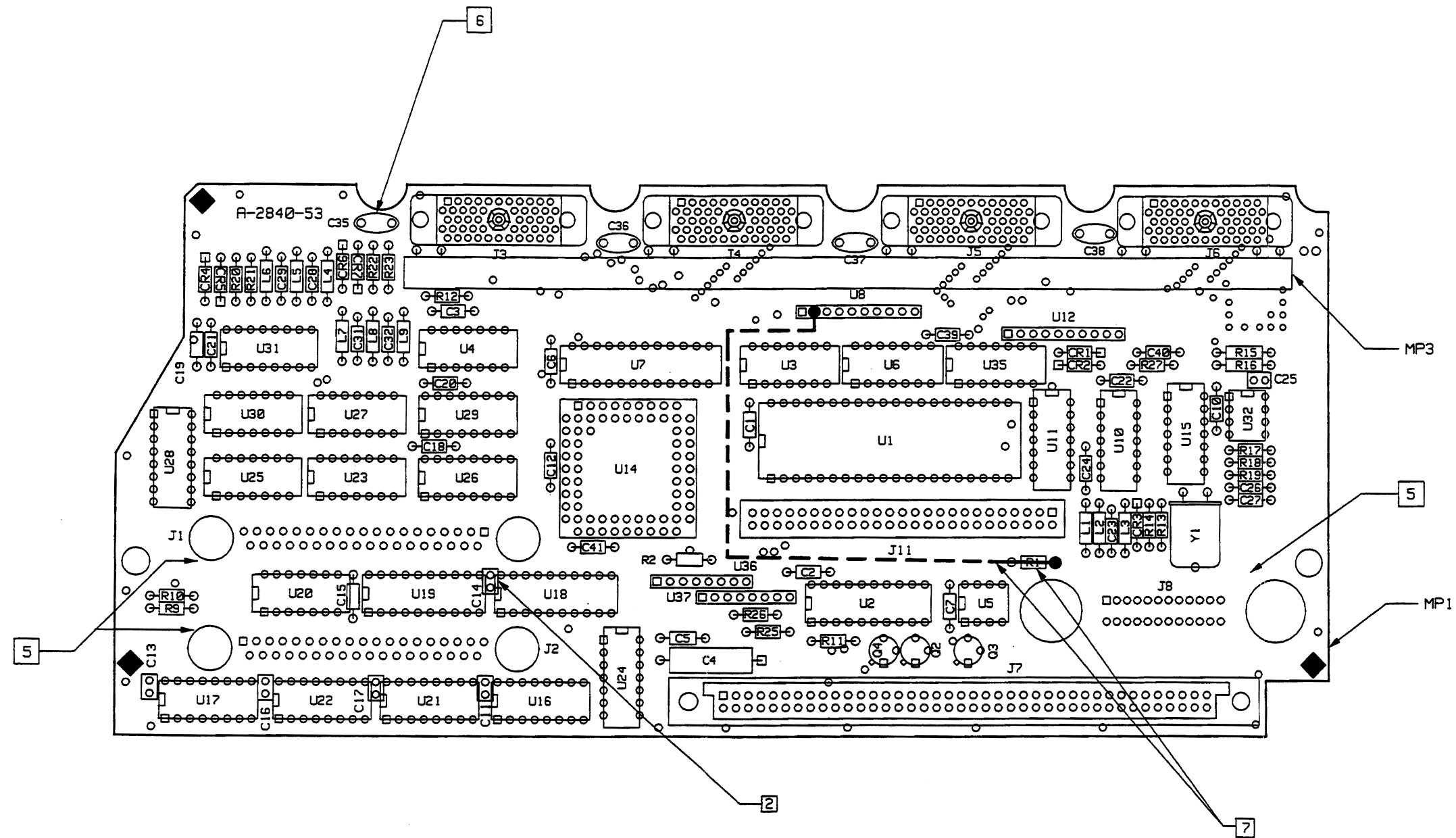
**HP Part Number 70004-60004
A6 HP-MSIB (continued)**

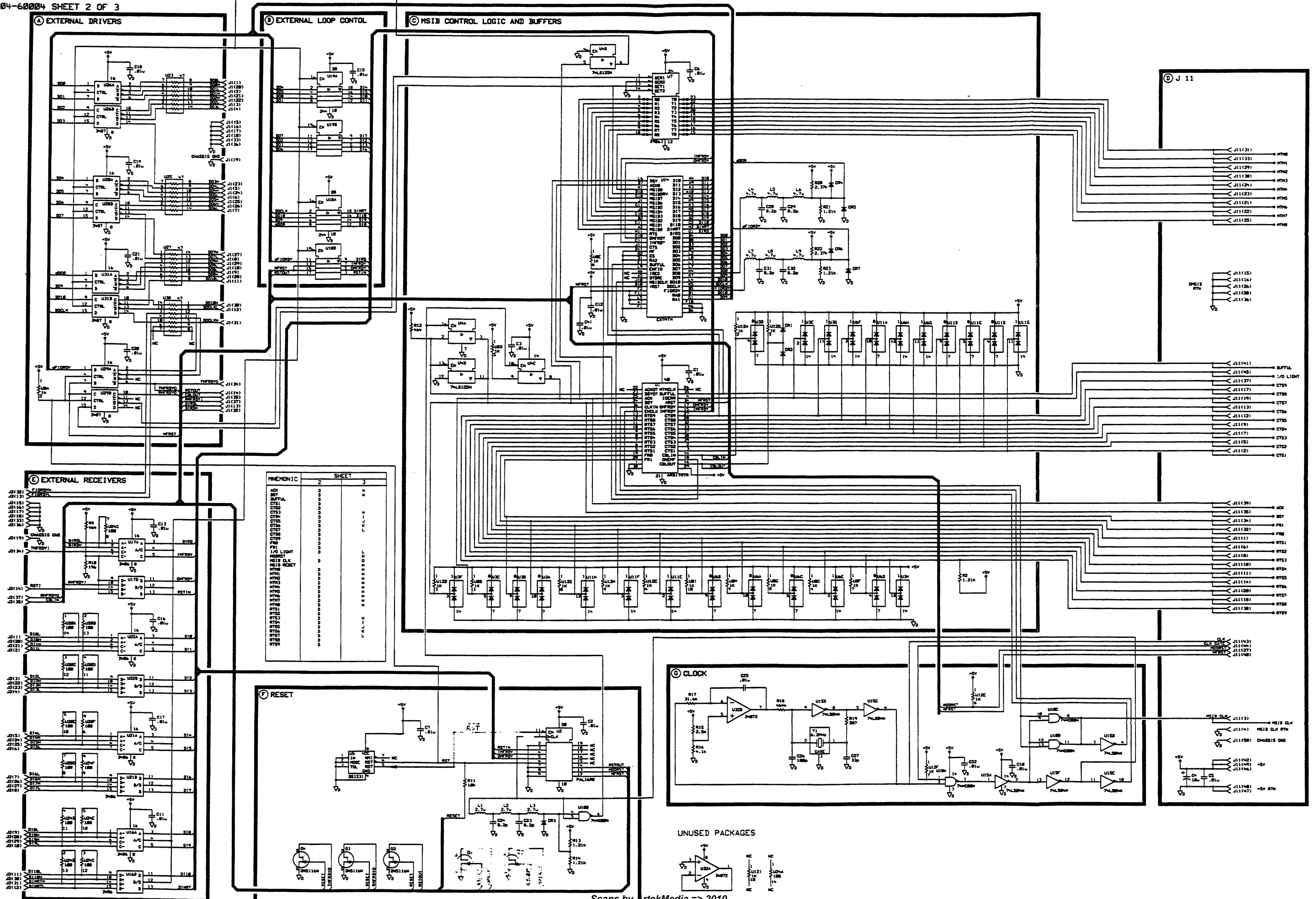
Reference Designation	HP Part Number	C	D	Qty	Description	Mfr Code	Mfr Part Number
A6 J6	70001-20005	1		1		28480	70001-20005
A6 J7	1252-2775	6		1		00779	532430-7
A6 J8	1251-8061	3		1	CONN-RECT MICRORBN 24-CKT 24-CONT		57-20240-11
A6 J11	1251-5926	3		1	CONN-POST TYPE .100-PIN-SPCG 50-CONT	18873	67997-650
A6 L1	9100-2261	2		1	INDUCTOR RF-CH-MLD 2.7UH +-10% .105D-INX	99800	1025-30
A6 L2	9100-2261	2		1	INDUCTOR RF-CH-MLD 2.7UH +-10% .105D-INX	99800	1025-30
A6 L3	9100-2261	2		1	INDUCTOR RF-CH-MLD 2.7UH +-10% .105D-INX	99800	1025-30
A6 L4	9140-0144	0		1	INDUCTOR RF-CH-MLD 4.7UH +-10% .105D-INX	99800	1025-36
A6 L5	9140-0144	0		1	INDUCTOR RF-CH-MLD 4.7UH +-10% .105D-INX	99800	1025-36
A6 L6	9140-0144	0		1	INDUCTOR RF-CH-MLD 4.7UH +-10% .105D-INX	99800	1025-36
A6 L7	9140-0144	0		1	INDUCTOR RF-CH-MLD 4.7UH +-10% .105D-INX	99800	1025-36
A6 L8	9140-0144	0		1	INDUCTOR RF-CH-MLD 4.7UH +-10% .105D-INX	99800	1025-36
A6 L9	9140-0144	0		1	INDUCTOR RF-CH-MLD 4.7UH +-10% .105D-INX	99800	1025-36
A6 Q1	1855-0278	8		1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE TO	27014	2N5116
A6 Q2	1855-0278	8		1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE TO	27014	2N5116
