

**Agilent E1420B  
Component Level  
Information**

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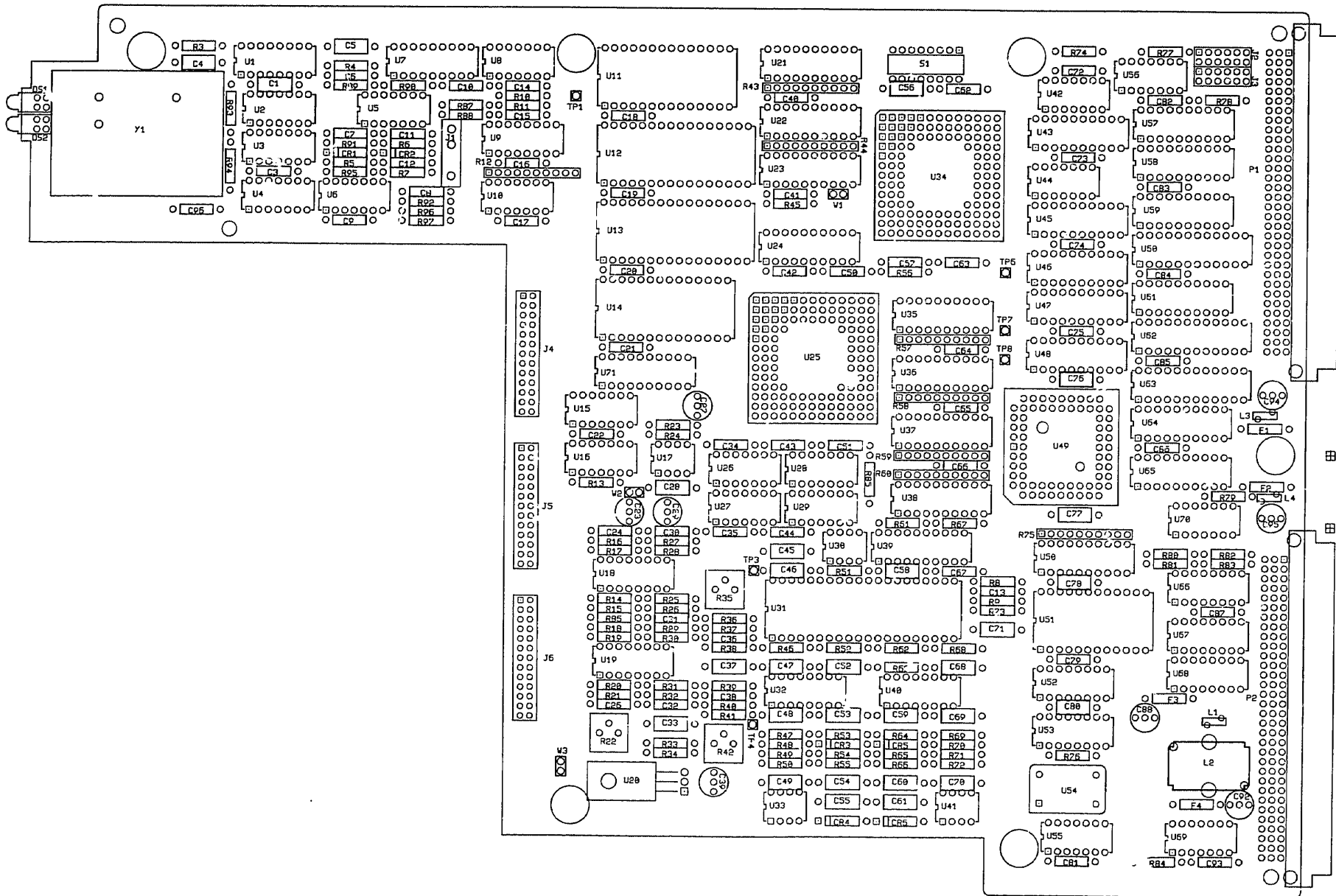
# E1420B Universal Counter Component Level Information

**Information in this packet applies to the following assemblies:**

- 1. E1420-68006 PC Assembly (VXI Assembly)**
- 2. 53310-60008 PC Assembly (Input Board)**

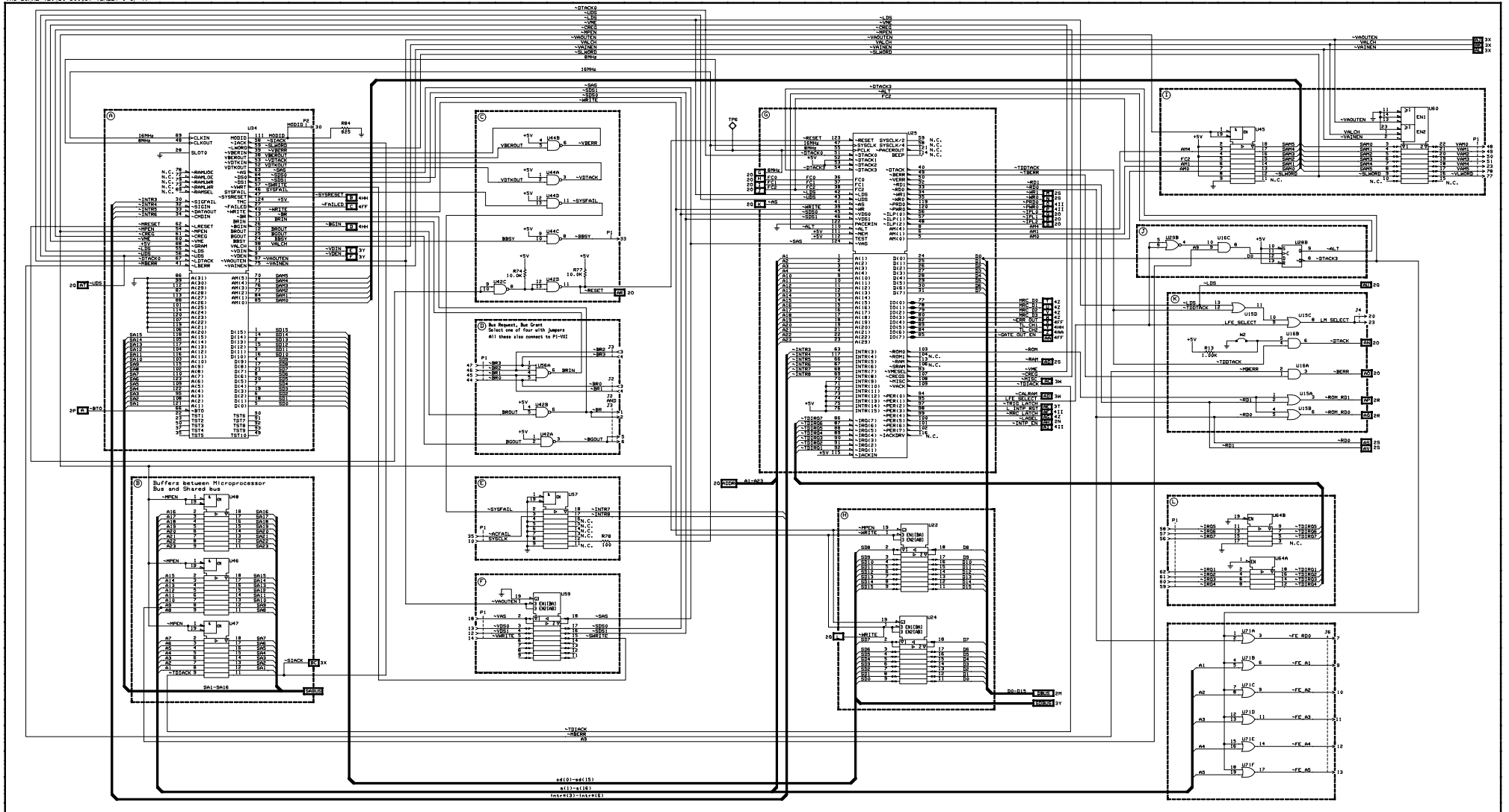
**The following is included in this packet:**

