

Agilent 53132A Universal Counter Component Level Information

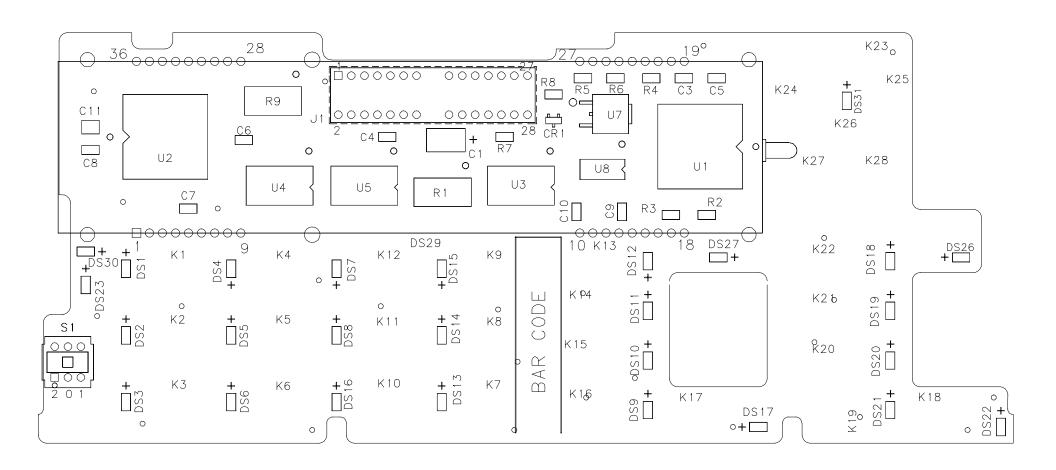
Information in this packet applies to the following assemblies:

- 1. 53132-68002 PC Assembly (Front Panel)
- 2. 53132-68003 PC Assembly (Channel 3 Board)
- 3. 53132-68011 PC Assembly (Optional Time Base w/Buffered 10 MHz Out Board)
- 4. 53132-68014 PC Assembly (Main Board)
- 5. 53132-68015 PC Assembly (12.4 GHz PrescalerBoard)
- 6. 53132-68016 PC Assembly (Optional Time Base Board)
- 7. 53132-68024 PC Assembly (Main Board)

The following is included in this packet:

- 1. Component locators
- 2. Schematics
- 3. Parts lists with Agilent and manufacturer's part numbers

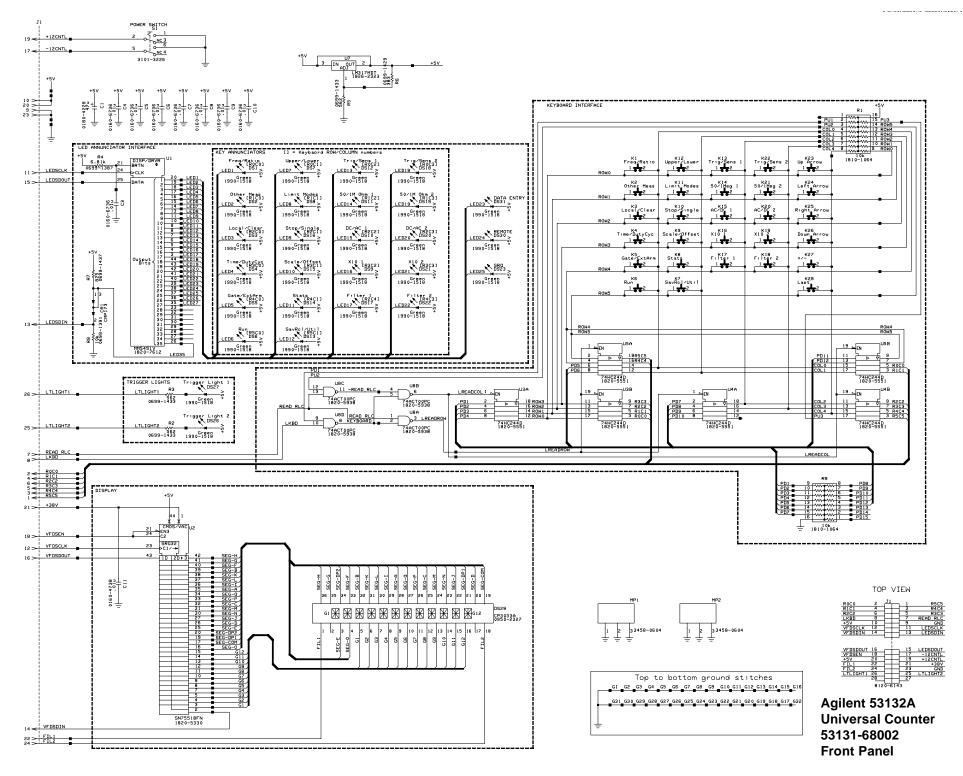




Agilent 53131A Universal Counter

53131-68002 Front Panel

Component Locator



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53131-68002 Parts List

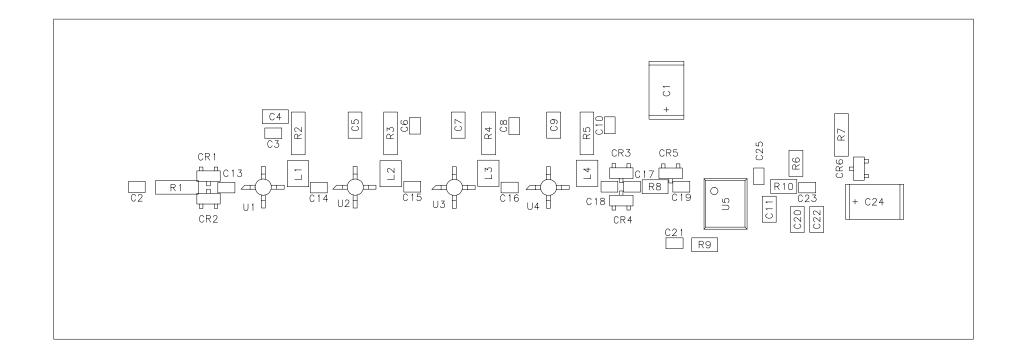
NOTE: This PC assembly is used in the 53131A, 53132A and 53181A. You may have no-load parts locations on your assembly and not all parts listed in this parts list are present on your assembly.

Reference					
Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C1		0180-4228	CAP-FXD 47uF +-20PCT 10V TA	TAJD476M010 293D476X0010D2WE3 49MC476D010M0AS ESVD1A476M	AVX VISHAY VISHAY BC COMPONENTS NEC ELECTRONICS
C11	1	0160-7438	CAP-FXD 0.01uF +-10pct 500 V CER X7R	12107C103KAT A 501S41W103KV6	AVX JOHANSON DIELECTRICS
C3-10	8	0160-6736	CAP-FXD 0.01uF +-10pct 50 V CER X7R	12065C103KAT A C1206C103K5RAC C3216X7R1H103K GRM316R71H103KD01D VJ1206Y103KXAMT	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
CR1	1	1906-0291	DIODE-DUAL 70V 100MA T0-236AA	BAV99 BAV99 BAV99LT1G BAV99X_ BAV99	PHILIPS FAIRCHILD SEMICONDUCTOR ON SEMICONDUCTOR INFINEON TECHNOLOGIES NXP
DS1-23, DS26, DS27, DS30, DS31	28	1990-1518	LED-LAMP GREEN COLOR LUM-INT 5MCD IF 30MA-MAX BVR 5V	LG T670-L1M2-1 SMLC-GC AA3528SGC	OSRAM BIVAR KINGBRIGHT AMERICAN
DS29	1	5040-0023	Display Vac-Flor	INB-12MM53T	SAMSUNG
R1, R9	2	1810-1064	NET-RES 15 10.0K OHM 16-PIN	767161103G SOMC-16-01-103G 4816P-2-103LF	CTS VISHAY BOURNS
R2, R3, R5	3	0699-1433	RESISTOR 562 +-1pct .125W TKF TC=0+-100	CRCW1206562RFKE_ RK73H2BT_5620F MCR18F5620 232272465621	VISHAY KOA ROHM YAGEO
R4	1	0699-1387	RESISTOR 6.81K +-1pct .125W TKF TC=0+-100	CRCW12066K81FKE_ RK73H2BT_6811F 232272466812L MCR18F6811	VISHAY KOA YAGEO ROHM

53131-68002 Parts List

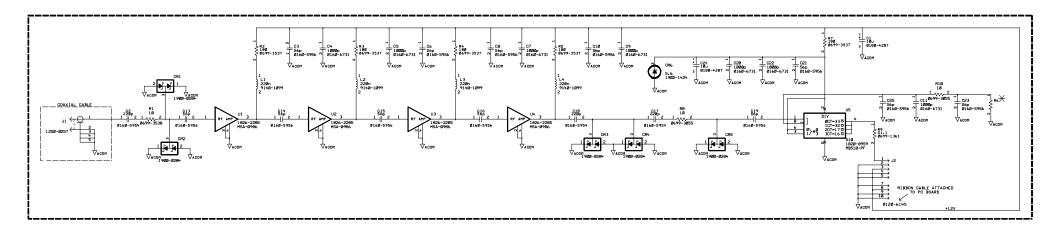
NOTE: This PC assembly is used in the 53131A, 53132A and 53181A. You may have no-load parts locations on your assembly and not all parts listed in this parts list are present on your assembly.

Reference					
Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R6	1	0699-1429	RESISTOR 383 +-1pct .125W TKF TC=0+-100	MCR18-F-3830	ROHM
				RK73H2BT3830F	KOA
				CRCW06031471F	VISHAY
				232270464221	YAGEO
R7	1	0699-1437	RESISTOR 825 +-1pct .125W TKF TC=0+-100	CRCW1206825RFKE_	VISHAY
				RK73H2BT_8250F	KOA
				MCR18F8250	ROHM
				232272468251	YAGEO
R8	1	0699-1391	RESISTOR 10K +-1pct .125W TKF TC=0+-100	CRCW120610K0FKE_	VISHAY
				RK73H2BT_1002F	KOA
				MCR18F1002	ROHM
				232272461003L	YAGEO
S1	1	3101-3226	SWITCH-PB DPDT ALTNG .1A 50 VAC	PVA2-EE-H1	ITT INDUSTRIES
U1	1	1820-7612	IC INTERFACE DRVR NMOS DISPLAY LED	M5451Q	STMICROELECTRONICS
				MM5451BV	MICREL
U2	1	1820-5330	IC INTERFACE DRVR BIPOLAR DISPLAY	HV518PJ	SUPERTEX
U3-U5	3	1820-5551	IC DRVR CMOS/HC LINE OCTL	74HC244D	PHILIPS
				MM74HC244WMX	FAIRCHILD SEMICONDUCTOR
				SN74HC244DW	TEXAS INSTRUMENTS
				MC74HC244ADWG	ON SEMICONDUCTOR
				74HC244D	NXP
U7	1	1826-2323	IC PWR MGT-V-REG-ADJ-POS 1.2/37V 3 PINS	LM317MDT	STMICROELECTRONICS
				LM317MDTG	ON SEMICONDUCTOR
U8	1	1820-5938	IC GATE CMOS/ACT NAND QUAD 2-INP	MC74ACT00DG	ON SEMICONDUCTOR
				SN74ACT00D	TEXAS INSTRUMENTS
				74ACT00SCX	FAIRCHILD SEMICONDUCTOR
	1	8120-6143	CA - ASSY 28 AWG	80-6105-1907-8	3M
				8120-6143	LEEMAH ELECTRONICS
	1	5180-0101	Shield-ESD	5180-0101	PARADIGM METAL INDUSTRIES



Agilent 53132A Universal Counter

53132-68003 Component Locator - Channel 3



Agilent 53132A Universal Counter

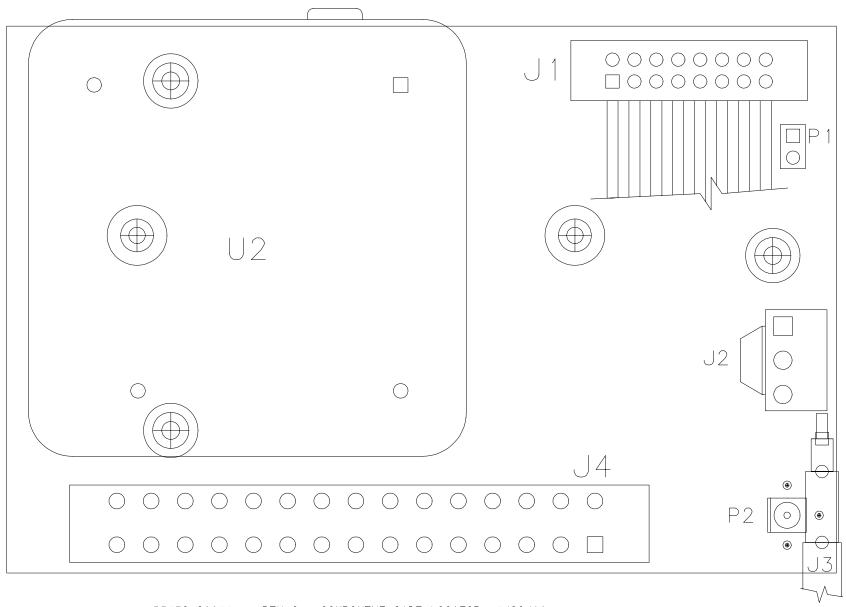
53132-68003 Channel 3

53132-68003 Parts List

Reference					
Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C1, C24	2		CAP-FXD 10uF +-20PCT 35V TA	TAJD106M035	AVX VISHAY NEC ELECTRONICS
C2, C17, C18	3	0160-5954	CAP-FXD 220pF +-5pct 50 V CER C0G	C2012COG1H221J	AVX YAGEO KEMET ELECTRONICS TDK MURATA MANUFACTURING
C3, C6, C8, C10, C13, C14, C15, C16, C19, C21, C23, C25	12	0160-5956	CAP-FXD 56pF +-5pct 50 V CER C0G	C2012COG1H560J	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C4, C5, C7, C9, C11, C20, C22	7	0160-6731	CAP-FXD 1000pF +-10pct 50 V CER X7R	12065C102KAT A C1206C102K5RAC C3216X7R1H102K GRM316R71H102KD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
CR1 - CR5	5	1900-0284	DIODE-SCHOTTKY SM SIG	HSMS-8202- G	AVAGO TECHNOLOGIES
CR6	1		DIODE-ZNR 5.6V 5pct TO-236 (SOT-23)	BZX84C5V6 BZX84C5V6 BZX84C5V6	FERRANTI PHILIPS NXP
J1	1	1250-0257	CONNECTOR-RF SMB MALE PC-W-STDFS 50-OHM	32JR149-1 903-499J-51P2	FCI FRAMATOME BERG AMPHENOL
L1 - L4	4	9140-1099	INDUCTOR 220nH +-5pct 2.8W-mmX3.4LG-mm	NLV32T-R22J-PF KL32TR22J	TDK KOA
R1	1	0699-3538	RESISTOR 10 +-5pct .5W TKF TC=0+-200	RK73B2HT_100J MCR50J100	KOA ROHM
R2, R3, R4, R5, R7	5	0699-3537	RESISTOR 180 +-5PCT .5W TKF TC=0+-200	MCR50J181	ROHM
R6	1		RESISTOR 316K +-1pct .125W TKF TC=0+-100	CRCW1206316KFKE_ RK73H2BT_3163F MCR18F3163 232272463164	VISHAY KOA ROHM YAGEO

53132-68003 Parts List

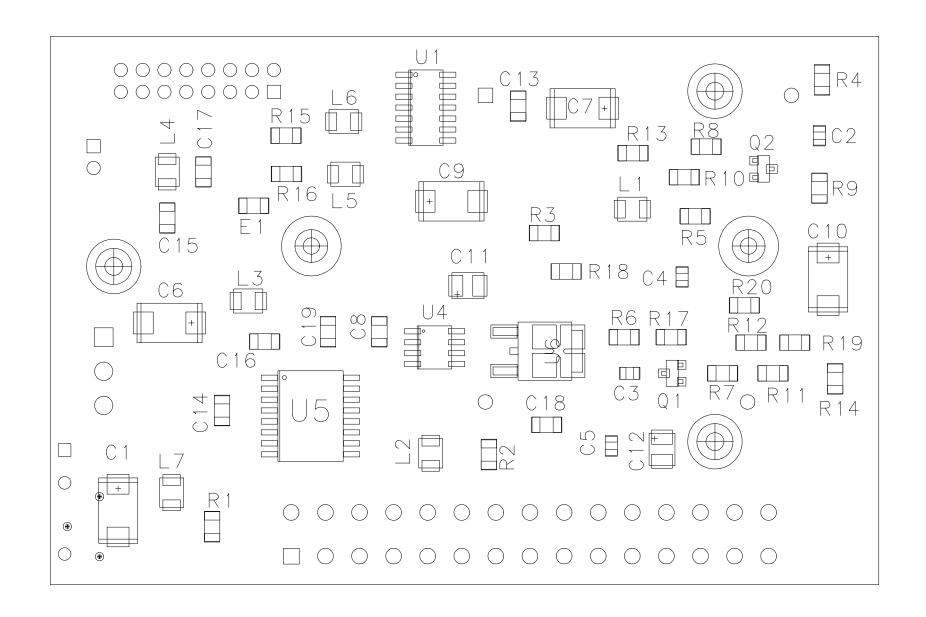
R8, R10	2	0699-3055	RESISTOR 10 +-1pct .1W TKF TC=0+-250	CRCW080510R0FKE_ RK73H2AT_10R0F MCR10F10R0 232273461009	VISHAY KOA ROHM YAGEO
R9	1	0699-1361	RESISTOR 51.1 +-1pct .125W TKF TC=0+-100	CRCW120651R1FKE_ RK73H2BT_51R1F MCR18F51R1 232272465119	VISHAY KOA ROHM YAGEO
U1, U2, U3, U4	4	1826-2285	IC RF/IF AMPL SINGLE 4 PIN U-WAVE-PILL	MSA-0986G	AVAGO TECHNOLOGIES
U5	1	5185-8460	LTB OF 1820-8959		
U5a	1	1820-8959	IC PRESCR		
	4	0590-1883	THREADED INSERT-STDF M3 X 0.5 6-MM-LG	KFB3-M3-6-ET	PENN ENGINEERING & MFG