A6 Q3	1855-0278	8		1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE TO	27014	2N5116
A6 Q4	1855-0278	8		1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE TO	27014	2N5116
A6 Q5	1855-0278	8		1	TRANSISTOR J-FET 2N5116 P-CHAN D-MODE TO	27014	2N5116
A6 R2	0698-7238	9		1	RESISTOR 1.21K 1% .05W TF TC=0+-100	19701	5063J
A6 R9	0698-7228	7		1	RESISTOR 464 1% .05W TF TC=0+-100	19701	5063J
A6 R10	0698-7219	6		1	RESISTOR 196 1% .05W TF TC=0+-100	19701	5063J
A6 R11	0698-7260	7		1	RESISTOR 10K 1% .05W TF TC=0+-100	19701	5063J
A6 R12	0698-7228	7		1	RESISTOR 464 1% .05W TF TC=0+-100	19701	5063J
A6 R13	0698-7238	9		1	RESISTOR 1.21K 1% .05W TF TC=0+-100	19701	5063J
A6 R14	0698-7238	9		1	RESISTOR 1.21K 1% .05W TF TC=0+-100	19701	5063J
A6 R15	0698-6631	4		1	RESISTOR 2.5K .1% .125W TF TC=0+-25	19701	5033R
A6 R16	0698-8866	1		1	RESISTOR 4.1K .1% .125W TF TC=0+-25	19701	5033R
A6 R17	0698-7272	1		1	RESISTOR 31.6K 1% .05W TF TC=0+-100	19701	5063J
A6 R18	0699-0127	3		1	RESISTOR 464K +-1% .05W FF TC=0+-100	11502	RG-1/8-T050
A6 R19	0698-7223	2		1	RESISTOR 287 1% .05W TF TC=0+-100	19701	5063J
A6 R20	0698-7245	8		1	RESISTOR 2.37K 1% .05W TF TC=0+-100	19701	5063J
A6 R21	0698-7238	9		1	RESISTOR 1.21K 1% .05W TF TC=0+-100	19701	5063J
A6 R22	0698-7245	8		1	RESISTOR 2.37K 1% .05W TF TC=0+-100	19701	5063J
A6 R23	0698-7238	9		1	RESISTOR 1.21K 1% .05W TF TC=0+-100	19701	5063J