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

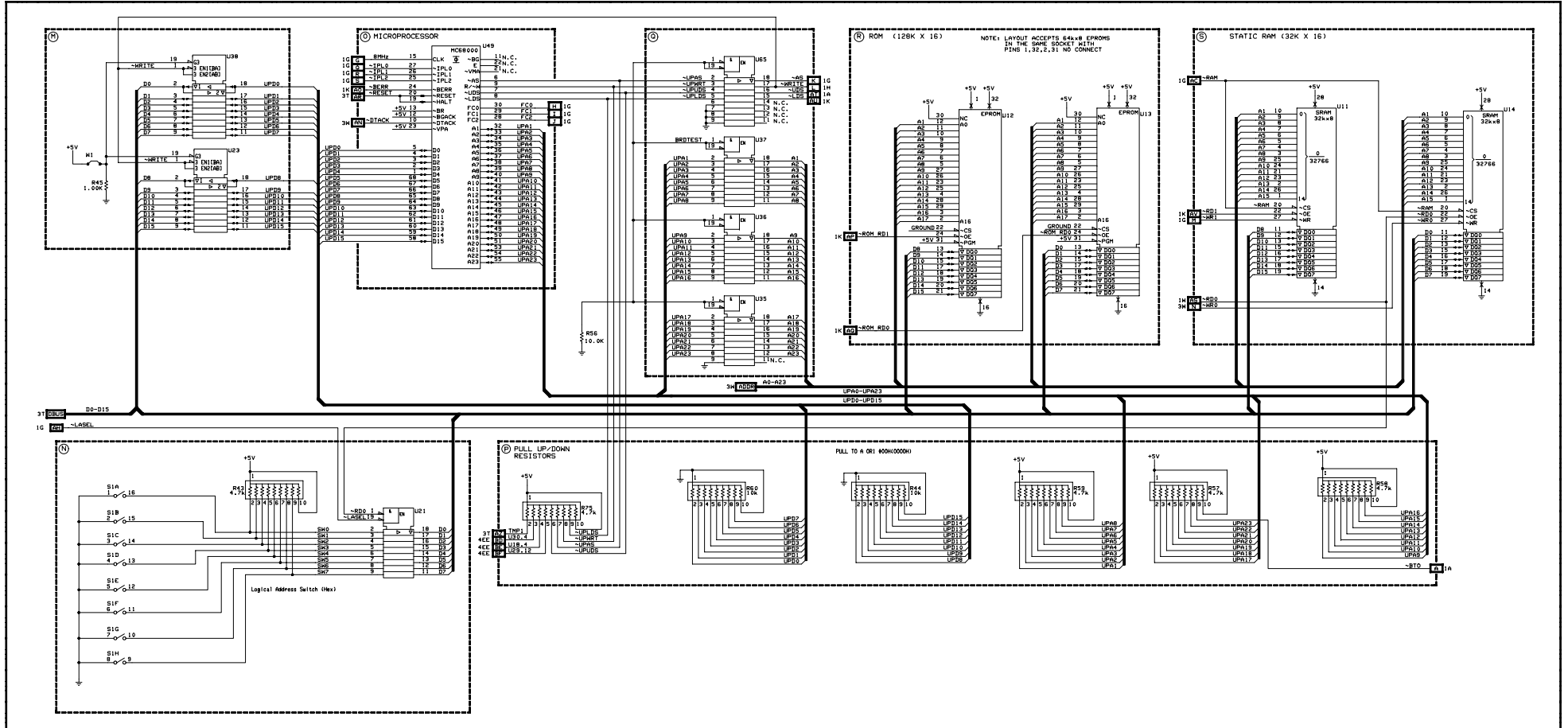


Agilent E1420B  
 Universal Counter  
 E1420-68006

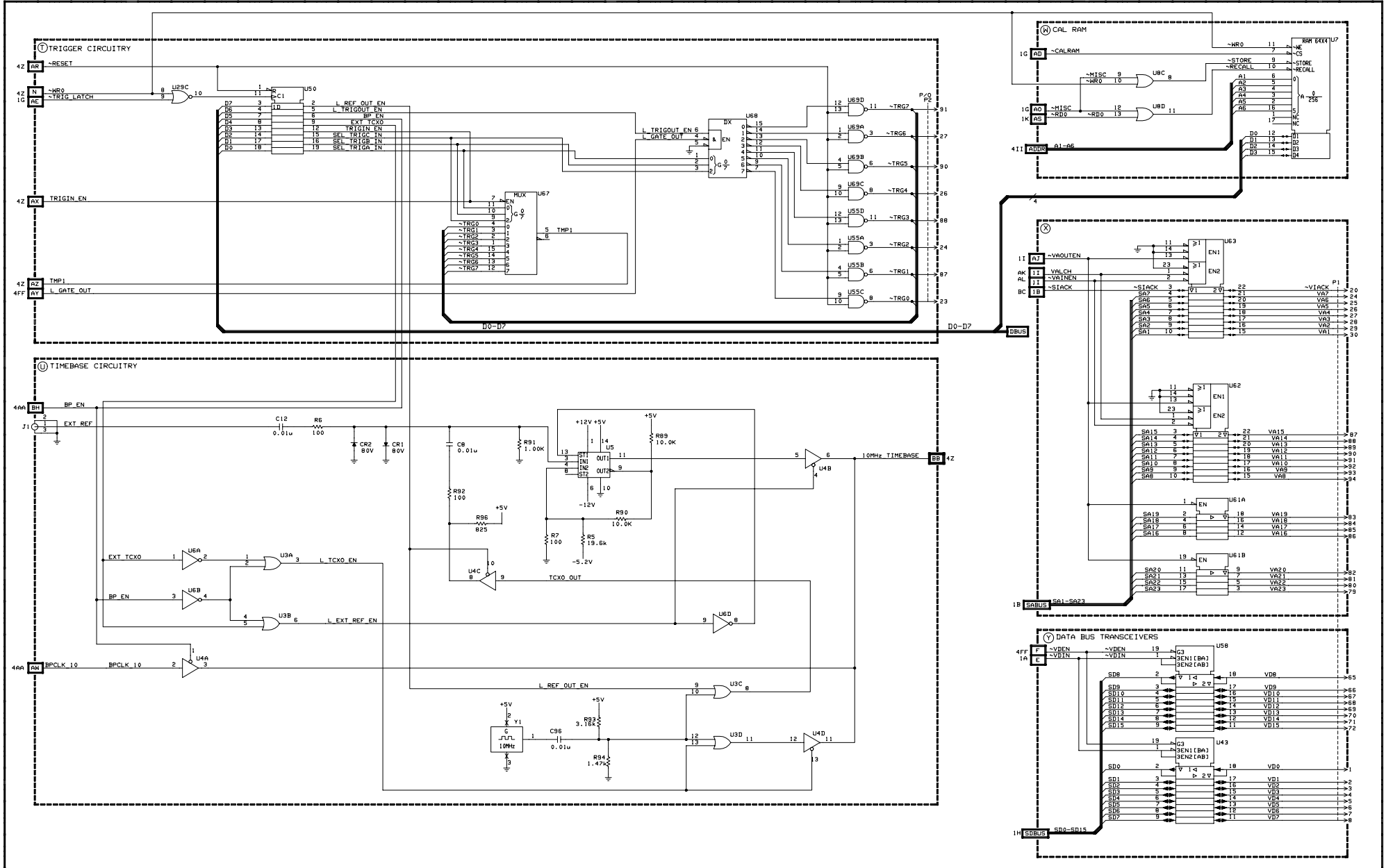
Component Locator



Agilent E1420B  
Universal Counter  
E1420-68006  
VXI Schematic

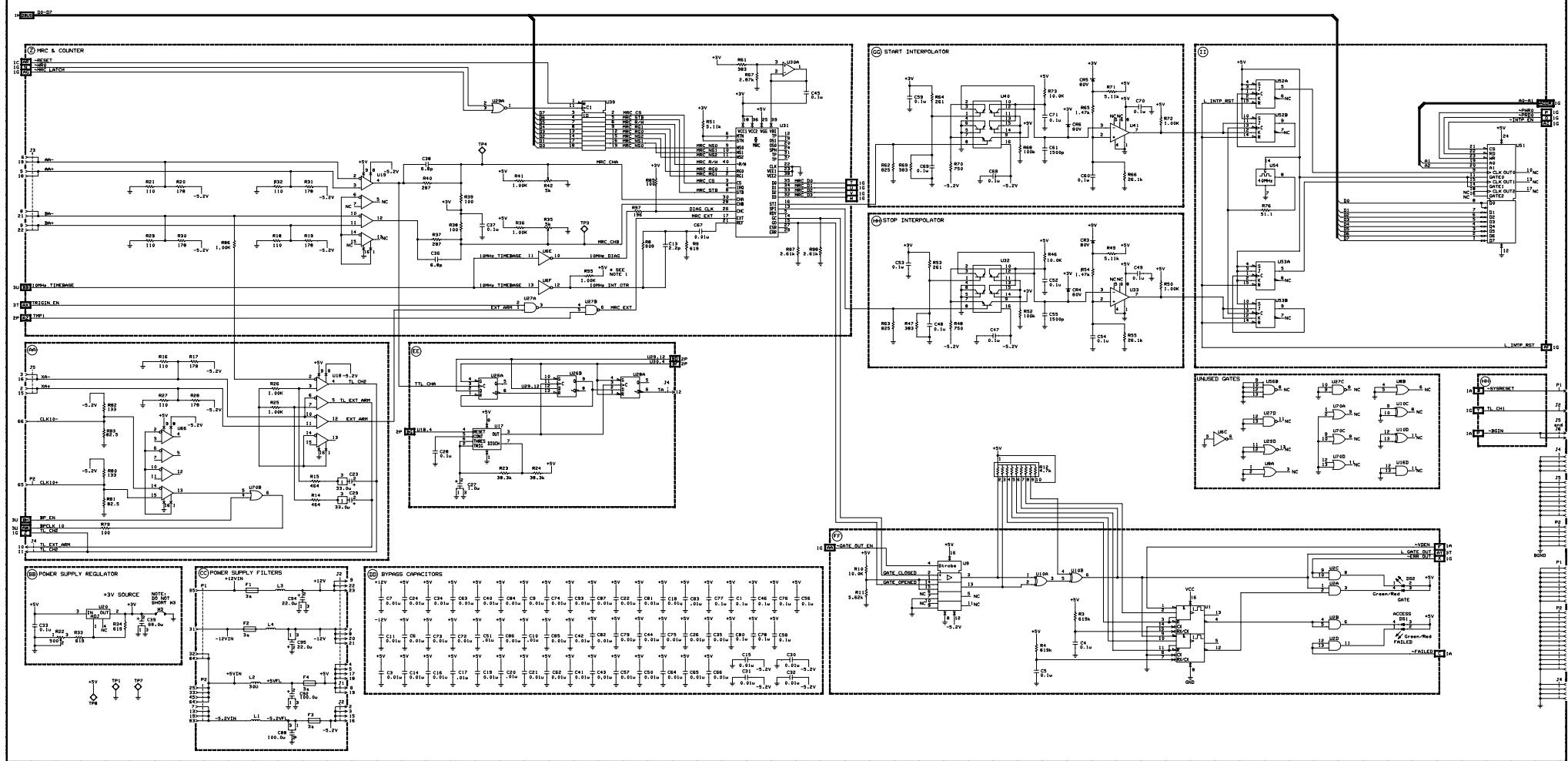


Agilent E1420B  
 Universal Counter  
 E1420-68006  
 VXI Schematic



\*\* NOTE: THE FOLLOWING PARTS ARE NOT CONNECTED: Y1, R94

**Agilent E1420B  
Universal Counter  
E1420-68006  
VXI Schematic**



NOTE 1: R95 IS NOT LOADED

### E1420-68006 Parts List

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C1, 4, 5, 7, 11, 28, 33, 37, 45-49, C52-54, 56, 58, 59, 60, 68, 69, 70, 71, C76- 78, 80	28	0160-4557	CAP-FXD 0.1uF +-20pct 50 V CER X7R	C420C104M5R5CA DA13X7R1H104M SA305C104MAAH	KEMET ELECTRONICS TDK AVX
C13	1	0160-4799	CAP-FXD 2.2pF 100V CER C0G	C114G229C1G5CA MA101A2R2CAAH MA101A2R2CAAH	KEMET ELECTRONICS AVX KYOCERA
C23, 29	2	0180-3834	CAP-FXD 33uF +-10pct 10 V TA	T398F336K010AS	KEMET ELECTRONICS
C27	1	0180-3771	CAP-FXD 1uF +-10pct 35 V TA	T398A105K035AS	KEMET ELECTRONICS
C3, 6, 8, 9, 10, 12, 14-22, 24, 26, C30-32, 34, 35, 40- 44, 50, 51, 57, C62-67, 72- 75, 79, 81-87, 93, 96	50	0160-4554	CAP-FXD 0.01uF +-20pct 50 V CER X7R	C410C103M5R5CA DA12X7R1H103M SA105C103MAAH	KEMET ELECTRONICS TDK AVX