53132-20011 REV C COMPONENT SIDE LOCATOR 1/22/96

Agilent 53132A Universal Counter

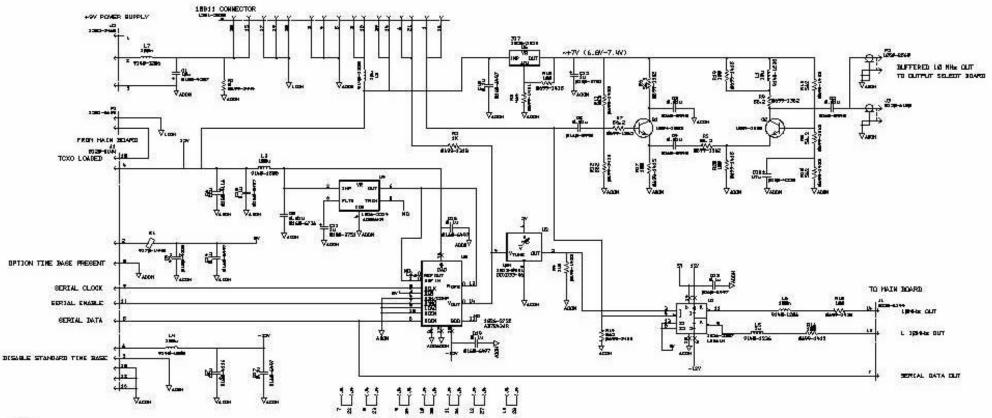
53132-60011 Component Locator (Component Side)



Agilent 53132A Universal Counter

53132-20011 REV C CIRCUIT SIDE LOCATOR 1/22/96

53132-60011 Component Locator (Circuit Side)



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Agilent 53132A Universal Counter

53132-60011 Optional Time Base

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53132-60011 Parts List (partial: see -68016 schematic)

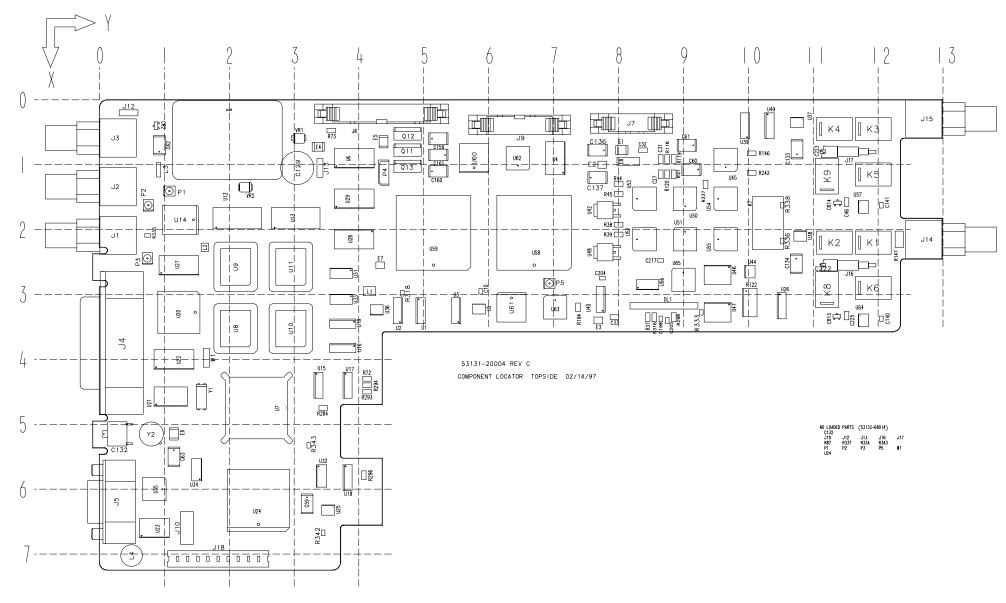
			33132-000111 arts List (partial.		1
Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C1	1		CAP-FXD 10uF +-20PCT 35V TA	TAJD106M035 293D106X0035D2WE3 ESVD1V106M	AVX VISHAY NEC ELECTRONICS
C11	1	0180-3751	CAP-FXD 1uF +-20PCT 35V TA	TAJB105M035 293D105X0035B2E3 ESVB21V105M SK-1V105M-RB	AVX VISHAY NEC ELECTRONICS ELNA
C13-C19	6	0160-6497	CAP-FXD 0.1uF +-10pct 50 V CER X7R	12065C104KAT A 2238 581 15649 C1206C104K5RAC C3216X7R1H104KT GRM319R71H104KA01D VJ1206Y104KXAMT	AVX YAGEO KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C6,C7	2	0180-4116	CAP-FXD 22uF +-20PCT 20V TA	TAJD226M020 293D226X0020D2E3 ESVD1D226M SK2-1D226M-RD0	AVX VISHAY NEC TOKIN ELNA
C8	1	0160-6736	CAP-FXD 0.01uF +-10pct 50 V CER X7R	12065C103KAT A C1206C103K5RAC C3216X7R1H103K GRM316R71H103KD01D VJ1206Y103KXAMT	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C9	1	0180-4228	CAP-FXD 47uF +-20PCT 10V TA	TAJD476M010 293D476X0010D2WE3 49MC476D010M0AS ESVD1A476M	AVX VISHAY VISHAY BC COMPONENTS NEC ELECTRONICS
E1	1	9170-1445	CORE-SHIELDING BEAD	HF70ACB-321611	TDK
H1-H3	3		THREADED INSERT-STDF M3 X 0.5 6-MM-LG	KFB3-M3-6-ET	PENN ENGINEERING & MFG
J1	1		CA-ASSY MULTICOND 16-COND MULTI-CONT CONN BOTH SIDE	80-6105-1873-2	3M
J2	1	1252-3468	CONN-POST TYPE .156-PIN-SPCG-MTG-END	26-60-4030	MOLEX
J4	1	1251-2035	CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	252-15-30-301 EB81-BN15TGW	LABINAL COMPONENTS & SYSTEMS VISHAY

53132-60011 Parts List (partial: see -68016 schematic)

			53132-60011 Parts List (partial:	See -00010 Schematic)	_
Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
L2	1	9140-1238	INDCTR-FXD 10uH +-5PCT Q 30 2.8W X 3.4LG-MM	NLV32100J-PF KL32T100J	TDK KOA
L3,L4	2	9140-1508	INDUCTOR 100uH +-5pct 2.8W-mmX3.4LG-mm	NLV32T-101J-PF KL32T101J	TDK KOA
L5	1	9140-1236	INDUCTOR 1uH +-5pct 2.8W-mmX3.4LG-mm Q=30	NLV32T-1R0J-PF KL32T1R0J	TDK KOA
L6,L7	2	9140-1206	INDUCTOR 100nH +-5pct 2.8W-mmX3.4LG-mm	NLV32T-R10J-PF KL32TR10J	TDK KOA
MP2	1	1258-0141	JUMPER-REMOVABLE FOR 0.025 IN SQ PINS	65474-004LF 530153-2	FCI FRAMATOME BERG TYCO ELECTRONICS AMP
MP3	1	53132-60213	CBL JUMPER AY		
P1	1		CONN-POST TYPE .100-PIN-SPCG-MTG-END	5-146281-2 68001-102HLF	TYCO ELECTRONICS AMP FCI FRAMATOME BERG
R14	1	0699-1433	RESISTOR 562 +-1pct .125W TKF TC=0+-100	CRCW1206562RFKE_ RK73H2BT_5620F MCR18F5620 232272465621	VISHAY KOA ROHM YAGEO
R15,R16	2	0699-1415	RESISTOR 100 +-1pct .125W TKF TC=0+-100	CRCW1206100RFKE_ RK73H2BT_1000F MCR18F1000 232272461001L	VISHAY KOA ROHM YAGEO
R2	1	0699-1318	RESISTOR 1K +-1pct .125W TKF TC=0+-100	CRCW12061K00FKE_ RK73H2BT_1001F MCR18F1001 232272461002L	VISHAY KOA ROHM YAGEO
R4	1	0699-1423	RESISTOR 215 +-1pct .125W TKF TC=0+-100	CRCW1206215RFKE_ RK73H2BT_2150F MCR18F2150 232272462151L	VISHAY KOA ROHM YAGEO
U1	1	1826-2387	IC COMPARATOR HS 14 PIN PLSTC-SOIC	LM361MNOPB	NATIONAL SEMICONDUCTOR
U2	1	1813-0931	CRYSTAL OSC 10.0 MHZ	OCXO33-46	ISOTEMP RESEARCH
U4	1	1826-2214	IC PWR MGT-V-REF-FXD 4.995/5.005V 8 PINS	AD586KRZ	ANALOG DEVICES

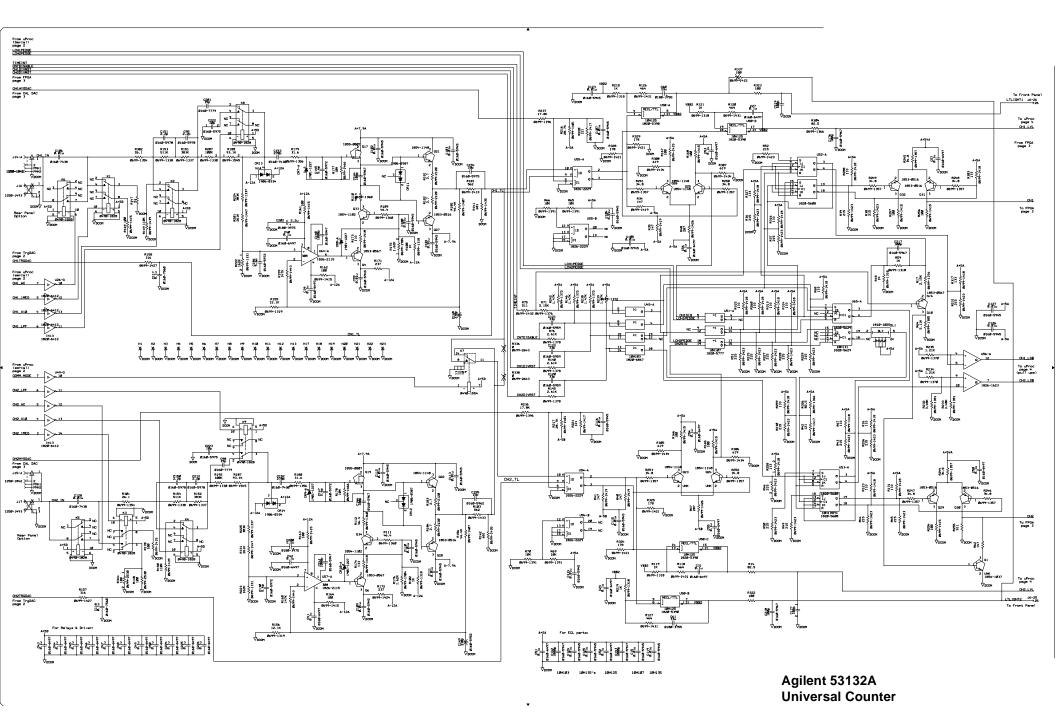
53132-60011 Parts List (partial: see -68016 schematic)

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
U5	1	1826-2722	D/A 12-BIT 16-P-SOIC CMOS	AD7243AR	ANALOG DEVICES
	1	1252-7969	INSULATOR-POST CONN	09-50-8031	MOLEX
	2	1251-2992	CONTACT-CONN U/W-UTIL FEM CRP	08-50-0108	MOLEX
			WIRE 26AWG BK 300V PVC 7X34 80C ; WIRE-ELECTRICAL ; COLOR: BLACK	8150-0048 F-1110-5115-DL 8150-0048	JUDD WIRE FILECA BELDEN CDT



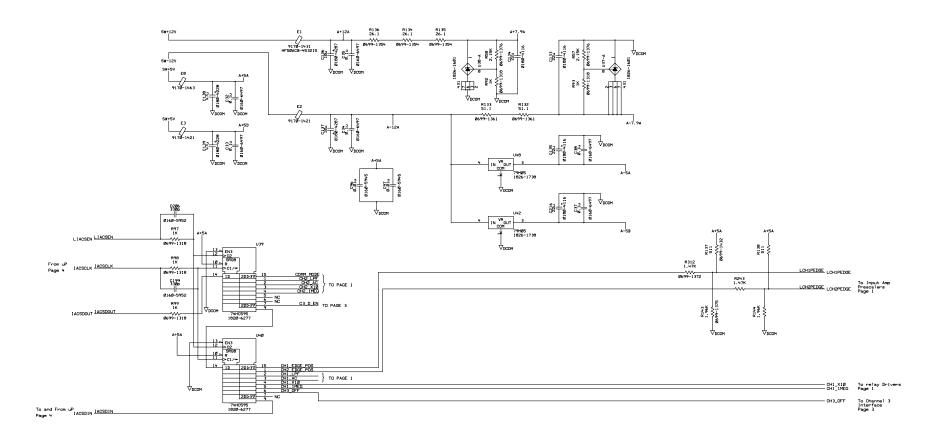
Agilent 53132A Universal Counter

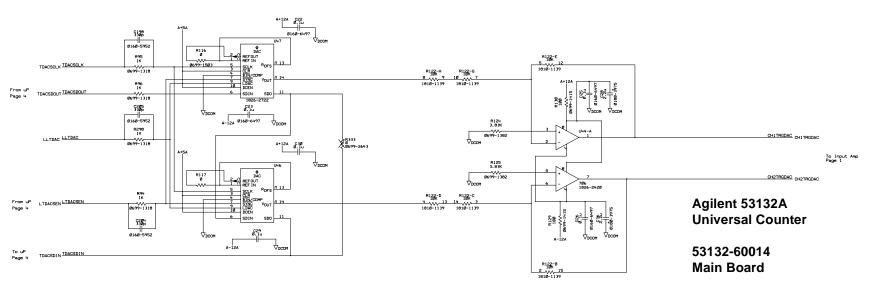
53132-60014 Component Locator - Main Board



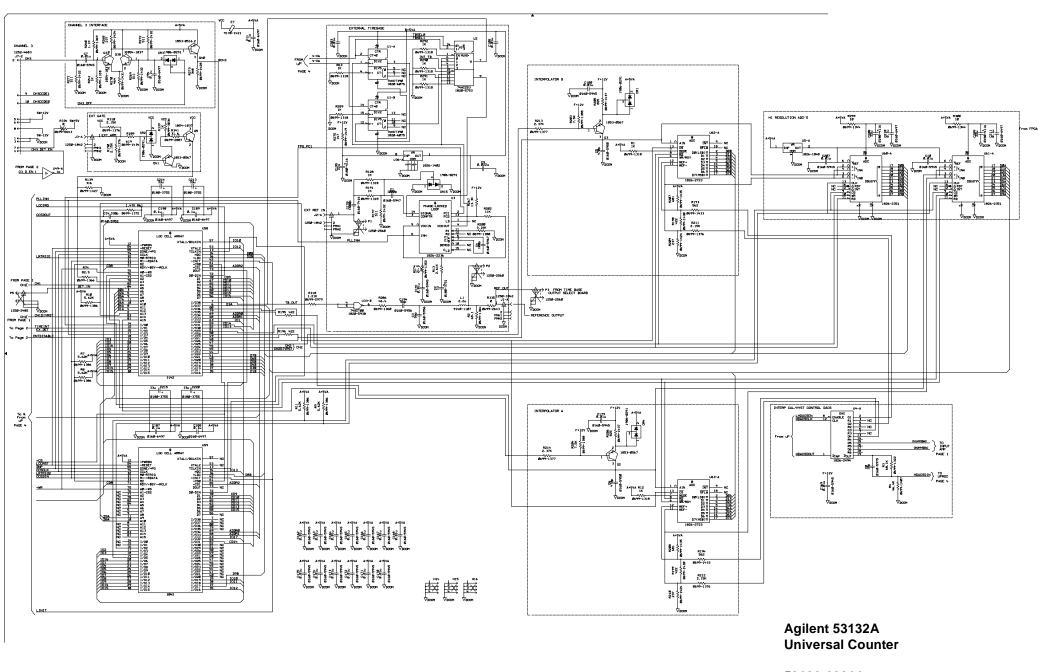
53132-60014 Main Board

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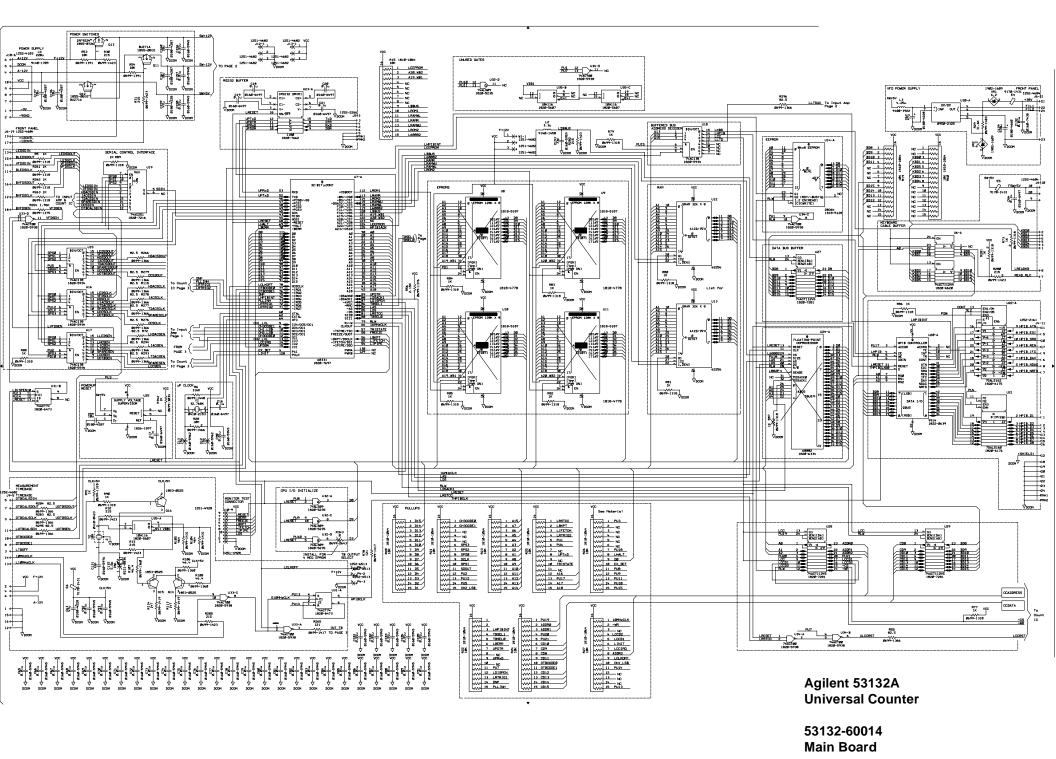