A6 R25	0698-7236	7		1	RESISTOR 1K 1% .05W TF TC=0+-100	19701	5063J
A6 R26	0698-7236	7		1	RESISTOR 1K 1% .05W TF TC=0+-100	19701	5063J
A6 R27	0698-7212	9		1	RESISTOR 100 1% .05W TF TC=0+-100	19701	5063J
A6 U1	1820-3009	6		1	IC GATE-ARY CMOS		LSI5080
A6 U2	70001-80002	4		1		28480	70001-80002
A6 U3	1906-0229	8		1	DIODE-ARRAY 50V 400MA	07263	
A6 U4	1820-1568	8		1	IC BFR TTL LS BUS QUAD	01295	SN74LS125AN
A6 U5	1820-6401	8		1	IC-INTERFACE MISC-DGTL MISC/UNKNOWN POWE		
A6 U6	1906-0229	8		1	DIODE-ARRAY 50V 400MA	07263	
A6 U7	1820-3426	1		1	IC TRANSCEIVER TTL S BUS 9-BIT	34335	AM29863DC
A6 U8	1810-0275	1		1	NETWORK-RES 10-SIP 1.0K OHM X 9	91637	MSP10A01
A6 U10	1820-2922	0		1	IC GATE CMOS/74HC NAND QUAD 2-INP	04713	MC74HC00N
A6 U11	1906-0229	8		1	DIODE-ARRAY 50V 400MA	07263	

**HP Part Number 70004-60004
A6 HP-MSIB (continued)**

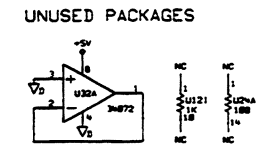
Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A6 U12	1810-0275	1	1	NETWORK-RES 10-SIP 1.0K OHM X 9	91637	MSP10A01
A6 U14	1820-3011	0	1	IC GATE-ARY CMOS 2-INP		LSI5220
A6 U15	1820-2921	9	1	IC INV CMOS/74HC HEX	27014	MM74HC04N
A6 U16	1820-2144	8	1	IC-INTERFACE RCVR BCD LINE RCVR QUAD	04713	MC3486P
A6 U17	1820-2144	8	1	IC-INTERFACE RCVR BCD LINE RCVR QUAD	04713	MC3486P
A6 U18	1820-2024	3	1	IC DRVR TTL LS LINE DRVR OCTL	01295	SN74LS244N