C36, 38	2	0160-4793	CAP-FXD 6.8pF +-7.35pct 100 V CER C0G	C410C689D1G5CA SA101A6R8DAA SA101A6R8DAA	KEMET ELECTRONICS AVX KYOCERA
C39	1	0180-3775	CAP-FXD 68uF +-10pct 10 V TA	T398H686K010AS	KEMET ELECTRONICS
C55, 61	2	0160-4846	CAP-FXD 1500pF +-5pct 100 V CER C0G	C420C152J1G5CA DA13C0G2A152J SA201A152JAAH SA201A152JAAH	KEMET ELECTRONICS TDK AVX KYOCERA
C88, 92	2	0180-3941	CAP-FXD 100uF +-10pct 10 V TA	T396J107K010AS	KEMET ELECTRONICS
C94, 95	2	0180-3847	CAP-FXD 22uF +-10pct 25 V TA	T398H226K025AS	KEMET ELECTRONICS
CR1-6	6	1901-0050	DIODE-SWITCHING 80V 200MA 2NS DO-35	D3D7 FDH6308C	FAIRCHILD SEMICONDUCTOR
DS1, 2	2	1990-1364	LED-LAMP ARRAY LUM-INT=800UCD	553-0321	DIALIGHT
F1-4	4	2110-0688	FUSE-SUBMINIATURE 3A 125V NTD AX UL-LST	0251003.	LITTELFUSE
J1	1	05355-60103	CBL AY - PULSE OUT		
J2, 3	2	1251-4756	CONN-POST TYPE .100-PIN-SPCG-MTG-END	87227-6	TYCO ELECTRONICS AMP
J4-6	3	1252-3914	CONN-POST TYPE .100-PIN-SPCG-MTG-END	68683-313	FCI FRAMATOME BERG
L1, 3, 4	3	9100-3922	INDUCTOR FIXED Z GREATER THAN 1200 OHMS 120 TO 650	99ZSPA45165 51-088	TECHNITROL GOWANDA ELECTRONICS
L2	1	9140-0249	INDUCTOR 30uH .4D-INX.875LG-IN Q=25	HC30	SCOTTS VALLEY MAGNETICS
LBL1	1	5185-1655	LABEL-INFORMATION .15-IN-WD .6-IN-LG		



### E1420-68006 Parts List

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