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53132-60014 Main Board

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Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C1, C140, C141, C142, C143	5		CAP-FXD 1000pF +-10pct 50 V CER X7R	C2012X7R1H102K	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C106, C128, C192	3	0160-7438	CAP-FXD 0.01uF +-10pct 500 V CER X7R	12107C103KAT A 501S41W103KV6	AVX JOHANSON DIELECTRICS
C108, C203	2	0160-6736	CAP-FXD 0.01uF +-10pct 50 V CER X7R	C1206C103K5RAC C3216X7R1H103K GRM316R71H103KD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C11, C16-C27, C29-C35, C37-C58, C64, C94, C187- C190, C210, C211, C224- C226	53	0160-6497	CAP-FXD 0.1uF +-10pct 50 V CER X7R	C3216X7R1H104KT GRM319R71H104KA01D	AVX YAGEO KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C117, C118	2	0160-7560	CAP-FXD 0.1uF +-20pct 16 V CER X7R	C0805C104M4RAC C2012X7R1C104M GRM219R71C104MA01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C120, C121, C122, C193	4	0160-5959	CAP-FXD 33pF +-5pct 50 V CER C0G	C0805C330J5GAC C2012COG1H330J	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C129	1	0180-4660	CAP-FXD 470uF +-20pct 63 V AL-ELCTLT	KME63VB471M12X25LL	NIPPON CHEMI-CON
C130, C145, C147, C186	4		CAP-FXD 5.6pF 50 V CER COG	08055A5R6DATA C0805C569D5GAC C2012COG1H5R6D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C131	1		CAP-FXD 12pF +-5pct 50 V CER C0G	08051A120JAT A C0805C120J5GAC C2012COG1H120J	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C133, C134, C135, C195, C208, C209, C216	7	0180-4116	CAP-FXD 22uF +-20PCT 20V TA	TAJD226M020 293D226X0020D2E3 ESVD1D226M SK2-1D226M-RD0	AVX VISHAY NEC TOKIN ELNA
C14, C198, C199, C204, C205, C206	6	0160-5952	CAP-FXD 330pF +-5pct 50 V CER C0G	08055A331JAT A C0805C331J5GAC C2012COG1H331J GRM2165C1H331JA01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C152, C153	2	0160-7430	CAP-FXD 270pF +-5pct 500 V CER C0G	12107A271JAT A 501S41N271JV6	AVX JOHANSON DIELECTRICS
C155	1	0160-5962	CAP-FXD 15pF +-5pct 50 V CER C0G	08055A150JAT A C0805C150J5GAC C2012COG1H150J GRM2165C1H150JD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C178	1	0160-7416	CAP-FXD 1500pF +-10pct 50 V CER X7R	C0805C152K5RAC C2012X7R1H152KT	KEMET ELECTRONICS TDK
C2	1	0180-3751	CAP-FXD 1uF +-20PCT 35V TA	TAJB105M035 293D105X0035B2E3 ESVB21V105M SK-1V105M-RB	AVX VISHAY NEC ELECTRONICS ELNA
C28, C36, C200, C202	4	0180-3975	CAP-FXD 2.2uF +-20PCT 20V TA	TAJB225M020 293D225X0020B2E3 49MC225B020M0AS ESVB21D225M T491B225M020AS	AVX VISHAY VISHAY BC COMPONENTS NEC ELECTRONICS KEMET ELECTRONICS
C3, C194	2	0160-5956	CAP-FXD 56pF +-5pct 50 V CER C0G	08055A560JAT A C0805C560J5GAC C2012COG1H560J GRM2165C1H560JD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C4, C144, C146, C176, C177, C217, C218, C219	8	0160-5967	CAP-FXD 100pF +-5pct 50 V CER C0G	08055A101JAT A C0805C101J5GAC C2012COG1H101J GRM2165C1H101JA01D VJ0805A101JXAMT	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C5, C6	2	0160-5950	CAP-FXD 470pF +-5pct 50 V CER C0G	08055A471JAT A C0805C471J5GAC C2012COG1H471J GRM2165C1H471JA01D VJ0805A471JXAMT	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C59, C137, C160, C196, C197, C136, C161	7	0180-4287	CAP-FXD 10uF +-20PCT 35V TA	TAJD106M035 293D106X0035D2WE3 ESVD1V106M	AVX VISHAY NEC ELECTRONICS
C60, C61, C213, C214, C215, C220	6	0180-3755	CAP-FXD 33uF +-20PCT 10V TA	TAJD336M010 293D336X0010D2E3 ESVD1A336M T491D336M010AS	AVX VISHAY NEC ELECTRONICS KEMET ELECTRONICS
C62	1	0180-4977	CAP-FXD 330uF +-20PCT 10V TA SMT	TPME337M010_0035 T510X337M010AS	AVX KEMET ELECTRONICS
C63, C138, C139, C159	4	0180-4228	CAP-FXD 47uF +-20PCT 10V TA	TAJD476M010 293D476X0010D2WE3 49MC476D010M0AS ESVD1A476M	AVX VISHAY VISHAY BC COMPONENTS NEC ELECTRONICS
C7, C10, C15, C65-C93, C96, C97, C99-C105, C107, C109-C116, C119, C123- C127, C156-C158, C162- C175, C179-C185, C191, C207	82	0160-5945	CAP-FXD 0.01uF +-10pct 50 V CER X7R	08055C103KAT A 223858016627 C0805C103K5RAC C2012X7R1H103K GRM216R71H103KA01J VJ0805Y103KXAMT	AVX YAGEO KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C8, C154, C222, C223	4	0160-5975	CAP-FXD 10pF +-5pct 50 V CER C0G	08055A100JAT A C0805C100J5GAC GRM2165C1H100JD01D	AVX KEMET ELECTRONICS MURATA MANUFACTURING

1	Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C12206223KSRAC KEMET ELECTRONICS C216X781H223K GRM319R71H223KD01D MIRATA MANUFACTURING C95, C150, C151, C212 4 0160-5978 CAP-FXD 2.2pF 50 V CER COG 08055A2R2DATA C0205C229D5GAC C21712COG1H2R2C CDX KEMET ELECTRONICS TDX MIRATA MANUFACTURING C95, C150, C151, C212 2 0160-7779 CAP-FXD 39pF +-5PCT 500 V CER COG C20712COG1H2R2C CDX CAP-FXD 39pF +-5PCT 500 V CER COG 1206 C20712COG1H2R2C CDX CAP-FXD 39pF +-5PCT 500 V CER COG 1206 C20712COG1H2R2C CDX CAP-FXD 39pF +-5PCT 500 V CER COG 1206 C20712COG1H2R2C CDX CAP-FXD 39pF +-5PCT 500 V CER COG 1206 C20712COG1H2R2C CDX CDX CDX CAP-FXD 39pF +-5PCT 500 V CER COG 1206 C20712COG1H2R2C CDX C				·		
C3216X7R1H223K	03	'	0100-0720	OAI -1 XD 0.022di 1-10pot 30 V OER XAR		
C95, C150, C151, C212						
C95, C150, C151, C212						
C0805C229D5GAC C2012COG1H2R2C TOK C2012COG1H2R2C					OKINISTSKY THEZSKOOTD	WORATA WAROT ACTORING
C2012COG1H2R2C TOK GRM2165C1H2R2CD01D MURATA MANUFACTURING	C95, C150, C151, C212	4	0160-5978	CAP-FXD 2.2pF 50 V CER C0G	08055A2R2DATA	AVX
CPR C201 2 0160-7779 CAP-FXD 39pF +-5PCT 500 V CER COG 1206 12067A390JAT_A 501R18N390JV6_ JOHANSON DIELECTRICS				·	C0805C229D5GAC	KEMET ELECTRONICS
C98, C201 2					C2012COG1H2R2C	TDK
CR1, CR2, CR3, CR4, CR15					GRM2165C1H2R2CD01D	MURATA MANUFACTURING
CR1, CR2, CR3, CR4, CR15	C98, C201	2	0160-7779	CAP-FXD 39pF +-5PCT 500 V CER C0G 1206	12067A390JAT A	AVX
CR1, CR2, CR3, CR4, CR15 1906-0291 DIODE-DUAL 70V 100MA T0-236AA BAV99 BAV99 BAV99 BAV99 BAV99 BAV99 AND SAMICONDUCTOR ON SEMICONDUCTOR ON				'	501R18N390JV6	JOHANSON DIELECTRICS
BAV99						
BAV99LT1G BAV99	CR1, CR2, CR3, CR4, CR15	5	1906-0291	DIODE-DUAL 70V 100MA T0-236AA	BAV99	PHILIPS
BAV99 X BAV99 X BAV99					BAV99	FAIRCHILD SEMICONDUCTOR
BAV99 NXP					BAV99LT1G	ON SEMICONDUCTOR
BAV99 NXP					BAV99 X	INFINEON TECHNOLOGIES
CR11, CR12						
CR13, CR14 2 1906-0334 DIODE-DUAL 200V 200MA T0-236AA MMBD1503A FAIRCHILD SEMICONDUCTOR DIODE-SWITCHING 75V 200MA 6NS T0-236 BAS16 BAS16 SAS16 VISHAY ON SEMICONDUCTOR NXP						
CR7, CR8, CR9, CR10	CR11, CR12	2	1906-0387	DIODE-DUAL 30V TO-236AB (SOT-23)	MMBD1703A	FAIRCHILD SEMICONDUCTOR
BAS16 BAS16 VISHAY ON SEMICONDUCTOR BAS16 DL1 STEMAND DL1 1 1810-1025 DELAY LINE PASSIVE DEVICE W/SINGLE DL1 DL1 STEWARD DL1 STEWARD DL1 STEWARD STE	CR13, CR14	2	1906-0334	DIODE-DUAL 200V 200MA T0-236AA	MMBD1503A	FAIRCHILD SEMICONDUCTOR
BAS16LT1G BAS16 ON SEMICONDUCTOR NXP	CR7, CR8, CR9, CR10	4	1901-1227	DIODE-SWITCHING 75V 200MA 6NS TO-236	BAS16	PHILIPS
BAS16 NXP					BAS16	VISHAY
DL1					BAS16LT1G	ON SEMICONDUCTOR
E1, E4, E5, E6					BAS16	NXP
E1, E4, E5, E6						
STEWARD STEW	DL1	1				
1 9170-1463 CORE-SHIELDING BEAD 4330-030-36301 FERROXCUBE USA FAIR RITE PRODUCTS J1, J2, J3, J14, J15 5 1250-1842 CONNECTOR-RF BNC FEMALE PC-W-STDFS 31-5506 AMPHENOL TYCO ELECTRONICS AMP J18 1 1252-4103 CONN-POST TYPE .156-PIN-SPCG-MTG-END 643886-2 TYCO ELECTRONICS AMP J4 1 1252-2161 CONN-RECT MICRORBN 24-CKT 24-CONT 5554923-2 TYCO ELECTRONICS AMP J5 1 1252-2266 CONN-RECT D-SUBMIN 9-CKT 9-CONT 5788793-1 TYCO ELECTRONICS AMP HON HAI PRECISION INDUSTRY J6 1 1252-4684 CONN-POST TYPE .100-PIN-SPCG-MTG-END N3429-6202RB 3M J7 1 1252-4683 CONN-POST TYPE .100-PIN-SPCG-MTG-END N3793-6202RB 3M						
2743021447 FAIR RITE PRODUCTS						
1 1252-4684 CONN-POST TYPE .100-PIN-SPCG-MTG-END N3429-6202RB MM MPHENOL TYCO ELECTRONICS AMP MR MR MR MR MR MR MR	E8	1	9170-1463	CORE-SHIELDING BEAD		
1 1252-4103 CONN-POST TYPE .156-PIN-SPCG-MTG-END 643886-2 TYCO ELECTRONICS AMP 3					2743021447	FAIR RITE PRODUCTS
1 1252-4103 CONN-POST TYPE .156-PIN-SPCG-MTG-END 643886-2 TYCO ELECTRONICS AMP 3	J1, J2, J3, J14, J15	5	1250-1842	CONNECTOR-RF BNC FEMALE PC-W-STDFS	31-5506	AMPHENOL
1 1252-4103 CONN-POST TYPE .156-PIN-SPCG-MTG-END 643886-2 TYCO ELECTRONICS AMP 1 1252-2161 CONN-RECT MICRORBN 24-CKT 24-CONT 5554923-2 TYCO ELECTRONICS AMP 1 1252-2266 CONN-RECT D-SUBMIN 9-CKT 9-CONT 5788793-1 TYCO ELECTRONICS AMP 1 1252-2266 CONN-RECT D-SUBMIN 9-CKT 9-CONT DM10123-D5 HON HAI PRECISION INDUSTRY 3 1 1252-4684 CONN-POST TYPE .100-PIN-SPCG-MTG-END N3429-6202RB 3M 4 1252-4683 CONN-POST TYPE .100-PIN-SPCG-MTG-END N3793-6202RB 3M					5227677-1	TYCO ELECTRONICS AMP
1 1252-2161 CONN-RECT MICRORBN 24-CKT 24-CONT 5554923-2 TYCO ELECTRONICS AMP 1 1252-2266 CONN-RECT D-SUBMIN 9-CKT 9-CONT 5788793-1 TYCO ELECTRONICS AMP 1 1252-4684 CONN-POST TYPE .100-PIN-SPCG-MTG-END N3429-6202RB 3M 1 1252-4683 CONN-POST TYPE .100-PIN-SPCG-MTG-END N3793-6202RB 3M						
J5 1 1252-2266 CONN-RECT D-SUBMIN 9-CKT 9-CONT 5788793-1 TYCO ELECTRONICS AMP HON HAI PRECISION INDUSTRY J6 1 1252-4684 CONN-POST TYPE .100-PIN-SPCG-MTG-END N3429-6202RB 3M J7 1 1252-4683 CONN-POST TYPE .100-PIN-SPCG-MTG-END N3793-6202RB 3M	J18	1				
DM10123-D5	J4	1			5554923-2	
J6 1 1252-4684 CONN-POST TYPE .100-PIN-SPCG-MTG-END N3429-6202RB 3M J7 1 1252-4683 CONN-POST TYPE .100-PIN-SPCG-MTG-END N3793-6202RB 3M	J5	1	1252-2266	CONN-RECT D-SUBMIN 9-CKT 9-CONT	5788793-1	
J7 1 1252-4683 CONN-POST TYPE .100-PIN-SPCG-MTG-END N3793-6202RB 3M					DM10123-D5	HON HAI PRECISION INDUSTRY
J7 1 1252-4683 CONN-POST TYPE .100-PIN-SPCG-MTG-END N3793-6202RB 3M	J6	1	1252-4684	CONN-POST TYPE .100-PIN-SPCG-MTG-FND	N3429-6202RB	I3M
	J7					
J9 I 1 I 1252-4682 ICONN-POST TYPE .100-PIN-SPCG-MTG-END IN3408-6202RB I3M	J9	1				3M

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
K1-K6, K8, K9	8	0490-1828	RELAY 2C 5VDC-COIL 2A 30VDC	TQ2SA-5V G6H-2F-DC5	MATSUSHITA OMRON
K7	1	0490-1554	RELAY 1C 5VDC-COIL 0.5A 30VAC/DC	G6Y-1-DC5	OMRON
L1	1	9140-1107	INDUCTOR 2.2uH +-5pct 3.4W-mmX4.8LG-mm	SMRF1812-221J	GOWANDA ELECTRONICS
L2	1	9140-1458	INDUCTOR 3.3uH +-5pct 2.8W-mmX3.4LG-mm	NLV32T-3R3J -PF KL32T3R3J	TDK KOA
L3	1	9100-3922	INDUCTOR FIXED Z GREATER THAN 1200 OHMS 120 TO 650	99ZSPA45165 51-088	TECHNITROL GOWANDA ELECTRONICS
L4	1	9140-1709	INDUCTOR FIXED 220uH +-10PCT 9D-mm Q 20	6000-221K-RC	J.W. MILLER MAGNETICS
Q1, Q5, Q37, Q38	4	1854-1037	TRANSISTOR NPN SI TO-236AA PD=350MW	MMBT3904 SST3904T116 MMBT3904LT1G	FAIRCHILD SEMICONDUCTOR ROHM ON SEMICONDUCTOR
Q11, Q12	2	1855-0831	TRANSISTOR MOSFET N-CHAN E-MODE TO-220 SI	NTP18N06LG	ON SEMICONDUCTOR
Q13	1	1855-0726	TRANSISTOR MOSFET P-CHAN E-MODE TO-220AB	IRF9Z24PBF	INTERNATIONAL RECTIFIER
Q14, Q15, Q16	3	1853-0525	TRANSISTOR PNP SI TO-236AA PD=200MW	MMBT2907 PMBT2907A MMBT2907ALT1G PMBT2907A	FAIRCHILD SEMICONDUCTOR PHILIPS ON SEMICONDUCTOR NXP
Q17, Q19	2	1855-0807	TRANSISTOR J-FET N-CHAN D-MODE SOT-23	BF511 BF511	PHILIPS NXP
Q2, Q3, Q4, Q6, Q10, Q41	6	1853-0567	TRANSISTOR PNP SI SOT-23 (TO-236AB)	MMBT3906 SST3906T116 MMBT3906LT1G	FAIRCHILD SEMICONDUCTOR ROHM ON SEMICONDUCTOR
Q21, Q22, Q23, Q24, Q25, Q2	6	1854-1148	TRANSISTOR NPN SI SOT-23 (TO-236AB)	MMBTH10 MMBTH10LT1G	FAIRCHILD SEMICONDUCTOR ON SEMICONDUCTOR
Q27-Q32, Q40	7	1853-0516	TRANSISTOR PNP SI SOT-23 (TO-236AB)	MMBTH81	FAIRCHILD SEMICONDUCTOR
Q33, Q34	2	1854-1102	TRANSISTOR NPN SI SOT-23 (TO-236AB)	MMBTH24	FAIRCHILD SEMICONDUCTOR

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R1, R5, R12, R18, R59, R63, R73, R77, R79-R86, R88- R100, R102, R119, R121, R128, R191, R218, R219, R241, R261-R263, R281, R289-R292, R298	46		RESISTOR 1K +-1pct .125W TKF TC=0+-100	CRCW12061K00FKE_ RK73H2BT_1001F MCR18F1001 232272461002L	VISHAY KOA ROHM YAGEO
R101, R103, R193, R194	4	0699-1433	RESISTOR 562 +-1pct .125W TKF TC=0+-100	CRCW1206562RFKE_ RK73H2BT_5620F MCR18F5620 232272465621	VISHAY KOA ROHM YAGEO
R104, R105, R118, R120, R126, R127, R270	7	0699-1431	RESISTOR 464 +-1pct .125W TKF TC=0+-100	CRCW1206464RFKE_ RK73H2BT_4640F MCR18F4640 232272464641	VISHAY KOA ROHM YAGEO
R106-R112, R286	8	0699-1360	RESISTOR 46.4 +-1pct .125W TKF TC=0+-100	CRCW120646R4FKE_ RK73H2BT_46R4F MCR18F46R4 232272464649	VISHAY KOA ROHM YAGEO
R116, R117	2	0699-1503	RESISTOR 0 CWM	CRCW12060000ZSE_ RK73Z2BT MCR18J000 232271191005	VISHAY KOA ROHM YAGEO
R122	1	1810-1139	NET-RES 8 10.0K OHM 16-PIN	GM8A-03-1002-D-B TOMC-1603-1002D	TT ELECTRONICS VISHAY
R124, R125	2	0699-1382	RESISTOR 3.83K +-1pct .125W TKF TC=0+-100	CRCW12063K83FKE_ RK73H2BT_3831F MCR18F3831 232272463832L	VISHAY KOA ROHM YAGEO
R129, R130, R161-R170, R254, R256, R257, R322, R323	17	0699-1415	RESISTOR 100 +-1pct .125W TKF TC=0+-100	CRCW1206100RFKE_ RK73H2BT_1000F MCR18F1000 232272461001L	VISHAY KOA ROHM YAGEO