A6 U19	1820-2024	3	1	IC DRVR TTL LS LINE DRVR OCTL	01295	SN74LS244N
A6 U20	1810-0573	2	1	NETWORK-RES 14-DIP 100.0 OHM X 7	11236	760-3-R100
A6 U21	1820-2144	8	1	IC-INTERFACE RCVR BCD LINE RCVR QUAD	04713	MC3486P
A6 U22	1820-2144	8	1	IC-INTERFACE RCVR BCD LINE RCVR QUAD	04713	MC3486P
A6 U23	1810-0450	4	1	NETWORK-RES 14-DIP 47.0 OHM X 7	11236	760-3-R47
A6 U24	1810-0573	2	1	NETWORK-RES 14-DIP 100.0 OHM X 7	11236	760-3-R100
A6 U25	1810-0450	4	1	NETWORK-RES 14-DIP 47.0 OHM X 7	11236	760-3-R47
A6 U26	1820-2145	9	1	IC-INTERFACE DRVR BCD LINE DRIVER QUAD	04713	MC3487P
A6 U27	1810-0450	4	1	NETWORK-RES 14-DIP 47.0 OHM X 7	11236	760-3-R47
A6 U28	1820-2145	9	1	IC-INTERFACE DRVR BCD LINE DRIVER QUAD	04713	MC3487P
A6 U29	1820-2145	9	1	IC-INTERFACE DRVR BCD LINE DRIVER QUAD	04713	MC3487P
A6 U30	1810-0450	4	1	NETWORK-RES 14-DIP 47.0 OHM X 7	11236	760-3-R47
A6 U31	1820-2145	9	1	IC-INTERFACE DRVR BCD LINE DRIVER QUAD	04713	MC3487P
A6 U32	1826-1543	1	1	IC OP AMP HS DUAL 8-DIP-C PKG	04713	MC34072AU
A6 U35	1820-2921	9	1	IC INV CMOS/74HC HEX	27014	MM74HC04N
A6 U36	1810-1324	3	1	NETWORK-RES 8-SIP MULTI-VALUE	91637	MSP08A-05-331-3916
A6 U37	1810-1324	3	1	NETWORK-RES 8-SIP MULTI-VALUE	91637	MSP08A-05-331-3916
A6 Y1	0410-1849	8	1	CRYSTAL-QUARTZ 6.200 MHZ HC-49/U-HLDR	11236	R1235-6BC-6.2MHZ

*Indicates factory-selected value





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