P1, 2	2	1252-1596	CONN-POST TYPE 2.54-PIN-SPCG-MTG-END	10-8557-096-002-025 536010-5 DIN-96CPC-SRI-TR	KYOCERA TYCO ELECTRONICS AMP 3M
R10, 46, 56, 73, 74, 77, 89, 90	8	0757-0442	RESISTOR 10K +-1pct .125W TF TC=0+-100	5053HD10K00F CMF-551002FT-1 NK4H.125W1%+/- 100PPM1002	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R11	1	0757-0200	RESISTOR 5.62K +-1pct .125W TF TC=0+-100	5053HD5K620F CMF-555621FT-1 NK4H.125W1%+/- 100PPM5621	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R12, 43, 57, 58, 59, 75	6	1810-0279	NET-RES 9 4.7K OHM 10-PIN	750-101 MSP10A01-472G 4310R-6F4-472LF	TT ELECTRONICS VISHAY BOURNS
R13, 25, 26, 41, 45, 50, 72, 86, 91	10	0757-0280	RESISTOR 1K +-1pct .125W TF TC=0+-100	5053HD1K000F CMF-551001FT-1 NK4H.125W1%+/- 100PPM1001	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R14, 15	2	0698-0082	RESISTOR 464 +-1pct .125W TF TC=0+-100	5053HD464R0F CMF-554640FT-1 NK4H.125W1%+/- 100PPM464R0	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R16, 18, 21, 27, 29, 32	6	0757-0402	RESISTOR 110 +-1pct .125W TF TC=0+-100	5053HD110R0F CMF-551100FT-1 NK4H.125W1%+/- 100PPM110R0	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R17, 19, 20, 28, 30, 31	6	0698-3439	RESISTOR 178 +-1pct .125W TF TC=0+-100	5053HD178R0F CMF-551780FT-1 NK4H.125W1%+/- 100PPM178R0	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS