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R13, R76, R140, R145	4	0699-1378	RESISTOR 2.61K +-1pct .125W TKF TC=0+-100	CRCW12062K61FKE_ RK73H2BT_2611F MCR18F2611 232272462612L	VISHAY KOA ROHM YAGEO
R132, R133	2	0699-1361	RESISTOR 51.1 +-1pct .125W TKF TC=0+-100	CRCW120651R1FKE_ RK73H2BT_51R1F MCR18F51R1 232272465119	VISHAY KOA ROHM YAGEO
R134-R136, R301, R302	5	0699-1354	RESISTOR 26.1 +-1pct .125W TKF TC=0+-100	CRCW120626R1FKE_ RK73H2BT_26R1F MCR18F26R1 232272462619	VISHAY KOA ROHM YAGEO
R139, R157, R158	3	0699-1427	RESISTOR 316 +-1pct .125W TKF TC=0+-100	CRCW1206316RFKE_ RK73H2BT_3160F MCR18F3160 232272463161	VISHAY KOA ROHM YAGEO
R14, R55, R72, R74, R115, R266, R276-R279, R283, R284, R293-R296, R304, R326	18	0699-1366	RESISTOR 82.5 +-1pct .125W TKF TC=0+-100	CRCW120682R5FKE_ RK73H2BT_82R5F MCR18F82R5 232272468259	VISHAY KOA ROHM YAGEO
R141, R142, R207, R208	4	0699-1435	RES-FXD 681 OHM +-1PCT .125W TC 0+-100	CRCW1206681RFKE_ RK73H2BT_6810F MCR18F6810 232272466811	VISHAY KOA ROHM YAGEO
R143, R144, R264	3	0699-1375	RESISTOR 1.96K +-1pct .125W TKF TC=0+-100	CRCW12061K96FKE_ RK73H2BT_1961F MCR18F1961 232272461962L	VISHAY KOA ROHM YAGEO
R147	1	0699-2859	RES-FXD 51 OHM +-5PCT 1W TC 0+-200	CRCW251251R0JNE_ RK73B3AT510J MCR100J510	VISHAY KOA ROHM
R148, R344	2	0699-2530	RESISTOR 100 +-1pct .25W TKF TC=0+-100	CRCW1210100RFKE_ RK73H2ET_1000F MCR25F1000	VISHAY KOA ROHM

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R149, R150	2	0699-1439	RESISTOR 110K +-1pct .125W TKF TC=0+-100	CRCW1206110KFKE_ RK73H2BT_1103F MCR18F1103 232272461104L	VISHAY KOA ROHM YAGEO
R15, R19-R27, R60	11	1810-1064	NET-RES 15 10.0K OHM 16-PIN	767161103G SOMC-16-01-103G 4816P-2-103LF	CTS VISHAY BOURNS
R151, R152, R224, R225	4	0699-1337	RESISTOR 383K +-1pct .125W TKF TC=0+-100	CRCW1206383KFKE_ RK73H2BT_3833F MCR18F3833 232272463834	VISHAY KOA ROHM YAGEO
R153, R154	2	0699-1338	RESISTOR 511K +-1pct .125W TKF TC=0+-100	CRCW1206511KFKE_ RK73H2BT_5113F MCR18F5113 232272465114	VISHAY KOA ROHM YAGEO
R155, R156	2	0699-1319	RESISTOR 12.1K +-1pct .125W TKF TC=0+-100	CRCW120612K1FKE_ RK73H2BT_1212F MCR18F1212 232272461213L	VISHAY KOA ROHM YAGEO
R159, R160	2	0699-1443	RESISTOR 147K +-1pct .125W TKF TC=0+-100	CRCW1206147KFKE_ RK73H2BT_1473F MCR18F1473 232272461474	VISHAY KOA ROHM YAGEO
R16, R67, R68, R123, R131, R173, R174, R258-R260, R288, R303, R313-R317, R327	18	0699-1418	RESISTOR 133 +-1pct .125W TKF TC=0+-100	CRCW1206133RFKE_ RK73H2BT_1330F MCR18F1330 232272461331	VISHAY KOA ROHM YAGEO
R17, R56, R57, R58, R71, R190, R211, R212, R310	9	0699-1376	RESISTOR 2.15K +-1pct .125W TKF TC=0+-100	CRCW12062K15FKE_ RK73H2BT_2151F MCR18F2151 232272462152	VISHAY KOA ROHM YAGEO
R171, R172, R209, R210, R268	5	0699-1424	RESISTOR-FXD 237 +-1pct .25W TC 0+-100 1206	CRCW1206237RFKE_ RK73H2BT_2370F MCR18F2370	VISHAY KOA ROHM

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R175, R176	2	0699-1904	RESISTOR 1.62K +-1pct .125W TKF TC=0+-100	CRCW12061K62FKE_ RK73H2BT_1621F MCR18F1621 232272461622L	VISHAY KOA ROHM YAGEO
R179, R180	2	0699-1356	RESISTOR 31.6 +-1pct .25W TKF TC=0+-100	CRCW120631R6FKE_ RK73H2BT_31R6F MCR18F31R6 232272463169	VISHAY KOA ROHM YAGEO
R181, R182, R183, R184	4	0699-2120	RESISTOR 2.7 +-5pct .125W TKF TC=0+-200	MCR18J2R7	ROHM
R187, R188	2	0699-1545	RESISTOR 93.1K +-1PCT .125W TKF TC=0+-100	CRCW120693K1FKE_ RK73H2BT_9312F MCR18F9312 232272469313	VISHAY KOA ROHM YAGEO
R189, R305-R308	5	0699-1434	RES-FXD 619 OHM +-1PCT 0.125W TC 0+-100	CRCW1206619RFKE_ RK73H2BT_6190F MCR18F6190 232272466191	VISHAY KOA ROHM YAGEO
R192, R287	2	0699-1330	RESISTOR 100K +-1pct .125W TKF TC=0+-100	CRCW1206100KFKE_ RK73H2BT_1003F MCR18F1003 232272461004L	VISHAY KOA ROHM YAGEO
R198, R199, R195, R196	4	0699-1430	RESISTOR 422 +-1pct .125W TKF TC=0+-100	CRCW1206422RFKE_ RK73H2BT_4220F MCR18F4220 232272464221	VISHAY KOA ROHM YAGEO
R2	1	0699-1364	RESISTOR 68.1 +-1pct .125W TKF TC=0+-100	CRCW120668R1FKE_ RK73H2BT_68R1F MCR18F68R1 232272466819	VISHAY KOA ROHM YAGEO
R200	1	0699-1380	RESISTOR 3.16K +-1pct .125W TKF TC=0+-100	CRCW12063K16FKE_ RK73H2BT_3161F MCR18F3161 232272463162	VISHAY KOA ROHM YAGEO

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R201, R331	2		RESISTOR 261K +-1pct .125W TKF TC=0+-100	CRCW1206261KFKE_ RK73H2BT_2613F MCR18F2613 232272462614	VISHAY KOA ROHM YAGEO
R202	1	0699-1392	RESISTOR 11K +-1pct .125W TKF TC=0+-100	CRCW120611K0FKE_ RK73H2BT_1102F MCR18F1102 232272461103	VISHAY KOA ROHM YAGEO
R203, R204	2	0699-1388	RESISTOR 7.5K +-1pct .125W TKF TC=0+-100	CRCW12067K50FKE_ RK73H2BT_7501F MCR18F7501 232272467502	VISHAY KOA ROHM YAGEO
R205, R206	2	0699-1437	RESISTOR 825 +-1pct .125W TKF TC=0+-100	CRCW1206825RFKE_ RK73H2BT_8250F MCR18F8250 232272468251	VISHAY KOA ROHM YAGEO
R213, R214	2	0699-1377	RESISTOR 2.37K +-1pct .125W TKF TC=0+-100	CRCW12062K37FKE_ RK73H2BT_2371F MCR18F2371 232272462372L	VISHAY KOA ROHM YAGEO
R216, R217	2	0699-1401	RESISTOR 28.7K +-1pct .125W TKF TC=0+-100	CRCW120628K7FKE_ RK73H2BT_2872F MCR18F2872 232272462873	VISHAY KOA ROHM YAGEO
R222, R223	2	0699-1331	RESISTOR 162K +-1pct .125W TKF TC=0+-100	CRCW1206162KFKE_ RK73H2BT_1623F MCR18F1623 232272461624L	VISHAY KOA ROHM YAGEO
R232, R233	2	0699-1381	RESISTOR 3.48K +-1pct .125W TKF TC=0+-100	CRCW12063K48FKE_ RK73H2BT_3481F MCR18F3481 232272463482	VISHAY KOA ROHM YAGEO

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R234, R235	2		RESISTOR 1.21K +-1pct .125W TKF TC=0+-100	CRCW12061K21FK E_ RK73H2BT_1211F MCR18F1211 232272461212	VISHAY KOA ROHM YAGEO
R236, R237	2	0699-1396	RESISTOR 17.8K +-1pct .125W TKF TC=0+-100	CRCW120617K8FKE_ RK73H2BT_1782F MCR18F1782 232272461783L	VISHAY KOA ROHM YAGEO
R240	1	0699-1369	RESISTOR 1.1K +-1pct .125W TKF TC=0+-100	CRCW12061K10FKE_ RK73H2BT_1101F MCR18F1101 232272461102L	VISHAY KOA ROHM YAGEO
R244-R253	10	0699-1357	RESISTOR 34.8 +-1pct .125W TKF TC=0+-100	CRCW120634R8FKE_ RK73H2BT_34R8F MCR18F34R8 232272463489	VISHAY KOA ROHM YAGEO
R267	1	0699-1785	RESISTOR 13.3K +-1pct .125W TKF TC=0+-100	CRCW120613K3FKE_ RK73H2BT_1332F MCR18F1332 232272461333	VISHAY KOA ROHM YAGEO
R273	1	0699-1428	RESISTOR 348 +-1pct .125W TKF TC=0+-100	CRCW1206348RFKE_ RK73H2BT_3480F MCR18F3480 232272463481	VISHAY KOA ROHM YAGEO
R28, R177, R178	3	0699-1466	RESISTOR 10M +-10pct .125W TKF TC=0+-200	CRCW1206106KJNE_ RK73B2BT_106J MCR18K106 232271161106	VISHAY KOA ROHM YAGEO
R29	1	0699-1403	RESISTOR 31.6K +-1pct .125W TKF TC=0+-100	CRCW120631K6FKE_ RK73H2BT_3162F MCR18F3162 232272463163L	VISHAY KOA ROHM YAGEO

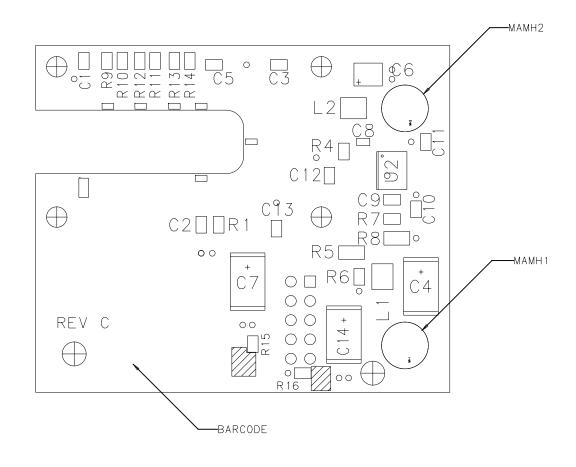
Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R299, R300	2	0699-1344	RESISTOR 10 +-1pct .125W TKF TC=0+-100	CRCW120610R0FKE_ RK73H2BT_10R0F MCR18F10R0 232272461009L	VISHAY KOA ROHM YAGEO
R3	1	0699-1322	RESISTOR 68.1K +-1pct .125W TKF TC=0+-100	CRCW120668K1FKE_ RK73H2BT_6812F MCR18F6812 232272466813	VISHAY KOA ROHM YAGEO
R30-R33, R36-R39, R43-R46, R49-R52, R215, R226-R231, R280, R282, R285	26	0699-1423	RESISTOR 215 +-1pct .125W TKF TC=0+-100	CRCW1206215RFKE_ RK73H2BT_2150F MCR18F2150 232272462151L	VISHAY KOA ROHM YAGEO
R318	1	0699-2979	RESISTOR 1.21K +-1pct .1W TKF TC=0+-100	CRCW08051K21FKE_ RK73H2AT_1211F MCR10F1211 232273461212 MC08051211-FT	VISHAY KOA ROHM YAGEO RCD COMPONENTS
R324, R325, R328, R329	4	0699-1421	RESISTOR 178 +-1pct .125W TKF TC=0+-100	CRCW1206178RFKE_ RK73H2BT_1780F MCR18F1780 232272461781	VISHAY KOA ROHM YAGEO
R335	1	0699-2643	RES-FXD 0 OHM +-5PCT .1W TC 0+-300	CRCW08050000ZSE_ CR21-000-ZL MCR10J000 RK73Z2AT 232273091002L ZC0805-TW	VISHAY ASJ ROHM KOA YAGEO RCD COMPONENTS
R339, R342	2	0699-3034	RESISTOR 1K +-1pct .1W TKF TC 0+-100	CRCW08051K00FKE_ RK73H2AT_1001F 232273461002L MCR10F1001 MC08051001-FT	VISHAY KOA YAGEO ROHM RCD COMPONENTS
R34, R35, R40, R41, R62, R113, R114, R275	8	0699-1419	RESISTOR 147 +-1pct .125W TKF TC=0+-100	CRCW1206147RFKE_ RK73H2BT_1470F MCR18F1470 232272461471L	VISHAY KOA ROHM YAGEO

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R341	1	0699-2887	RESISTOR 31.6 +-1pct .1W TKF TC=0+-100	CRCW080531R6FKE_ RK73H2AT_31R6F MCR10F31R6 MC080531R6-FT	VISHAY KOA ROHM RCD COMPONENTS
R4, R185, R186	3	0699-1407	RESISTOR 46.4K +-1pct .125W TKF TC=0+-100	CRCW120646K4FKE_ RK73H2BT_4642F MCR18F4642 232272464643	VISHAY KOA ROHM YAGEO
R42, R78, R220, R221, R265	5	0699-1417	RESISTOR 121 +-1pct .125W TKF TC=0+-100	CRCW1206121RFKE_ RK73H2BT_1210F MCR18F1210 232272461211	VISHAY KOA ROHM YAGEO
R47, R48	2	0699-1426	RESISTOR 287 +-1pct .125W TKF TC=0+-100	CRCW1206287RFKE_ RK73H2BT_2870F MCR18F2870 232272462871	VISHAY KOA ROHM YAGEO
R53, R54, R65, R66, R69, R70	6	0699-1391	RESISTOR 10K +-1pct .125W TKF TC=0+-100	CRCW120610K0FKE_ RK73H2BT_1002F MCR18F1002 232272461003L	VISHAY KOA ROHM YAGEO
R6	1	0699-1448	RESISTOR 316K +-1pct .125W TKF TC=0+-100	CRCW1206316KFKE_ RK73H2BT_3163F MCR18F3163 232272463164	VISHAY KOA ROHM YAGEO
R61, R146, R238, R239, R242, R243, R312	7	0699-1372	RESISTOR 1.47K +-1pct .125W TKF TC=0+-100	CRCW12061K47FKE_ RK73H2BT_1471F MCR18F1471 232272461472	VISHAY KOA ROHM YAGEO
R64	1	0699-1385	RES-FXD 5.11K +-1PCT .125W TC 0+-100	CRCW12065K11FKE_ RK73H2BT_5111F MCR18F5111 232272465112L	VISHAY KOA ROHM YAGEO

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R7, R8, R9, R10, R11	5		RESISTOR 5.62K +-1pct .125W TKF TC=0+-100	CRCW12065K62FKE_ RK73H2BT_5621F MCR18F5621 232272465622L	VISHAY KOA ROHM YAGEO
R75, R137, R138, R197, R255, R269, R271, R272	8	0699-1432	RESISTOR 511 +-1pct .125W TKF TC=0+-100	CRCW1206511RFKE_ RK73H2BT_5110F MCR18F5110 232272465111L	VISHAY KOA ROHM YAGEO
U1	1	1820-6075	IC CNTR CMOS/HCT DECD ASYNCHRO	74HCT390D 74HCT390D	PHILIPS NXP
U12, U13	2	1818-4983	IC 256K-BIT SRAM 15-NS CMOS	IDT71256SA15YG CY7C199CN-15VXC	IDT CYPRESS SEMICONDUCTOR
U14	1	1818-5128	IC 64K-BIT EEPROM 200-NS CMOS	AT28C64B-15JU	ATMEL
U15, U16, U17, U18	4		IC DCDR-DEMUXR CMOS/AC BIN 8-TO-1-LINE		ON SEMICONDUCTOR
U19	1		IC MUXR/DATA-SEL CMOS/AC 8-TO-1-LINE	74AC251SCX.	FAIRCHILD SEMICONDUCTOR
U2	1		IC MUXR/DATA-SEL 4-TO-1-LINE 16-SOIC	74HC253D 74HC253D	PHILIPS NXP
U20	1	1822-0639	IC GPIB CONTROLLER	14063-501	AMIS SEMICONDUCTOR
U21	1		IC INTERFACE XCVR BIPOLAR BUS OCTL	SN75ALS160DW	TEXAS INSTRUMENTS
U22	1		IC INTERFACE XCVR BIPOLAR BUS OCTL	SN75ALS162DW	TEXAS INSTRUMENTS
U23	1		IC INTFC DRVR/RCVR BIPOLAR DUAL 18-SOIC	LT1180ACSW	LINEAR TECHNOLOGY
U25	1	1826-1897	IC PWR MGT-VS-SUPVR/CONT	TL7705ACD1/A TL7705ACD	STMICROELECTRONICS TEXAS INSTRUMENTS
U26, U49	2	1820-6412	TRANSISTOR ARRAY 16-PIN PLSTC SURFACE	ULN2003AD MC1413DG	TEXAS INSTRUMENTS ON SEMICONDUCTOR
U27, U28, U29	3	1820-7281	IC TRANSCEIVER CMOS/ACL BUS OCTL	74ACT11245DW	TEXAS INSTRUMENTS
U3	1		IC PL LOOP LP SINGLE 16 PIN PLSTC-SOIC	74HCT7046AD 74HCT7046AD	PHILIPS NXP
U30	1	0950-2325	DC-DC-CONV 12 VDC NOM INP; DL-OUT	E2577VF	ENDICOTT RESEARCH GROUP
U31	1		IC FF CMOS/ACT D-TYPE POS-EDGE-TRIG	MC74ACT74DG SN74ACT74D 74ACT74SCX	ON SEMICONDUCTOR TEXAS INSTRUMENTS FAIRCHILD SEMICONDUCTOR
U32	1	1820-5235	IC GATE TTL/ALS AND QUAD 2-INP	DM74ALS09MX	FAIRCHILD SEMICONDUCTOR
		1020-0200	IN CALL TIEMED MIND QUAD Z-IIVI	PINIT TI LEGODINIA	I / III O I II D CEMIOONDOOTOK