### E1420-68006 Parts List

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R22	1	2100-0554	RESISTOR-TRMR 500 10pct TKF TOP-ADJ 1-TF	3386P-Y46-501 PV34P501C30	BOURNS MURATA MANUFACTURING
R23, 24	2	0698-3161	RESISTOR 38.3K +-1pct .125W TF TC=0+-100	5053HD38K30F CMF-553832FT-1 NK4H.125W1%+/- 100PPM3832	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R3, 4	2	0698-8959	RESISTOR 619K +-1pct .125W TF TC=0+-100	5053HD619K0F CMF-556193FT-1	VISHAY BC COMPONENTS VISHAY
R35, 42	2	2100-3252	RESISTOR-TRMR 5K 10pct TKF TOP-ADJ 1-TRN	2100-3252 3386P-Y46-502	MURATA MANUFACTURING BOURNS
R37, 40	2	0698-3443	RESISTOR 287 +-1pct .125W TF TC=0+-100	5053HD287R0F CMF-552870FT-1 NK4H.125W1%+/- 100PPM287R0	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R44, 60	2	1810-0280	NET-RES 9 10.0K OHM 10-PIN	750-101 MSP10A01-103G 4310R-94Y-103LF	TT ELECTRONICS VISHAY BOURNS
R46	1	0757-0422	RESISTOR 909 +-1pct .125W TF TC=0+-100	5053HD909R0F CMF-559090FT-1	VISHAY BC COMPONENTS VISHAY
R48, 70	2	0757-0420	RES-FXD 750 OHM +-1PCT .125W TC 0+-100	CMF557500FKEA 5053HD750R0F NK4H.125W1%+/- 100PPM750R0	VISHAY VISHAY BC COMPONENTS E-SIL COMPONENTS
R49, 51, 71	3	0757-0438	RESISTOR 5.11K +-1pct .125W TF TC=0+-100	5053HD5K110F CMF-555111FT-1 NK4H.125W1%+/- 100PPM5111	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS

### E1420-68006 Parts List

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R5	1	0698-3157	RESISTOR 19.6K +-1pct .125W TF TC=0+-100	5053HD19K60F CMF-551962FT-1 NK4H.125W1%+/- 100PPM1962	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R52, 68	2	0757-0465	RESISTOR 100K +-1pct .125W TF TC=0+-100	5053HD100K0F CMF-551003FT-1 NK4H.125W1%+/- 100PPM1003	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R53, 64	2	0698-3132	RESISTOR 261 +-1pct .125W TF TC=0+-100	5053HD261R0F CMF-552610FT-1 NK4H.125W1%+/- 100PPM261R0	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R54, 65	2	0757-1094	RESISTOR 1.47K +-1pct .125W TF TC=0+-100	5053HD1K470F CMF-551471FT-1 NK4H.125W1%+/- 100PPM1471	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R6, 7, 38, 39, 78, 85, 92	8	0757-0401	RESISTOR 100 +-1pct .125W TF TC=0+-100	5053HD100R0F CMF-551000FT-1	VISHAY BC COMPONENTS VISHAY
R62, 63, 84, 96	4	0757-0421	RESISTOR 825 +-1pct .125W TF TC=0+-100	5053HD825R0F CMF-558250FT-1	VISHAY BC COMPONENTS VISHAY
R67	1	0698-3151	RESISTOR 2.87K +-1pct .125W TF TC=0+-100	5053HD2K870F CMF-552871FT-1 CRB25-FX-2871 H82K87FZ	VISHAY BC COMPONENTS VISHAY ROHM MEGGITT-ELECTRONIC COMPONENTS
R76	1	0757-0394	RESISTOR 51.1 +-1pct .125W TF TC=0+-100	5053HD51R10F CMF-5551R1FT-1 NK4H.125W1%+/- 100PPM51R1	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS

### E1420-68006 Parts List

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R80, 82	2	0698-3437	RESISTOR 133 +-1pct .125W TF TC=0+-100	5053HD133R0F CMF-551330FT-1 NK4H.125W1%+/- 100PPM133R0	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R81, 83	2	0757-0399	RESISTOR 82.5 +-1pct .125W TF TC=0+-100	5053HD82R50F CMF-5582R5FT-1 NK4H.125W1%+/- 100PPM82R5	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R87, 88	2	0698-0085	RESISTOR 2.61K +-1pct .25W TF TC=0+-100	5043ED2K610F CMF-552611FT-1 NK4H.25W1%+/- 100PPM2611	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R9, 33, 34	3	0757-0418	RESISTOR 619 +-1pct .125W TF TC=0+-100	5053HD619R0F CMF-556190FT-1 NK4H.125W1%+/- 100PPM619R0	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R93	1	0757-0279	RESISTOR 3.16K +-1pct .125W TF TC=0+-100	5053HD3K160F CMF-553161FT-1 NK4H.125W1%+/- 100PPM3161	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
R97	1	0698-3440	RESISTOR 196 +-1pct .125W TF TC=0+-100	5053HD196R0F CMF-551960FT-1	VISHAY BC COMPONENTS VISHAY
S1	1	3101-2747	SWITCH-DIP SL 8-1A 0.1A 30VDC	90B08ST 209-8LPST 436393-8	GRAYHILL CTS TYCO ELECTRONICS AMP
TP1, 3, 4, 6, 7, 8	6	0360-0124	CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	0360-0124	FORM CUT INDUSTRIES
U1	1	5188-2551	LTB FOR 1820-3373		
U1a	1	1820-3373	IC MV CMOS/HC MONOSTBL CLEAR DUAL		
U10	1	1820-3973	IC GATE TTL/ALS EXCL-OR QUAD 2-INP	SN74ALS86N	TEXAS INSTRUMENTS
U34	1	5188-2537	LTB FOR 1820-6693		
U34a	1	1820-6693	IC-ASIC		
	1	5188-2511	LTB FOR 1821-2190		