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
J33, U34	2	1820-5938	IC GATE CMOS/ACT NAND QUAD 2-INP	MC74ACT00DG	ON SEMICONDUCTOR
				SN74ACT00D	TEXAS INSTRUMENTS
				74ACT00SCX	FAIRCHILD SEMICONDUCTOR
J35	1		IC RCVR ECL/10KH LINE TPL	MC10H116FNG	ON SEMICONDUCTOR
J36	1		IC PWR MGT-V-REG-FXD-POS 4.8/5.2V	UA78L05ACD	TEXAS INSTRUMENTS
			8 PINS	MC78L05ACDR2G	ON SEMICONDUCTOR
				LM78L05ACM NOPB	NATIONAL SEMICONDUCTOR
J37, U38	2	1826-1601	IC PWR MGT-V-REF-ADJ 2.5/36V 8 PINS	TL431CD	TEXAS INSTRUMENTS
				LM431ACMNOPB	NATIONAL SEMICONDUCTOR
J39, U40	2	1820-6277	IC SHF-RGTR CMOS/HC SYNC/ASYNC	MC74HC595ADG	ON SEMICONDUCTOR
			SERIAL-IN	MM74HC595M	FAIRCHILD SEMICONDUCTOR
				N74HC595D	PHILIPS
				SN74HC595D	TEXAS INSTRUMENTS
				N74HC595D	NXP
J4	1	1826-2494	D/A 6-BIT 20-P-SOIC CMOS		
J42, U48	2	1826-1738	IC PWR MGT-V-REG-FXD-NEG -4.8/-5.2V 3	MC79M05CDTG	ON SEMICONDUCTOR
J44	1	1826-2420	IC OP AMP LOW-POWER-BIPOLAR-DUAL	AD706JRZ	ANALOG DEVICES
			8-SOIC		
J45	1	1820-6867	IC GATE ECL/10KH OR QUAD 2-INP	MC10H103FN G	ON SEMICONDUCTOR
J46, U47	2	1826-2722	D/A 12-BIT 16-P-SOIC CMOS	AD7243AR	ANALOG DEVICES
J5	1	1826-1848	IC PWR MGT-V-REF-FXD 2.475/2.525V 8 PINS	MC1403DG	ON SEMICONDUCTOR
J50	1	1820-5390	IC XLTR ECL/10KH ECL-TO-TTL QUAD	MC10H125FNG	ON SEMICONDUCTOR
J51	1			MC10H107FNG	ON SEMICONDUCTOR
J52, U53	2		IC FF ECL/10KH J-K M/S POS-EDGE-TRIG	MC10H135FNG	ON SEMICONDUCTOR
J54, U55	2	1826-2229	IC COMPARATOR HS DUAL 20 PIN PLCC	AD96687BPZ	ANALOG DEVICES
J56	1		IC COMPARATOR GP DUAL 14 PIN PLSTC-SOIC	LM319M-NOPB	NATIONAL SEMICONDUCTOR
J57, U64	2			LT1008S8	LINEAR TECHNOLOGY
J58	1		IC-PLD FPGA UNPRGMD CMOS XC3142A	XC3142A-4PC84C	XILINX
			84-PLCC		
J59	1	1821-1489	IC PLD FPGA UNPRGMD CMOS 3042	XC3042A-7PC84C	XILINX
J6	1		IC DRVR CMOS/ACL BUS OCTL	74ACT11244DW	TEXAS INSTRUMENTS
J60, U61	2	1826-2351	A/D 10-BIT 28-PLCC BPLR	AD7580JP	ANALOG DEVICES
J62, U63	2		A/D 8-BIT 20-PLCC CMOS	TLC0820ACFN	TEXAS INSTRUMENTS
J65	1		IC FF ECL/10KH D-M/S POS-EDGE-TRIG	MC10H131FNG	ON SEMICONDUCTOR
J7	1		IC MODULAR MICROCONTROLLER;16MHZ	MC68331CEH16	FREESCALE SEMICONDUCTOR
VR1, VR2	2		DIODE-ZNR 6.2V 5pct PD=1.5W IR=5UA	1SMB5920BT3G	ON SEMICONDUCTOR
,	4		SOCKET-IC-PLCC 32-CONT RECTGLR J-LEAD		TYCO ELECTRONICS AMP
XU8, XU9, XU10, XU11	1 -				

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
Y1	1	0410-2153			FOX ELECTRONICS EPSON TOYOCOM
Y2	1	0410-0423		0410-0423 BK3-1B-10MHZ	CTS FCP BLILEY ELECTRIC COMPANY VECTRON



53132-68015 COMPONENT LOCATOR TOPSIDE REV

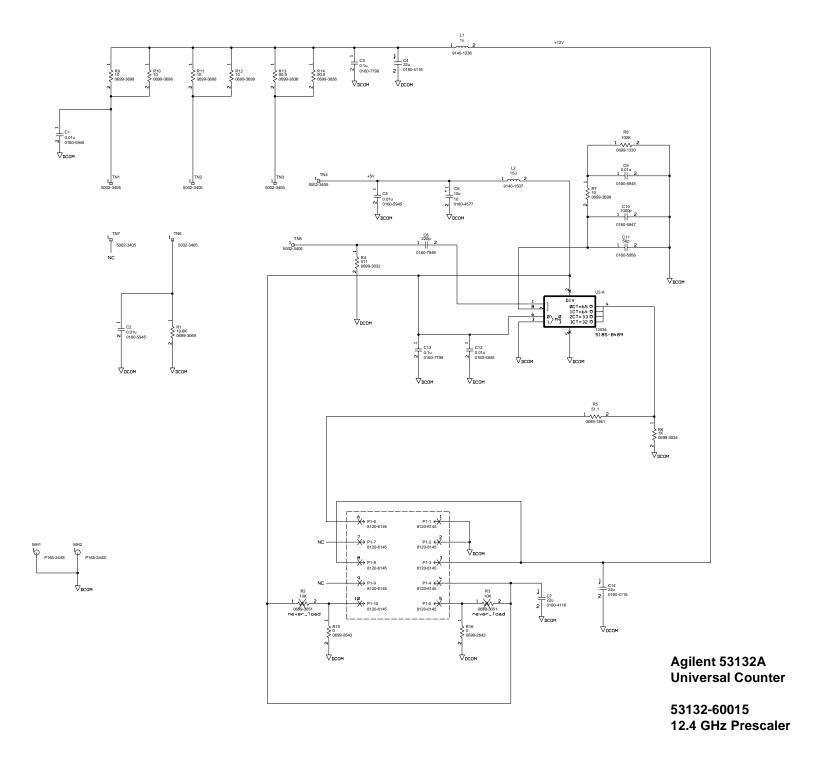
REV C

NOTES:

- 1) RESISTORS R2/R15 AND R3/R16 SHARE A COMMON PAD. ONLY ONE RESISTOR OF EITHER PAIR WILL BE LOADED. HATCHED PARTS ARE NOT LOADED FOR THIS ASSEMBLY.
- 2) PADS AROUND CUTOUT ARE WIRE BONDING PADS FOR NEXT LEVEL ASSEMBLY.

Agilent 53132A Universal Counter

53132-60015 Component Locator 12.4 GHz Prescaler



53132-60015 Parts List

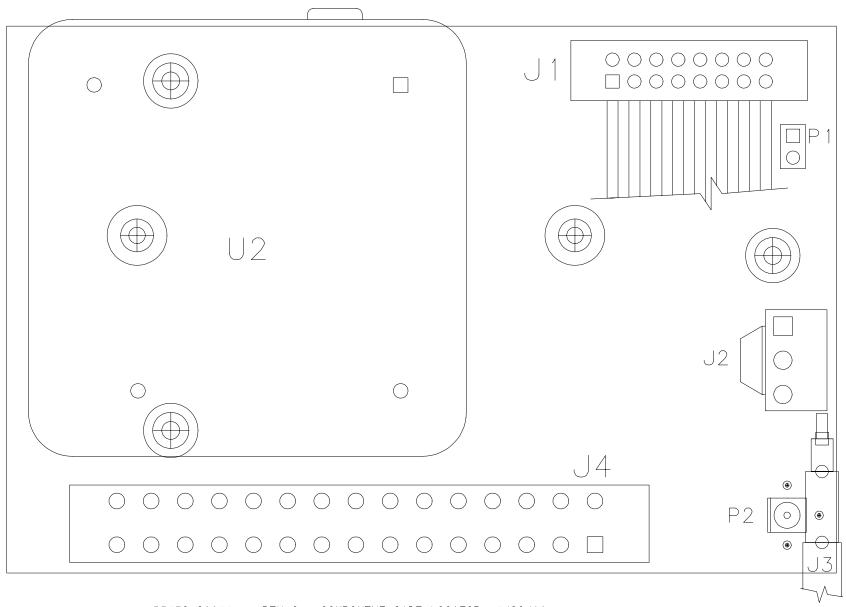
Reference			OUTOE OUT OF UITS EIGH		
Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C1, C2, C5, C9, C12	5	0160-5945	CAP-FXD 0.01uF +-10pct 50 V CER X7R	08055C103KAT A 223858016627 C0805C103K5RAC C2012X7R1H103K GRM216R71H103KA01J VJ0805Y103KXAMT	AVX YAGEO KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C10	1	0160-5947	CAP-FXD 1000pF +-10pct 50 V CER X7R	08055C102KAT A C0805C102K5RAC C2012X7R1H102K GRM216R71H102KA01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C11	1	0160-5956	CAP-FXD 56pF +-5pct 50 V CER C0G	08055A560JAT A C0805C560J5GAC C2012COG1H560J GRM2165C1H560JD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C3, C13	2	0160-7798	CAP-FXD 0.1uF +-10PCT 50V CER X7R	GRM21BR71H104KA11L VJ0805Y104KXAMT 08055C104KAT_A C0805C104K5RAC C2012X7R1H104K	MURATA MANUFACTURING VISHAY AVX KEMET ELECTRONICS TDK
C4, C7, C14	3	0180-4116	CAP-FXD 22uF +-20PCT 20V TA	TAJD226M020 293D226X0020D2E3 ESVD1D226M SK2-1D226M-RD0	AVX VISHAY NEC TOKIN ELNA
C6	1	0180-4577	CAPACITOR-FIXED 10uF +-20PCT 10V TA	TAJB106M010R 293D106X0010B2E3 ESVB21A106M T491B106M010AS	AVX VISHAY NEC ELECTRONICS KEMET ELECTRONICS
C8	1	0160-7849	CAP-FXD 220pF +-5pct 50 V CER C0G	06035A221JAT C0603C221J5GAC C1608C0G1H221J	AVX KEMET ELECTRONICS TDK
L1	1	9140-1236	INDUCTOR 1uH +-5pct 2.8W-mmX3.4LG-mm Q=30	NLV32T-1R0J-PF KL32T1R0J	TDK KOA

53132-60015 Parts List

Reference					
Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
L2	1	9140-1507	INDUCTOR 15uH +-5pct 2.8W-mmX3.4LG-mm Q=30	NLV32T-150J-PF KL32T150J	TDK KOA
MAMH1, MAMH2	2	0380-1186	STANDOFF-PRESS-IN 10.00 MM LG; M 3.0 X	KFE-M3-10ZI	PENN ENGINEERING & MFG
R1	1	0699-3069	RESISTOR 19.6K +-1pct .1W TKF TC=0+-100	CRCW080519K6FKE_ RK73H2AT_1962F MCR10F1962 232273471963	VISHAY KOA ROHM YAGEO
R13, R14	2	0699-3836	RESISTOR 90.9 +-1pct .1W TKF TC=0+-100	CRCW080590R9FKE_ RK73H2AT_90R9F MCR10F90R9 232273469099 MC080590R9-FT	VISHAY KOA ROHM YAGEO RCD COMPONENTS
R15, R16	2	0699-2643	RES-FXD 0 OHM +-5PCT .1W TC 0+-300	CRCW08050000ZSE_ CR21-000-ZL MCR10J000 RK73Z2AT 232273091002L ZC0805-TW	VISHAY ASJ ROHM KOA YAGEO RCD COMPONENTS
R4	1	0699-3032	RESISTOR 511 +-1pct .1W TKF TC=0+-100	CRCW0805511RFKE_ RK73H2AT_5110F MCR10F5110 232273465111 MC08055110-FT	VISHAY KOA ROHM YAGEO RCD COMPONENTS
R5	1	0699-1361	RESISTOR 51.1 +-1pct .125W TKF TC=0+-100	CRCW120651R1FKE_ RK73H2BT_51R1F MCR18F51R1 232272465119	VISHAY KOA ROHM YAGEO
R6	1	0699-3034	RESISTOR 1K +-1pct .1W TKF TC 0+-100	CRCW08051K00FKE_ RK73H2AT_1001F 232273461002L MCR10F1001 MC08051001-FT	VISHAY KOA YAGEO ROHM RCD COMPONENTS

53132-60015 Parts List

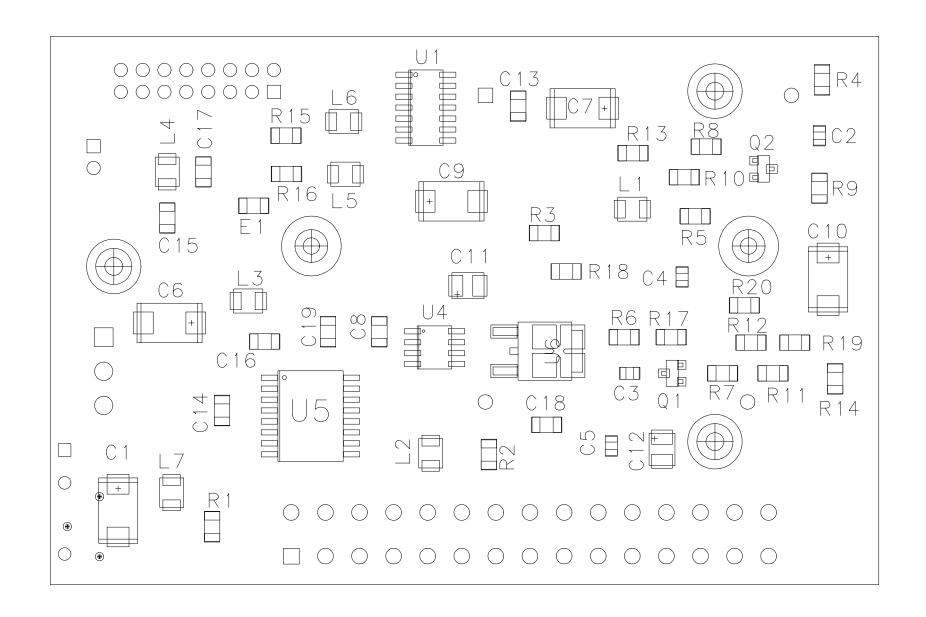
Reference Designator	041	Agilont D/N	Decariotion	MPN	Manufacturar
Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R7, R9, R10, R11, R12	5	0699-3698	·	MCR10F10R0	VISHAY KOA ROHM RCD COMPONENTS
R8	1	0699-1330	·		VISHAY KOA ROHM YAGEO
U2	1	5185-8489	PPN for 1821-0246		
U2a		1821-0246	IC PRESCR ECL	ML12034-5P	LANSDALE SEMICONDUCTOR



53132-20011 REV C COMPONENT SIDE LOCATOR 1/22/96

Agilent 53132A Universal Counter

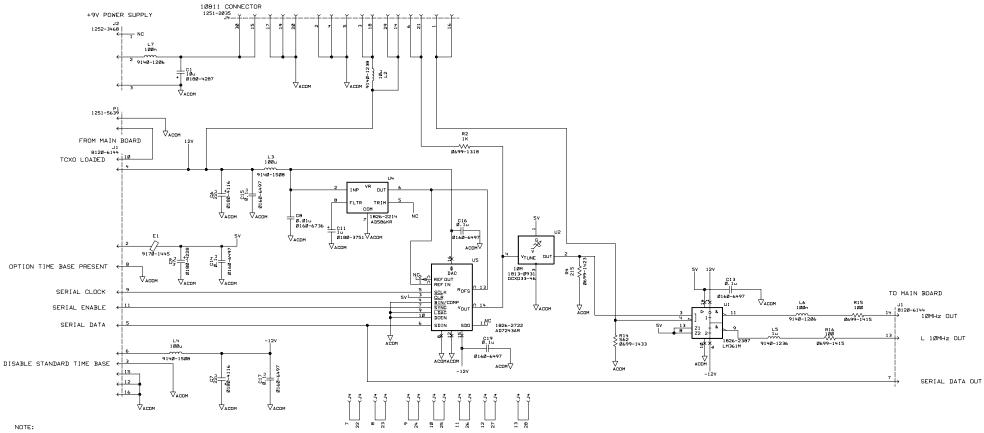
53132-60016 Component Locator (Component Side)



Agilent 53132A Universal Counter

53132-20011 REV C CIRCUIT SIDE LOCATOR 1/22/96

53132-60016 Component Locator (Circuit Side)



PLACE JUMPER ACROSS P1 WHEN THE 10811 IS USED, (OPTION 10 OR 12)

REMOVE JUMPER WHEN TOXO IS USED, (OPTION Ø1)