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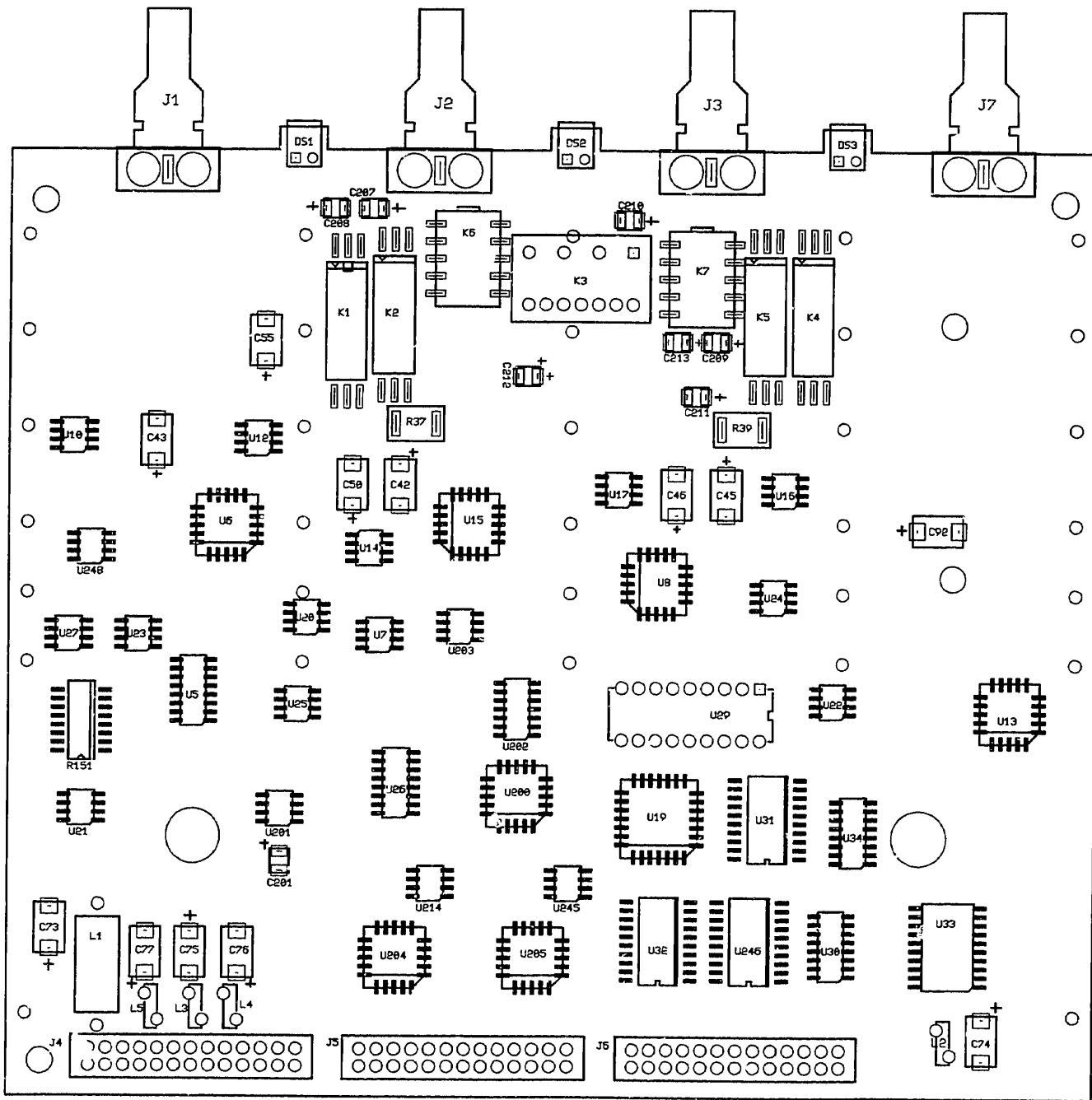
Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
	1	1821-2190	IC DRVR TTL/F OR HEX 2-INP		
	2	5188-2543	LTB FOR 1858-0054		
	1	1858-0054	TRANSISTOR ARRAY 16-PIN PLSTC DIP		
	1	5188-2490	LTB FOR 1813-0119		
	1	1813-0119	CRYSTAL OSC 40.0MHZ 0.01pct	K1100AM-40MHZ	MTRONPTI
U11, 14	2	1818-3981	IC 256K-BIT SRAM 120-NS CMOS	CY62256LL-70PC	CYPRESS SEMICONDUCTOR
U16	1	1820-4583	IC GATE CMOS/HCT AND QUAD 2-INP	SN74HCT08	TEXAS INSTRUMENTS
U17	1	5000-0017	LTB for 1826-0180		
U17a	1	1826-0180	IC TMR/CNTR GP 8 PIN DIP-P	NE555N	STMICROELECTRONICS
U18, 19, 66	3	1820-4079	IC XLTR ECL/10KH ECL-TO-TTL QUAD	MC10H125P	ON SEMICONDUCTOR
U2	1	1820-2686	IC GATE TTL/F AND QUAD 2-INP	74F08N SN74F08N 74F08N	PHILIPS TEXAS INSTRUMENTS NXP
U20	1	1826-0393	IC PWR MGT-V-REG-ADJ-POS 1.2/37V 3 PINS	LM317T-NOPB	NATIONAL SEMICONDUCTOR
U21, 35-37, 45-48, 57, 65	10	1820-6744	IC DRVR CMOS/ACT LINE OCTL	MC74ACT541NG	ON SEMICONDUCTOR
U22-24, 38	4	1820-5701	IC TRANSCEIVER CMOS/ACT BUS OCTL 20-PDIP	74ACT245PC	FAIRCHILD SEMICONDUCTOR
U25	1	5188-2562	LTB for 1820-7041		
U25a	1	1820-7041	IC-ASIC		
U26, 28	2	1820-2691	IC FF TTL/F D-TYPE POS-EDGE-TRIG 14-PDIP	N74F74N N74F74N	PHILIPS NXP
U27	1	1820-2684	IC GATE TTL/F NAND QUAD 2-INP	74F00N 74F00N	PHILIPS NXP
U29	1	1820-2739	IC GATE TTL/ALS NOR QUAD 2-INP	DM74ALS02N SN74ALS02AN	FAIRCHILD SEMICONDUCTOR TEXAS INSTRUMENTS
U3, 8, 15	3	1820-4721	IC GATE CMOS/HCT OR QUAD 2-INP	74HCT32N MM74HC32N 74HCT32N	PHILIPS FAIRCHILD SEMICONDUCTOR NXP
U30	1	1826-0346	IC OP AMP GP DUAL 8 PIN DIP-P	LM358NNOPB	NATIONAL SEMICONDUCTOR
U33, 41	2	1826-0065	IC COMPARATOR PRCN 8 PIN DIP-P	LM311P LM311NNOPB	TEXAS INSTRUMENTS NATIONAL SEMICONDUCTOR
U39, 50	2	1820-3318	IC FF TTL/ALS D-TYPE POS-EDGE-TRIG COM	DM74ALS273N SN74ALS273N	FAIRCHILD SEMICONDUCTOR TEXAS INSTRUMENTS