Agilent 53132A Universal Counter

53132-60016 Optional Time Base

Page 1 of 1

53132-60016 Parts List

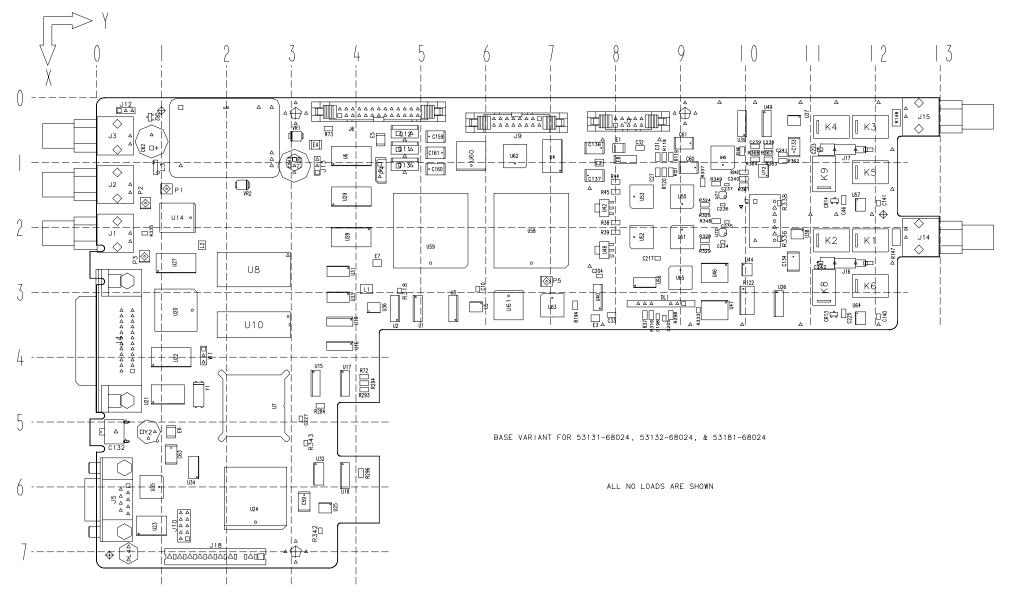
Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C1	1		CAP-FXD 10uF +-20PCT 35V TA	TAJD106M035 293D106X0035D2WE3 ESVD1V106M	AVX VISHAY NEC ELECTRONICS
C11	1	0180-3751	CAP-FXD 1uF +-20PCT 35V TA	TAJB105M035 293D105X0035B2E3 ESVB21V105M SK-1V105M-RB	AVX VISHAY NEC ELECTRONICS ELNA
C13-C19	6	0160-6497	CAP-FXD 0.1uF +-10pct 50 V CER X7R	12065C104KAT A 2238 581 15649 C1206C104K5RAC C3216X7R1H104KT GRM319R71H104KA01D VJ1206Y104KXAMT	AVX YAGEO KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C6,C7	2	0180-4116	CAP-FXD 22uF +-20PCT 20V TA	TAJD226M020 293D226X0020D2E3 ESVD1D226M SK2-1D226M-RD0	AVX VISHAY NEC TOKIN ELNA
C8	1	0160-6736	CAP-FXD 0.01uF +-10pct 50 V CER X7R	12065C103KAT A C1206C103K5RAC C3216X7R1H103K GRM316R71H103KD01D VJ1206Y103KXAMT	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C9	1	0180-4228	CAP-FXD 47uF +-20PCT 10V TA	TAJD476M010 293D476X0010D2WE3 49MC476D010M0AS ESVD1A476M	AVX VISHAY VISHAY BC COMPONENTS NEC ELECTRONICS
E1	1	9170-1445	CORE-SHIELDING BEAD	HF70ACB-321611	TDK
H1-H3	3		THREADED INSERT-STDF M3 X 0.5 6-MM-LG	KFB3-M3-6-ET	PENN ENGINEERING & MFG
J1	1		CA-ASSY MULTICOND 16-COND MULTI-CONT CONN BOTH SIDE	80-6105-1873-2	3M
J2	1		CONN-POST TYPE .156-PIN-SPCG-MTG-END	26-60-4030	MOLEX
J4	1	1251-2035	CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	252-15-30-301 EB81-BN15TGW	LABINAL COMPONENTS & SYSTEMS VISHAY

53132-60016 Parts List

Reference					
Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
L2	1	9140-1238	INDCTR-FXD 10uH +-5PCT Q 30 2.8W X 3.4LG-MM	NLV32100J-PF KL32T100J	TDK KOA
L3,L4	2	9140-1508	INDUCTOR 100uH +-5pct 2.8W-mmX3.4LG-mm	NLV32T-101J-PF KL32T101J	TDK KOA
L5	1	9140-1236	INDUCTOR 1uH +-5pct 2.8W-mmX3.4LG-mm Q=30	NLV32T-1R0J-PF KL32T1R0J	TDK KOA
L6,L7	2	9140-1206	INDUCTOR 100nH +-5pct 2.8W-mmX3.4LG-mm	NLV32T-R10J-PF KL32TR10J	TDK KOA
LBL1	1	7121-5459	LABEL-ANTISTATIC 2-IN-WD 3-IN-LG PPR	7121-5459 9035	SPECIALTY ENTERPRISES SANMINA-SCI
LBL2	1	7121-5729	LBL-LNE-PTR; 1.5-IN-WD X .25-IN-LG	THT-45-457-10	BRADY
MP2	1	1258-0141	JUMPER-REMOVABLE FOR 0.025 IN SQ PINS	65474-004LF 530153-2	FCI FRAMATOME BERG TYCO ELECTRONICS AMP
MP3	1	53132-60213	CBL JUMPER AY		
P1	1	1251-5639	CONN-POST TYPE .100-PIN-SPCG-MTG-END	5-146281-2 68001-102HLF	TYCO ELECTRONICS AMP FCI FRAMATOME BERG
R14	1	0699-1433	RESISTOR 562 +-1pct .125W TKF TC=0+-100	CRCW1206562RFKE_ RK73H2BT_5620F MCR18F5620 232272465621	VISHAY KOA ROHM YAGEO
R15,R16	2	0699-1415	RESISTOR 100 +-1pct .125W TKF TC=0+-100	CRCW1206100RFKE_ RK73H2BT_1000F MCR18F1000 232272461001L	VISHAY KOA ROHM YAGEO
R2	1	0699-1318	RESISTOR 1K +-1pct .125W TKF TC=0+-100	CRCW12061K00FKE_ RK73H2BT_1001F MCR18F1001 232272461002L	VISHAY KOA ROHM YAGEO

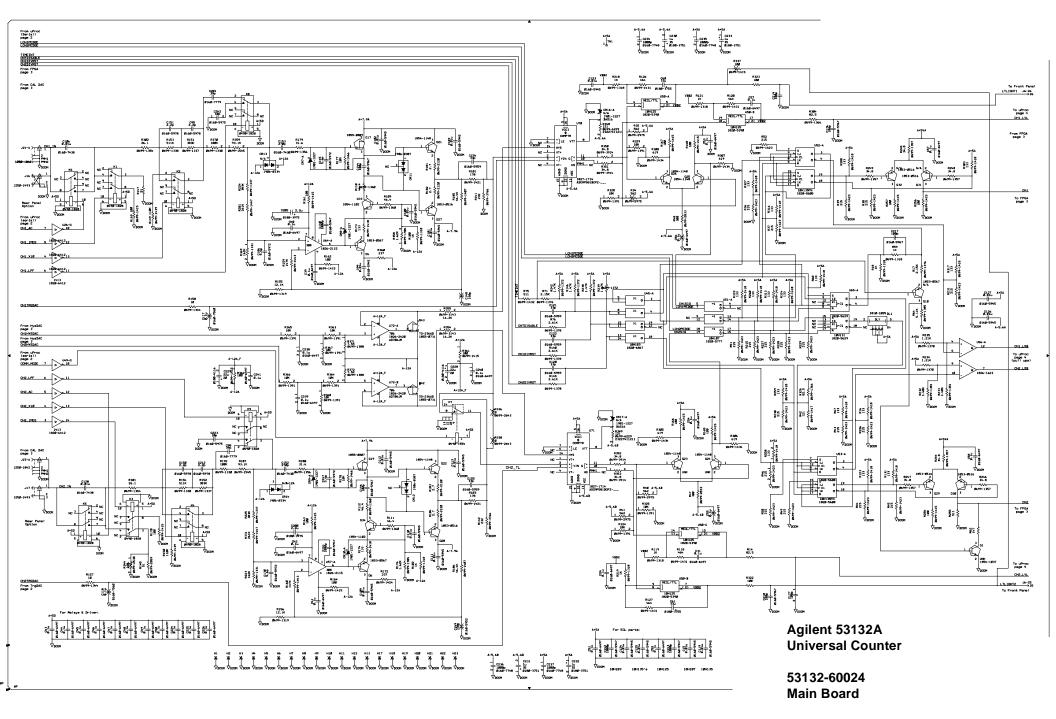
53132-60016 Parts List

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R4	1	0699-1423	RESISTOR 215 +-1pct .125W TKF TC=0+-100		VISHAY KOA ROHM YAGEO
U1	1	1826-2387	IC COMPARATOR HS 14 PIN PLSTC-SOIC	LM361MNOPB	NATIONAL SEMICONDUCTOR
U4	1	1826-2214	IC PWR MGT-V-REF-FXD 4.995/5.005V 8 PINS	AD586KRZ	ANALOG DEVICES
U5	1	1826-2722	D/A 12-BIT 16-P-SOIC CMOS	AD7243AR	ANALOG DEVICES
	1	1252-7969	INSULATOR-POST CONN	09-50-8031	MOLEX
	2	1251-2992	CONTACT-CONN U/W-UTIL FEM CRP	08-50-0108	MOLEX
		8150-0048	WIRE 26AWG BK 300V PVC 7X34 80C ;	8150-0048	JUDD WIRE
			WIRE-ELECTRICAL ; COLOR: BLACK	F-1110-5115-DL 8150-0048	FILECA BELDEN CDT

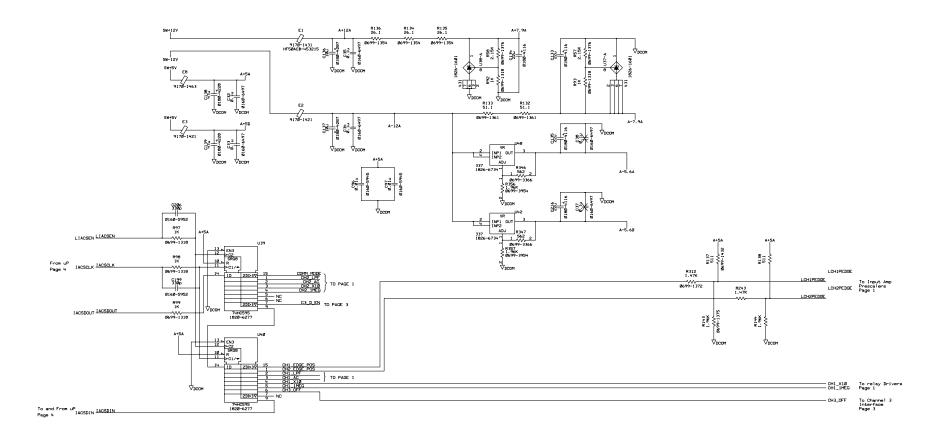


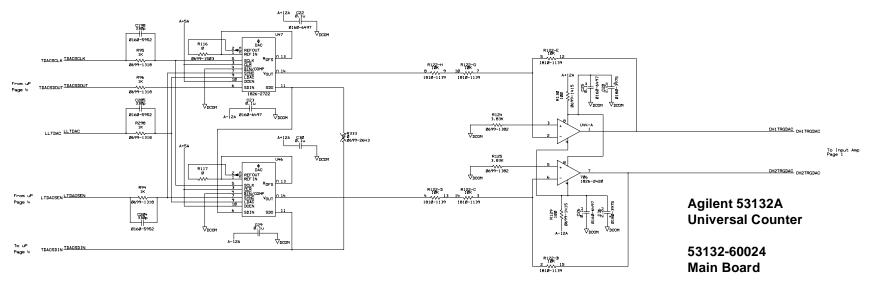
Agilent 53132A Universal Counter

53132-60024 Component Locator - Main Board

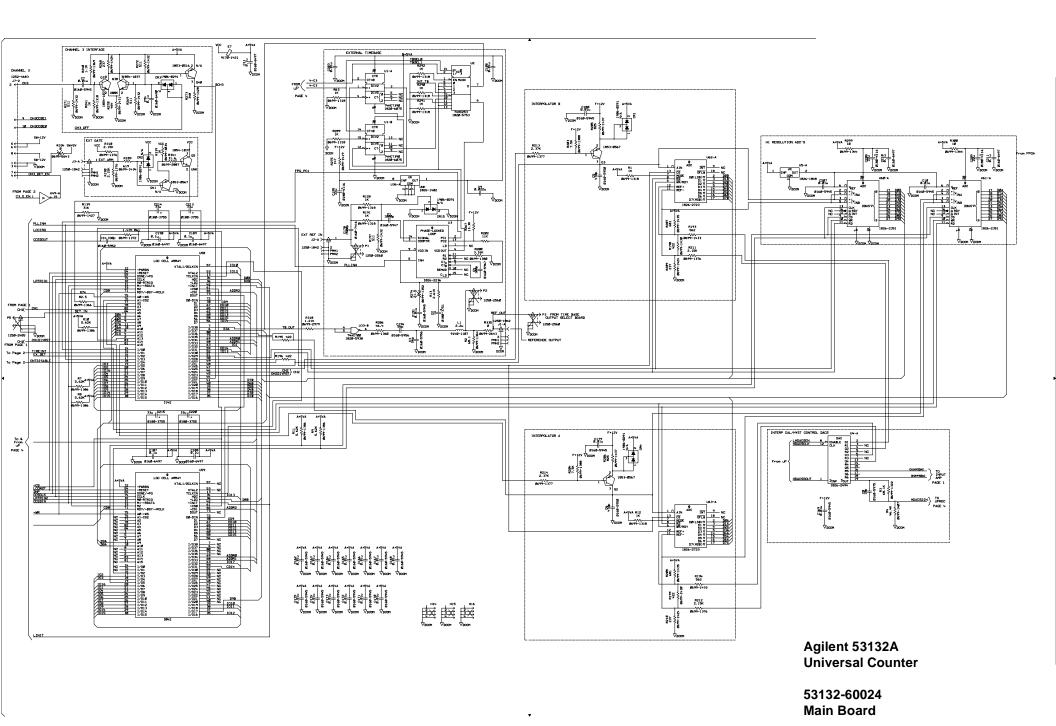


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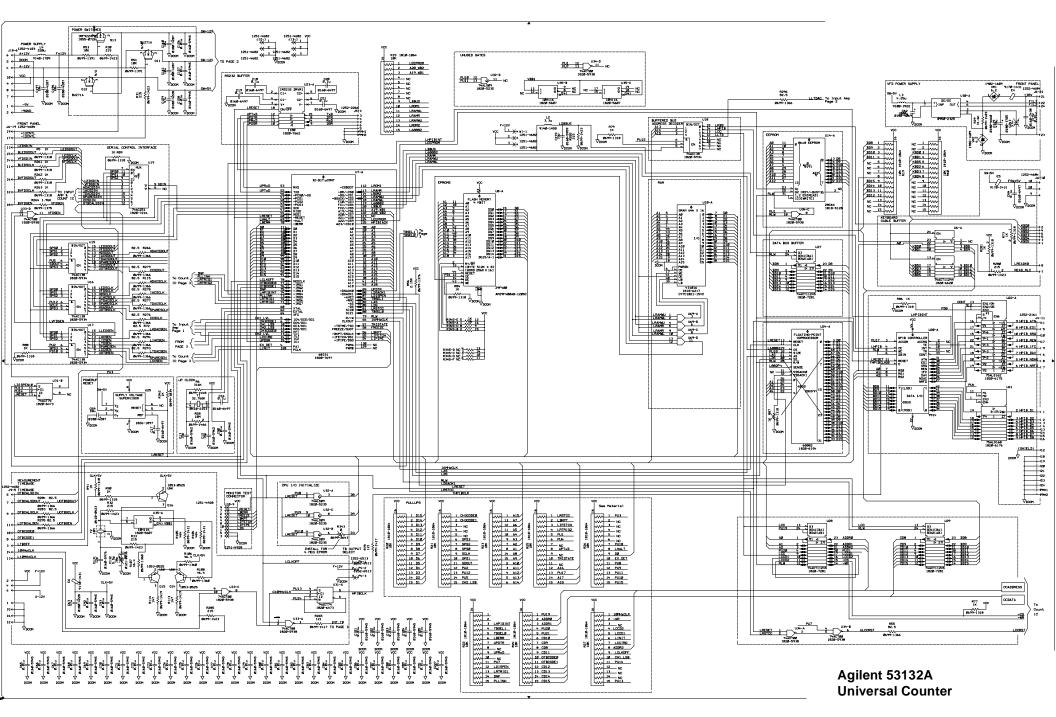




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53132-60024 Main Board

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Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C1, C140, C141, C142, C143	5	0160-5947	CAP-FXD 1000pF +-10pct 50 V CER X7R	08055C102KAT A C0805C102K5RAC C2012X7R1H102K GRM216R71H102KA01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C106, C128, C192	3	0160-7438	CAP-FXD 0.01uF +-10pct 500 V CER X7R	12107C103KAT A 501S41W103KV6	AVX JOHANSON DIELECTRICS
C108, C203	2	0160-6736	CAP-FXD 0.01uF +-10pct 50 V CER X7R	12065C103KAT A C1206C103K5RAC C3216X7R1H103K GRM316R71H103KD01D VJ1206Y103KXAMT	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C11, C16-C27, C29-C35, C39-C54, C57, C58, C64, C94, C187-C190, C210, C211, C224-C226, C238- C241	53	0160-6497	CAP-FXD 0.1uF +-10pct 50 V CER X7R	12065C104KAT A 2238 581 15649 C1206C104K5RAC C3216X7R1H104KT GRM319R71H104KA01D VJ1206Y104KXAMT	AVX YAGEO KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C12, C13	2	0160-5962	CAP-FXD 15pF +-5pct 50 V CER C0G	08055A150JAT A C0805C150J5GAC C2012COG1H150J GRM2165C1H150JD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C120-C122, C154, C155, C193	6	0160-5959	CAP-FXD 33pF +-5pct 50 V CER C0G	08055A330JAT A C0805C330J5GAC C2012COG1H330J GRM2165C1H330JD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C129	1	0180-4660	CAP-FXD 470uF +-20pct 63 V AL-ELCTLT	KME63VB471M12X25LL	NIPPON CHEMI-CON
C130, C145, C147, C186	4		CAP-FXD 5.6pF 50 V CER COG	08055A5R6DATA C0805C569D5GAC C2012COG1H5R6D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C131	1	0160-5976	CAP-FXD 12pF +-5pct 50 V CER C0G	08051A120JAT A C0805C120J5GAC C2012COG1H120J GRM2165C1H120JD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C133, C134, C135, C195, C208, C209, C216, C228, C229	9	0180-4116	CAP-FXD 22uF +-20PCT 20V TA	TAJD226M020 293D226X0020D2E3 ESVD1D226M SK2-1D226M-RD0	AVX VISHAY NEC TOKIN ELNA
C14, C198, C199, C204, C205, C206	6	0160-5952	CAP-FXD 330pF +-5pct 50 V CER C0G	08055A331JAT A C0805C331J5GAC C2012COG1H331J GRM2165C1H331JA01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C152, C153	2	0160-7430	CAP-FXD 270pF +-5pct 500 V CER C0G	12107A271JAT A 501S41N271JV6	AVX JOHANSON DIELECTRICS
C178	1	0160-7416	CAP-FXD 1500pF +-10pct 50 V CER X7R	C0805C152K5RAC C2012X7R1H152KT	KEMET ELECTRONICS TDK
C2, C230, C231, C232, C233	5	0180-3751	CAP-FXD 1uF +-20PCT 35V TA	TAJB105M035 293D105X0035B2E3 ESVB21V105M SK-1V105M-RB	AVX VISHAY NEC ELECTRONICS ELNA
C234, C235, C236, C237	4	0160-7748	CAP-FXD 1000pF +-10PCT 50V CER X7R 0603	06035C102KAT 223858615614 C0603C102K5RAC C1608X7R1H102KT GRM188R71H102KA01D VJ0603Y102KXA	AVX YAGEO KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C28, C36, C200, C202	4	0180-3975	CAP-FXD 2.2uF +-20PCT 20V TA	TAJB225M020 293D225X0020B2E3 49MC225B020M0AS ESVB21D225M T491B225M020AS	AVX VISHAY VISHAY BC COMPONENTS NEC ELECTRONICS KEMET ELECTRONICS