### E1420-68006 Parts List

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
U4	1	1820-1568	IC DRVR TTL/LS BUS QUAD	SN74LS125AN	TEXAS INSTRUMENTS
U42, 44, 55, 69	4	1820-4057	IC BFR TTL/F NAND QUAD 2-INP	74F38N N74F38N	PHILIPS NXP
U43, 58	2	1820-3714	IC TRANSCEIVER TTL/ALS BUS OCTL	SN74ALS245A-1N	TEXAS INSTRUMENTS
U49	1	1820-5845	IC 16-BIT MPU W/COUNTER, PLCC 10MHZ	MC68HC000E110	FREESCALE SEMICONDUCTOR
U5	1	1826-0210	IC COMPARATOR HS 14 PIN DIP-P	LM361N-NOPB	NATIONAL SEMICONDUCTOR
U51	1	5088-1195	IC-DIGITAL		
U51a	1	1821-4749	IC TIMER CMOS PRGMBL		
U52, 53	2	1820-2694	IC FF TTL/F J-K NEG-EDGE-TRIG	74F112N SN74F112N 74F112N	PHILIPS TEXAS INSTRUMENTS NXP
U56	1	1820-2774	IC GATE TTL/ALS NAND DUAL 4-INP	DM74ALS20AN SN74ALS20AN	FAIRCHILD SEMICONDUCTOR TEXAS INSTRUMENTS
U59	1	1820-3224	IC TRANSCEIVER TTL/F BUS OCTL	74F245N SN74F245N 74F245N	PHILIPS TEXAS INSTRUMENTS NXP
U6	1	1820-2506	IC INV TTL/F HEX	74F04N SN74F04N 74F04N	PHILIPS TEXAS INSTRUMENTS NXP
U60, 62, 63	3	1820-4597	IC TRANSCEIVER TTL/F BUS OCTL	74F543N SN74F543NT 74F543N	PHILIPS TEXAS INSTRUMENTS NXP
U61	1	1820-2795	IC DRVR TTL/F BUS OCTL	74F244N SN74F244N 74F244N	PHILIPS TEXAS INSTRUMENTS NXP
U64	1	1820-3145	IC DRVR TTL/ALS BUS OCTL	DM74ALS244AN	FAIRCHILD SEMICONDUCTOR
U67	1	1820-3225	IC MUXR/DATA-SEL TTL/F 8-TO-1-LINE	74F251APC	FAIRCHILD SEMICONDUCTOR
U68	1	1820-5984	IC DCDR-DEMUXR CMOS/HCT BIN 3-TO-8-LINE	74HCT238N 74HCT238N	PHILIPS NXP
U7	1	1818-3484	IC 256-BIT SRAM 120-NS CMOS		

### E1420-68006 Parts List

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
U70	1	1820-2657	IC GATE TTL/ALS OR QUAD 2-INP	DM74ALS32N SN74ALS32N	FAIRCHILD SEMICONDUCTOR TEXAS INSTRUMENTS
U9	1	1826-0360	IC COMPARATOR GP QUAD 16 PIN DIP-P		
W1, 2, 3	3	1251-6073	CONN-HDR VERT 2-PIN 2.54MM 1-ROW	929450-01-02-I 22-10-2021 1102-1-102-02	3M MOLEX METHODE ELECTRONICS
XJ2.1-2, XJ3.1-4	6	1258-0141	JUMPER-REMOVABLE FOR 0.025 IN SQ PINS	65474-004LF 530153-2	FCI FRAMATOME BERG TYCO ELECTRONICS AMP
XU12, 13	2	1200-1314	SOCKET-IC-DIP 32-CONT DIP DIP-SLDR	1-390263-2	TYCO ELECTRONICS AMP
XU31	1	1200-0654	SOCKET-IC-DIP 40-CONT DIP DIP-SLDR	1-390262-5 DILB40P-223TLF	TYCO ELECTRONICS AMP FCI FRAMATOME BERG
XU49	1	1200-1274	SOCKET-IC-PLCC 68-CONT SQUARE DIP-SLDR	1-822473-6 PLCC68PT2	TYCO ELECTRONICS AMP FCI FRAMATOME BERG
	3	0698-3446	RESISTOR 383 +-1pct .125W TF TC=0+-100	5053HD383R0F CMF-553830FT-1 NK4H.125W1%+/- 100PPM383R0	VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS
	2	0698-3159	RESISTOR 26.1K +-1pct .25W TF TC=0+-100	MFS 1/4 D C ___ 2612 F 5053HD26K10F CMF-552612FT-1 NK4H.125W1%+/- 100PPM2612	KOA VISHAY BC COMPONENTS VISHAY E-SIL COMPONENTS