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C3, C194	2	0160-5956	CAP-FXD 56pF +-5pct 50 V CER C0G	08055A560JAT A C0805C560J5GAC C2012COG1H560J GRM2165C1H560JD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C4, C144, C146, C176, C177, C217, C218, C219	8	0160-5967	CAP-FXD 100pF +-5pct 50 V CER C0G	08055A101JAT A C0805C101J5GAC C2012COG1H101J GRM2165C1H101JA01D VJ0805A101JXAMT	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C5, C6	2	0160-5950	CAP-FXD 470pF +-5pct 50 V CER C0G	08055A471JAT A C0805C471J5GAC C2012COG1H471J GRM2165C1H471JA01D VJ0805A471JXAMT	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C59, C136, C137, C160, C161, C196, C197	7	0180-4287	CAP-FXD 10uF +-20PCT 35V TA	TAJD106M035 293D106X0035D2WE3 ESVD1V106M	AVX VISHAY NEC ELECTRONICS
C60, C61, C213, C214, C215, C220	6	0180-3755	CAP-FXD 33uF +-20PCT 10V TA	TAJD336M010 293D336X0010D2E3 ESVD1A336M T491D336M010AS	AVX VISHAY NEC ELECTRONICS KEMET ELECTRONICS
C62	1	0180-4069	CAP-FXD 1000uF +-20pct 25 V AL-ELCTLT	SME25VB102M12X20FT	NIPPON CHEMI-CON
C63, C138, C139, C159	4		CAP-FXD 47uF +-20PCT 10V TA	TAJD476M010 293D476X0010D2WE3 49MC476D010M0AS ESVD1A476M	AVX VISHAY VISHAY BC COMPONENTS NEC ELECTRONICS
C7, C10, C15, C65-C97, C99-C103, C109-C113, C119, C123-C127, C156-C158, C162-C175, C179-C185, C191, C207, C227	77	0160-5945	CAP-FXD 0.01uF +-10pct 50 V CER X7R	08055C103KAT A 223858016627 C0805C103K5RAC C2012X7R1H103K GRM216R71H103KA01J VJ0805Y103KXAMT	AVX YAGEO KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C8, C223, C242	3	0160-5975	CAP-FXD 10pF +-5pct 50 V CER C0G		AVX KEMET ELECTRONICS MURATA MANUFACTURING

Reference Designator	Qty	Agilent P/N	53132-60024 Parts List	MPN	Manufacturer
		_	Description		
C9	1	0160-6728	CAP-FXD 0.022uF +-10pct 50 V CER X7R	C3216X7R1H223K	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C95, C150, C151, C212	4	0160-5978	CAP-FXD 2.2pF 50 V CER C0G	08055A2R2DATA C0805C229D5GAC C2012COG1H2R2C GRM2165C1H2R2CD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C98, C201	2	0160-7779	CAP-FXD 39pF +-5PCT 500 V CER C0G 1206	12067A390JAT_A 501R18N390JV6_	AVX JOHANSON DIELECTRICS
CR1-CR4, CR15	5	1906-0291	DIODE-DUAL 70V 100MA T0-236AA	BAV99 BAV99 BAV99LT1G BAV99X_ BAV99	PHILIPS FAIRCHILD SEMICONDUCTOR ON SEMICONDUCTOR INFINEON TECHNOLOGIES NXP
CR11, CR12	2	1906-0387	DIODE-DUAL 30V TO-236AB (SOT-23)	MMBD1703A	FAIRCHILD SEMICONDUCTOR
CR13, CR14	2		DIODE-DUAL 200V 200MA T0-236AA	MMBD1503A	FAIRCHILD SEMICONDUCTOR
CR7-CR10, CR16, CR17	6		DIODE-SWITCHING 75V 200MA 6NS TO-236	BAS16 BAS16 BAS16LT1G BAS16	PHILIPS VISHAY ON SEMICONDUCTOR NXP
DL1	1	1810-1025	DELAY LINE PASSIVE DEVICE W/SINGLE	DL1L5XK200S	SUSUMU
E1, E4, E5, E6	4	9170-1431	CORE-SHIELDING BEAD	HF50ACB-453215	TDK
E2, E3, E7	3	9170-1421	CORE-SHIELDING BEAD IMAX 1500MA	MI1210K600R-10	STEWARD
E8	1		CORE-SHIELDING BEAD	4330-030-36301 2743021447	FERROXCUBE USA FAIR RITE PRODUCTS
J1, J2, J3, J14, J15	5	1250-1842	CONNECTOR-RF BNC FEMALE PC-W-STDFS	31-5506 5227677-1	AMPHENOL TYCO ELECTRONICS AMP
J17	1	1250-1493	TERMINATION-COAX CA CRP-COAX-CA	9-226176-1	TYCO ELECTRONICS AMP
J18	1			643886-2	TYCO ELECTRONICS AMP
J4	1		CONN-RECT MICRORBN 24-CKT 24-CONT	5554923-2	TYCO ELECTRONICS AMP
J5	1		CONN-RECT D-SUBMIN 9-CKT 9-CONT	5788793-1	TYCO ELECTRONICS AMP
		1202 2200	COLUMN TO COLUMN	DM10123-D5	HON HAI PRECISION INDUSTRY
J6	1	1252-4684	CONN-POST TYPE .100-PIN-SPCG-MTG-END	N3429-6202RB	3M
i .					<u> </u>

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
J7	1	1252-4683	CONN-POST TYPE .100-PIN-SPCG-MTG-END	N3793-6202RB	3M
J9	1	1252-4682	CONN-POST TYPE .100-PIN-SPCG-MTG-END	N3408-6202RB	3M
K1-K6, K8, K9	8		RELAY 2C 5VDC-COIL 2A 30VDC	TQ2SA-5V	MATSUSHITA
, ,				G6H-2F-DC5	OMRON
K7	1	0490-1554	RELAY 1C 5VDC-COIL 0.5A 30VAC/DC	G6Y-1-DC5	OMRON
L1	1	9140-1107	INDUCTOR 2.2uH +-5pct 3.4W-mmX4.8LG-mm	SMRF1812-221J	GOWANDA ELECTRONICS
L2	1	9140-1458	INDUCTOR 3.3uH +-5pct 2.8W-mmX3.4LG-mm	NLV32T-3R3J -PF	TDK
			·	KL32T3R3J	KOA
L3	1	9100-3922	INDUCTOR FIXED Z GREATER THAN 1200	99ZSPA45165	TECHNITROL
		0.00 00==	OHMS 120 TO 650	51-088	GOWANDA ELECTRONICS
L4	1	9140-1709	INDUCTOR FIXED 220uH +-10PCT 9D-mm	6000-221K-RC	J.W. MILLER MAGNETICS
			Q 20		
Q1, Q5, Q37, Q38	4	1854-1037	TRANSISTOR NPN SI TO-236AA PD=350MW	MMBT3904	FAIRCHILD SEMICONDUCTOR
				SST3904T116	ROHM
				MMBT3904LT1G	ON SEMICONDUCTOR
Q11, Q12	2	1855-0831	TRANSISTOR MOSFET N-CHAN E-MODE	NTP18N06LG	ON SEMICONDUCTOR
			TO-220 SI		
Q13	1	1855-0726	TRANSISTOR MOSFET P-CHAN E-MODE	IRF9Z24PBF	INTERNATIONAL RECTIFIER
			TO-220AB		
Q14, Q15, Q16	3	1853-0525	TRANSISTOR PNP SI TO-236AA PD=200MW	MMBT2907	FAIRCHILD SEMICONDUCTOR
				PMBT2907A	PHILIPS
				MMBT2907ALT1G	ON SEMICONDUCTOR
				PMBT2907A	NXP
Q17, Q19	2	1855-0807	TRANSISTOR J-FET N-CHAN D-MODE	BF511	PHILIPS
α, α.ιο	-	1000 0007	SOT-23	BF511	NXP
Q2, Q3, Q4, Q6, Q10, Q41	6	1853-0567	TRANSISTOR PNP SI SOT-23 (TO-236AB)	MMBT3906	FAIRCHILD SEMICONDUCTOR
			, , , , , , , , , , , , , , , , , , ,	SST3906T116	ROHM
				MMBT3906LT1G	ON SEMICONDUCTOR
Q21-Q26	6	1854-1148	TRANSISTOR NPN SI SOT-23 (TO-236AB)	MMBTH10	FAIRCHILD SEMICONDUCTOR
				MMBTH10LT1G	ON SEMICONDUCTOR
Q27-Q32, Q40	7	1853-0516	TRANSISTOR PNP SI SOT-23 (TO-236AB)	MMBTH81	FAIRCHILD SEMICONDUCTOR
Q33, Q34	2		TRANSISTOR PNP SI SOT-23 (TO-236AB)	MMBTH24	FAIRCHILD SEMICONDUCTOR
Q00, Q0 1	1 4	1004-1102		INIINID II 124	I VILOLIED SEMICOMPOCIOK

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
Q42, Q43	2	1855-0731	TRANSISTOR J-FET P-CHAN D-MODE TO-236AA	MMBFJ175 PMBFJ175 MMBFJ175LG PMBFJ175	FAIRCHILD SEMICONDUCTOR PHILIPS ON SEMICONDUCTOR NXP
R1, R5, R12, R18, R59, R63, R73, R77, R79, R84, R86, R88-R100, R102, R119, R121, R128, R191, R218, R219, R241, R261-R263, R281, R289-R292, R298	41	0699-1318	RESISTOR 1K +-1pct .125W TKF TC=0+-100	CRCW12061K00FKE_ RK73H2BT_1001F MCR18F1001 232272461002L	VISHAY KOA ROHM YAGEO
R101, R103	2	0699-1421	RESISTOR 178 +-1pct .125W TKF TC=0+-100	CRCW1206178RFKE_ RK73H2BT_1780F MCR18F1780 232272461781	VISHAY KOA ROHM YAGEO
R104, R105, R118, R120, R126, R127, R270	7	0699-1431	RESISTOR 464 +-1pct .125W TKF TC=0+-100	CRCW1206464RFKE_ RK73H2BT_4640F MCR18F4640 232272464641	VISHAY KOA ROHM YAGEO
R106-R112, R286	8	0699-1360	RESISTOR 46.4 +-1pct .125W TKF TC=0+-100	CRCW120646R4FKE_ RK73H2BT_46R4F MCR18F46R4 232272464649	VISHAY KOA ROHM YAGEO
R116, R117	2	0699-1503	RESISTOR 0 CWM	CRCW12060000ZSE_ RK73Z2BT MCR18J000 232271191005	VISHAY KOA ROHM YAGEO
R122	1	1810-1139	NET-RES 8 10.0K OHM 16-PIN	GM8A-03-1002-D-B TOMC-1603-1002D	TT ELECTRONICS VISHAY
R124, R125	2	0699-1382	RESISTOR 3.83K +-1pct .125W TKF TC=0+-100	CRCW12063K83FKE_ RK73H2BT_3831F MCR18F3831 232272463832L	VISHAY KOA ROHM YAGEO

Reference Designator	Qty	Agilent P/N	53132-60024 Parts List Description	MPN	Manufacturer
R129, R130, R161-R170,	19	_	RESISTOR 100 +-1pct .125W TKF TC=0+-100	CRCW1206100RFKE_	VISHAY
R254, R256, R257, R322,	'	0000 1410	The color of the		KOA
R323, R361, R362				MCR18F1000	ROHM
, , , , , , , , , , , , , , , , , , , ,				232272461001L	YAGEO
R13, R76, R140, R145	4	0699-1378	RESISTOR 2.61K +-1pct .125W TKF	CRCW12062K61FKE_	VISHAY
			TC=0+-100		KOA
				MCR18F2611	ROHM
				232272462612L	YAGEO
R132, R133	2	0699-1361	RESISTOR 51.1 +-1pct .125W TKF TC=0+-100	CRCW120651R1FKE_	VISHAY
,			'	_	KOA
					ROHM
				232272465119	YAGEO
R134-R136, R301, R302	5	0699-1354	RESISTOR 26.1 +-1pct .125W TKF TC=0+-100	CRCW120626R1FKE_	VISHAY
					KOA
				MCR18F26R1	ROHM
				232272462619	YAGEO
R139	1	0699-1427	RESISTOR 316 +-1pct .125W TKF TC=0+-100	CRCW1206316RFKE_	VISHAY
			·	RK73H2BT_3160F	KOA
				MCR18F3160	ROHM
				232272463161	YAGEO
R14, R55, R72, R74, R115,	18	0699-1366	RESISTOR 82.5 +-1pct .125W TKF TC=0+-100	CRCW120682R5FKE_	VISHAY
R266, R276-R279, R283,	'				KOA
R284, R293-R296, R304,					ROHM
R326				232272468259	YAGEO
R141, R142	2	0699-3766	RESISTOR 232 +-0.1pct .125W TF TC=0+-25		KOA
					RCD COMPONENTS
				25PPM	VISHAY BC COMPONENTS
				MCA1206-25 0, 1% P5	VISHAY
				232R	TT ELECTRONICS
				PTN1206E2320BB	
				PCF-W1206LF-03-2320-B	
				- - -	
R143, R144, R264	3	0699-1375	RESISTOR 1.96K +-1pct .125W TKF	CRCW12061K96FKE_	VISHAY
			TC=0+-100		KOA
				MCR18F1961	ROHM
				232272461962L	YAGEO

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R147, R148	2		RES-FXD 51 OHM +-5PCT 1W TC 0+-200	CRCW251251R0JNE_ RK73B3AT510J MCR100J510	VISHAY KOA ROHM
R149, R150	2	0699-1439	RESISTOR 110K +-1pct .125W TKF TC=0+-100	CRCW1206110KFKE_ RK73H2BT_1103F MCR18F1103 232272461104L	VISHAY KOA ROHM YAGEO
R15, R19-R27, R60	11	1810-1064	NET-RES 15 10.0K OHM 16-PIN	767161103G SOMC-16-01-103G 4816P-2-103LF	CTS VISHAY BOURNS
R151, R152, R224, R225	4	0699-1337	RESISTOR 383K +-1pct .125W TKF TC=0+-100	CRCW1206383KFKE_ RK73H2BT_3833F MCR18F3833 232272463834	VISHAY KOA ROHM YAGEO
R153, R154	2	0699-1338	RESISTOR 511K +-1pct .125W TKF TC=0+-100	CRCW1206511KFKE_ RK73H2BT_5113F MCR18F5113 232272465114	VISHAY KOA ROHM YAGEO
R155, R156	2	0699-1319	RESISTOR 12.1K +-1pct .125W TKF TC=0+-100	CRCW120612K1FKE_ RK73H2BT_1212F MCR18F1212 232272461213L	VISHAY KOA ROHM YAGEO
R157, R158, R299, R300	4	0699-1344	RESISTOR 10 +-1pct .125W TKF TC=0+-100	CRCW120610R0FKE_ RK73H2BT_10R0F MCR18F10R0 232272461009L	VISHAY KOA ROHM YAGEO
R159, R160	2	0699-1443	RESISTOR 147K +-1pct .125W TKF TC=0+-100	CRCW1206147KFKE_ RK73H2BT_1473F MCR18F1473 232272461474	VISHAY KOA ROHM YAGEO
R16, R67, R68, R123, R131, R173, R174, R258, R259, R260, R288, R303, R313- R317, R327	18	0699-1418	RESISTOR 133 +-1pct .125W TKF TC=0+-100	CRCW1206133RFKE_ RK73H2BT_1330F MCR18F1330 232272461331	VISHAY KOA ROHM YAGEO

Reference Designator	Qty	Agilent P/N	Description Description	MPN	Manufacturer
R17, R56, R57, R58, R71, R190, R211, R212, R310	9	0699-1376	RESISTOR 2.15K +-1pct .125W TKF TC=0+-100	CRCW12062K15FKE_ RK73H2BT_2151F MCR18F2151 232272462152	VISHAY KOA ROHM YAGEO
R172, R209, R210, R268, R360	5	0699-1424	RESISTOR-FXD 237 +-1pct .25W TC 0+-100 1206	CRCW1206237RFKE_ RK73H2BT_2370F MCR18F2370	VISHAY KOA ROHM
R176, R358	2	0699-1904	RESISTOR 1.62K +-1pct .125W TKF TC=0+-100	CRCW12061K62FKE_ RK73H2BT_1621F MCR18F1621 232272461622L	VISHAY KOA ROHM YAGEO
R179, R180	2	0699-1356	RESISTOR 31.6 +-1pct .25W TKF TC=0+-100	CRCW120631R6FKE_ RK73H2BT_31R6F MCR18F31R6 232272463169	VISHAY KOA ROHM YAGEO
R181, R182, R183, R184	4	0699-2120	RESISTOR 2.7 +-5pct .125W TKF TC=0+-200	MCR18J2R7	ROHM
R187, R359	2	0699-1545	RESISTOR 93.1K +-1PCT .125W TKF TC=0+-10	CRCW120693K1FKE_ RK73H2BT_9312F MCR18F9312 232272469313	VISHAY KOA ROHM YAGEO
R189, R305-R308	5	0699-1434	RES-FXD 619 OHM +-1PCT 0.125W TC 0+-100	CRCW1206619RFKE_ RK73H2BT_6190F MCR18F6190 232272466191	VISHAY KOA ROHM YAGEO
R192, R370	2	0699-1330	RESISTOR 100K +-1pct .125W TKF TC=0+-100	CRCW1206100KFKE_ RK73H2BT_1003F MCR18F1003 232272461004L	VISHAY KOA ROHM YAGEO
R193, R194	2	0699-1433	· ·	CRCW1206562RFKE_ RK73H2BT_5620F MCR18F5620 232272465621	VISHAY KOA ROHM YAGEO

Reference Designator	Qty	Agilent P/N	Description Description	MPN	Manufacturer
R195, R196, R198, R199	4	0699-1430	RESISTOR 422 +-1pct .125W TKF TC=0+-100	CRCW1206422RFKE_ RK73H2BT_4220F MCR18F4220 232272464221	VISHAY KOA ROHM YAGEO
R2	1	0699-1364	RESISTOR 68.1 +-1pct .125W TKF TC=0+-100	CRCW120668R1FKE_ RK73H2BT_68R1F MCR18F68R1 232272466819	VISHAY KOA ROHM YAGEO
R200	1	0699-1380	RESISTOR 3.16K +-1pct .125W TKF TC=0+-100	CRCW12063K16FKE_ RK73H2BT_3161F MCR18F3161 232272463162	VISHAY KOA ROHM YAGEO
R201, R331	2	0699-1447	RESISTOR 261K +-1pct .125W TKF TC=0+-100	CRCW1206261KFKE_ RK73H2BT_2613F MCR18F2613 232272462614	VISHAY KOA ROHM YAGEO
R202	1	0699-1392	RESISTOR 11K +-1pct .125W TKF TC=0+-100	CRCW120611K0FKE_ RK73H2BT_1102F MCR18F1102 232272461103	VISHAY KOA ROHM YAGEO
R203, R204, R371, R372	4	0699-1388	RESISTOR 7.5K +-1pct .125W TKF TC=0+-100	CRCW12067K50FKE_ RK73H2BT_7501F MCR18F7501 232272467502	VISHAY KOA ROHM YAGEO
R205, R206	2	0699-1437	RESISTOR 825 +-1pct .125W TKF TC=0+-100	CRCW1206825RFKE_ RK73H2BT_8250F MCR18F8250 232272468251	VISHAY KOA ROHM YAGEO
R207, R208	2	0699-1435	RES-FXD 681 OHM +-1PCT .125W TC 0+-100	CRCW1206681RFKE_ RK73H2BT_6810F MCR18F6810 232272466811	VISHAY KOA ROHM YAGEO

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R213, R214	2	0699-1377	RESISTOR 2.37K +-1pct .125W TKF TC=0+-100	CRCW12062K37FKE_ RK73H2BT_2371F MCR18F2371 232272462372L	VISHAY KOA ROHM YAGEO
R223, R369	2	0699-1331	RESISTOR 162K +-1pct .125W TKF TC=0+-100	CRCW1206162KFKE_ RK73H2BT_1623F MCR18F1623 232272461624L	VISHAY KOA ROHM YAGEO
R232, R233	2	0699-1381	RESISTOR 3.48K +-1pct .125W TKF TC=0+-100	CRCW12063K48FKE_ RK73H2BT_3481F MCR18F3481 232272463482	VISHAY KOA ROHM YAGEO
R234, R235	2	0699-1370	RESISTOR 1.21K +-1pct .125W TKF TC=0+-100	CRCW12061K21FK E_ RK73H2BT_1211F MCR18F1211 232272461212	VISHAY KOA ROHM YAGEO
R240	1	0699-1369	RESISTOR 1.1K +-1pct .125W TKF TC=0+-100	CRCW12061K10FKE_ RK73H2BT_1101F MCR18F1101 232272461102L	VISHAY KOA ROHM YAGEO
R244-R249	6	0699-1357	RESISTOR 34.8 +-1pct .125W TKF TC=0+-100	CRCW120634R8FKE_ RK73H2BT_34R8F MCR18F34R8 232272463489	VISHAY KOA ROHM YAGEO
R267	1	0699-1785	RESISTOR 13.3K +-1pct .125W TKF TC=0+-100	CRCW120613K3FKE_ RK73H2BT_1332F MCR18F1332 232272461333	VISHAY KOA ROHM YAGEO
R273	1	0699-1428	RESISTOR 348 +-1pct .125W TKF TC=0+-100	CRCW1206348RFKE_ RK73H2BT_3480F MCR18F3480 232272463481	VISHAY KOA ROHM YAGEO

Reference Designator	Qty	Agilent P/N	53132-60024 Parts List Description	MPN	Manufacturer
R28, R177, R178	3		RESISTOR 10M +-10pct .125W TKF TC=0+-200	CRCW1206106KJNE_ RK73B2BT_106J MCR18K106 232271161106	VISHAY KOA ROHM YAGEO
R29	1	0699-1403	RESISTOR 31.6K +-1pct .125W TKF TC=0+-100	CRCW120631K6FKE_ RK73H2BT_3162F MCR18F3162 232272463163L	VISHAY KOA ROHM YAGEO
R3	1	0699-1322	RESISTOR 68.1K +-1pct .125W TKF TC=0+-100	CRCW120668K1FKE_ RK73H2BT_6812F MCR18F6812 232272466813	VISHAY KOA ROHM YAGEO
R30-R33, R36-R39, R43-R46, R49-R52, R215, R226-R231, R280, R282, R285	26	0699-1423	RESISTOR 215 +-1pct .125W TKF TC=0+-100	CRCW1206215RFKE_ RK73H2BT_2150F MCR18F2150 232272462151L	VISHAY KOA ROHM YAGEO
R318	1	0699-2979	RESISTOR 1.21K +-1pct .1W TKF TC=0+-100	CRCW08051K21FKE_ RK73H2AT_1211F MCR10F1211 232273461212 MC08051211-FT	VISHAY KOA ROHM YAGEO RCD COMPONENTS
R335	1	0699-2643	RES-FXD 0 OHM +-5PCT .1W TC 0+-300	CRCW08050000ZSE_ CR21-000-ZL MCR10J000 RK73Z2AT 232273091002L ZC0805-TW	VISHAY ASJ ROHM KOA YAGEO RCD COMPONENTS
R339, R342	2	0699-3034	RESISTOR 1K +-1pct .1W TKF TC 0+-100	CRCW08051K00FKE_ RK73H2AT_1001F 232273461002L MCR10F1001 MC08051001-FT	VISHAY KOA YAGEO ROHM RCD COMPONENTS
R341	1	0699-2887	RESISTOR 31.6 +-1pct .1W TKF TC=0+-100	CRCW080531R6FKE_ RK73H2AT_31R6F MCR10F31R6 MC080531R6-FT	VISHAY KOA ROHM RCD COMPONENTS

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R345	1	1810-1380	NET-RES 8 1.0K OHM 16-PIN	4816P-001-102 767163102G SOMC1603-102G	BOURNS CTS VISHAY
R346, R347	2	0699-3366	RESISTOR 562 +-1pct .065W TKF TC=0+-200	CRCW0603562RFKE_ RK73H1JT_5620F 232270465621L MCR03FX5650	VISHAY KOA YAGEO ROHM
R348, R349	2	0699-6229	RESISTOR 121 0.1 pct .125W TC=0+-25	RN732BT_1210B25 RR1632P121OB BLU-1206-121OHM 0.1%25PPM	KOA SUSUMU RCD COMPONENTS
R35, R40, R41	3	0699-2975	RESISTOR 562 +-1pct .1W TKF TC=0+-100	CRCW0805562RFKE_ RK73H2AT_5620F MCR10F5620 232273465621 MC08055620-FT	VISHAY KOA ROHM YAGEO RCD COMPONENTS
R350, R351, R352, R353	4	0699-3914	RESISTOR 34.8 +-1pct .063W TKF TC=0+-200	CRCW060334R8FKE_ RK73H1JT_34R8F MCR03FX34R8 232270463489	VISHAY KOA ROHM YAGEO
R354, R355	2	0699-3143	RESISTOR 16.2K +-0.1pct .1W TF TC=0+-25	RN732AT_1622B25 RR1220P1622B	KOA SUSUMU
R356, R357	2	0699-3954	RESISTOR 1.96K +-1pct .063W TKF TC=0+-200	CRCW06031K96FKE_ RK73H1JT_1961F 232270461962L MCR03FX1961	VISHAY KOA YAGEO ROHM
R4, R185, R186	3	0699-1407	RESISTOR 46.4K +-1pct .125W TKF TC=0+-100	CRCW120646K4FKE_ RK73H2BT_4642F MCR18F4642 232272464643	VISHAY KOA ROHM YAGEO
R42, R78, R265	3	0699-1417	RESISTOR 121 +-1pct .125W TKF TC=0+-100	CRCW1206121RFKE_ RK73H2BT_1210F MCR18F1210 232272461211	VISHAY KOA ROHM YAGEO

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R47, R48	2	0699-2833	RESISTOR 300 +-0.1pct .125W TF TC=0+-25		KOA RCD COMPONENTS VISHAY TT ELECTRONICS
R53, R54, R324, R325, R328, R329, R363-R368	12	0699-1391	RESISTOR 10K +-1pct .125W TKF TC=0+-100	_	VISHAY KOA ROHM YAGEO
R6	1	0699-1448	RESISTOR 316K +-1pct .125W TKF TC=0+-100		VISHAY KOA ROHM YAGEO
R61, R146, R238, R239, R242, R243, R312	7	0699-1372	RESISTOR 1.47K +-1pct .125W TKF TC=0+-100	_	VISHAY KOA ROHM YAGEO
R62, R113, R114, R275	4	0699-1419	RESISTOR 147 +-1pct .125W TKF TC=0+-100		VISHAY KOA ROHM YAGEO
R64	1	0699-1385	RES-FXD 5.11K +-1PCT .125W TC 0+-100	RK73H2BT_5111F MCR18F5111	VISHAY KOA ROHM YAGEO
R7, R8, R9, R10, R11	5	0699-1386	RESISTOR 5.62K +-1pct .125W TKF TC=0+-100		VISHAY KOA ROHM YAGEO
R75, R137, R138, R197, R255, R269, R271, R272	8	0699-1432	RESISTOR 511 +-1pct .125W TKF TC=0+-100	RK73H2BT_5110F	VISHAY KOA ROHM YAGEO

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
U1	1	1820-6075	IC CNTR CMOS/HCT DECD ASYNCHRO	74HCT390D	PHILIPS
	1 .	1020 0070	lo civil cimedino i bece no monito	74HCT390D	NXP
U10	1	1818-6217	IC 1M-BIT SRAM 15-NS CMOS 44-SOJ	IDT71016S15Y	IDT
U14	1	1818-5128	IC 64K-BIT EEPROM 200-NS CMOS	AT28C64B-15JU	ATMEL
U15, U16, U17, U18	4	1820-5934	IC DCDR-DEMUXR CMOS/AC BIN 8-TO-1-LINE	MC74AC138DR2G	ON SEMICONDUCTOR
U19	1		IC MUXR/DATA-SEL CMOS/AC 8-TO-1-LINE	74AC251SCX.	FAIRCHILD SEMICONDUCTOR
U2	1	1820-5753	IC MUXR/DATA-SEL 4-TO-1-LINE 16-SOIC	74HC253D	PHILIPS
				74HC253D	NXP
U20	1	1822-0639	IC GPIB CONTROLLER	14063-501	AMIS SEMICONDUCTOR
U21	1	1820-6176	IC INTERFACE XCVR BIPOLAR BUS OCTL	SN75ALS160DW	TEXAS INSTRUMENTS
U22	1	1820-6175	IC INTERFACE XCVR BIPOLAR BUS OCTL	SN75ALS162DW	TEXAS INSTRUMENTS
U23	1	1820-7662	IC INTFC DRVR/RCVR BIPOLAR DUAL	LT1180ACSW	LINEAR TECHNOLOGY
			18-SOIC		
U25	1	1826-1897	IC PWR MGT-VS-SUPVR/CONT	TL7705ACD1/A	STMICROELECTRONICS
				TL7705ACD	TEXAS INSTRUMENTS
U26, U49	2	1820-6412	TRANSISTOR ARRAY 16-PIN PLSTC	ULN2003AD	TEXAS INSTRUMENTS
020, 010	-	1020 0112	SURFACE	MC1413DG	ON SEMICONDUCTOR
			007.0_		
U27, U28, U29	3	1820-7281	IC TRANSCEIVER CMOS/ACL BUS OCTL	74ACT11245DW	TEXAS INSTRUMENTS
U3	1	1826-2236	IC PL LOOP LP SINGLE 16 PIN PLSTC-SOIC	74HCT7046AD	PHILIPS
				74HCT7046AD	NXP
U30	1	0950-2325	DC-DC-CONV 12 VDC NOM INP; DL-OUT	E2577VF	ENDICOTT RESEARCH GROUP
U31	1		IC FF CMOS/ACT D-TYPE POS-EDGE-TRIG	MC74ACT74DG	ON SEMICONDUCTOR
031	'	1020-0473	ICTT CMOS/ACT D-TTFE FOS-EDGE-TRIG	SN74ACT74DG	TEXAS INSTRUMENTS
				74ACT74SCX	FAIRCHILD SEMICONDUCTOR
				17 17 100%	TAIN COMES CENTROCKES OF CIT
U32	1	1820-5235	IC GATE TTL/ALS AND QUAD 2-INP	DM74ALS09MX	FAIRCHILD SEMICONDUCTOR
U33, U34	2		IC GATE CMOS/ACT NAND QUAD 2-INP	MC74ACT00DG	ON SEMICONDUCTOR
				SN74ACT00D	TEXAS INSTRUMENTS
				74ACT00SCX	FAIRCHILD SEMICONDUCTOR
U35	1	1820-5607	IC RCVR ECL/10KH LINE TPL	MC10H116FNG	ON SEMICONDUCTOR
U36	1 1				TEXAS INSTRUMENTS
030	'	1020-1402	IC PWR MGT-V-REG-FXD-POS 4.8/5.2V 8 PINS		
				MC78L05ACDR2G LM78L05ACM NOPB	ON SEMICONDUCTOR NATIONAL SEMICONDUCTOR
				LIVITOLUDACIVI NUMB	INATIONAL SEIVIICONDUCTOR
U37, U38	2	1826-1601	IC PWR MGT-V-REF-ADJ 2.5/36V 8 PINS	TL431CD	TEXAS INSTRUMENTS
				LM431ACMNOPB	NATIONAL SEMICONDUCTOR

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
U39, U40	2	1820-6277	IC SHF-RGTR CMOS/HC SYNC/ASYNC	MC74HC595ADG	ON SEMICONDUCTOR
,			SERIAL-IN	MM74HC595M	FAIRCHILD SEMICONDUCTOR
				N74HC595D	PHILIPS
				SN74HC595D	TEXAS INSTRUMENTS
				N74HC595D	NXP
U4	1		D/A 6-BIT 20-P-SOIC CMOS		
U42, U48	2	1826-6734	IC PWR MGT-V-REG-ADJ-NEG 4-SOT-223	LM337IMP NOPB	NATIONAL SEMICONDUCTOR
U44, U72	2	1826-2420	IC OP AMP LOW-POWER-BIPOLAR-DUAL 8-SOIC	AD706JRZ	ANALOG DEVICES
U45	1	1820-6867	IC GATE ECL/10KH OR QUAD 2-INP	MC10H103FNG	ON SEMICONDUCTOR
U46, U47	2		D/A 12-BIT 16-P-SOIC CMOS	AD7243AR	ANALOG DEVICES
U5	1		IC PWR MGT-V-REF-FXD 2.475/2.525V 8 PINS		ON SEMICONDUCTOR
U50	1		IC XLTR ECL/10KH ECL-TO-TTL QUAD	MC10H125FNG	ON SEMICONDUCTOR
U51	1			MC10H107FN G	ON SEMICONDUCTOR
U52, U53	2		IC FF ECL/10KH J-K M/S POS-EDGE-TRIG	MC10H135FNG	ON SEMICONDUCTOR
U56	1		IC COMPARATOR GP DUAL 14 PIN	LM319M-NOPB	NATIONAL SEMICONDUCTOR
			PLSTC-SOIC		
U57, U64	2	1826-2115		LT1008S8	LINEAR TECHNOLOGY
U58	1	1821-3425	IC-PLD FPGA UNPRGMD CMOS XC3142A	XC3142A-4PC84C	XILINX
			84-PLCC		
U59	1	1821-1489	IC PLD FPGA UNPRGMD CMOS 3042	XC3042A-7PC84C	XILINX
U6	1	1820-6620	IC DRVR CMOS/ACL BUS OCTL	74ACT11244DW	TEXAS INSTRUMENTS
U60, U61	2	1826-2351	A/D 10-BIT 28-PLCC BPLR	AD7580JP	ANALOG DEVICES
U62, U63	2	1826-2723	A/D 8-BIT 20-PLCC CMOS	TLC0820ACFN	TEXAS INSTRUMENTS
U65	1	1820-5629	IC FF ECL/10KH D-M/S POS-EDGE-TRIG	MC10H131FNG	ON SEMICONDUCTOR
U69	1	1820-5940	IC GATE CMOS/ACT AND QUAD 2-INP	MC74ACT08DG	ON SEMICONDUCTOR
				74ACT08SCX.	FAIRCHILD SEMICONDUCTOR
U7	1	1820-7697	IC MODULAR MICROCONTROLLER;16MHZ	MC68331CEH16	FREESCALE SEMICONDUCTOR
U70, U71	2		IC V COMPTR ULTRAFAST SiGe 16-LFCSP	ADCMP581BCPZ-	ANALOG DEVICES
U8	1		PROGRAMMED IC 4M-BIT FLASH 120-NS		
			CMOS, RAW PART 1818-6109		
U8a	1	1818-6109	IC 4M-BIT FLASH 120-NS CMOS	AM29F400BB-120SD	SPANSION
VR1, VR2	2		DIODE-ZNR 6.2V 5pct PD=1.5W IR=5UA	1SMB5920BT3G	ON SEMICONDUCTOR
Y1 ´	1		CRYSTAL-QUARTZ 32.768 KHZ	FSMLF-327	FOX ELECTRONICS
				Q13MC4051000200	EPSON TOYOCOM
Y2	1	0410-0423	PRECISION BULK MODE-AT FREQ=10.0 MHZ	020-0033-0	CTS
	1 '	0410-0423		0410-0423	FCP
				BK3-1B-10MHZ	BLILEY ELECTRIC COMPANY
				XTS-153	VECTRON
				103-103	VECTRON
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