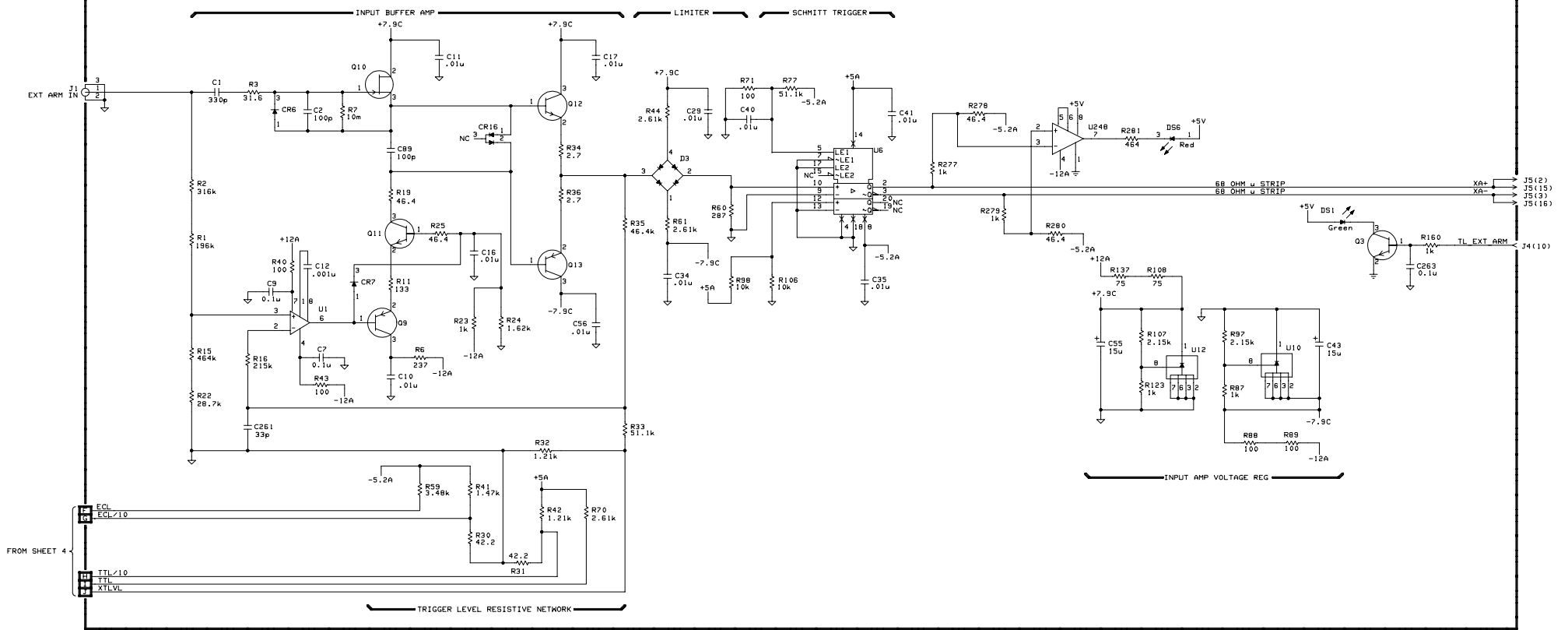
Agilent E1420B  
 Universal Counter  
 53310-60008

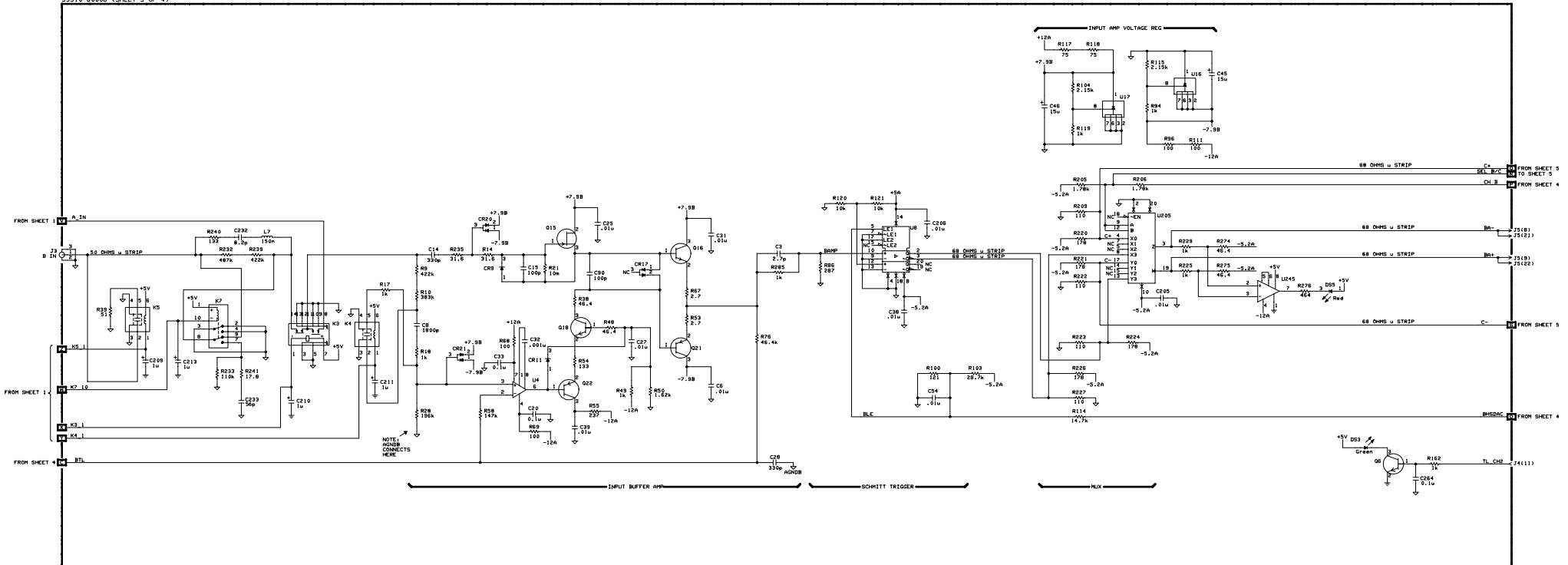
Component Locator



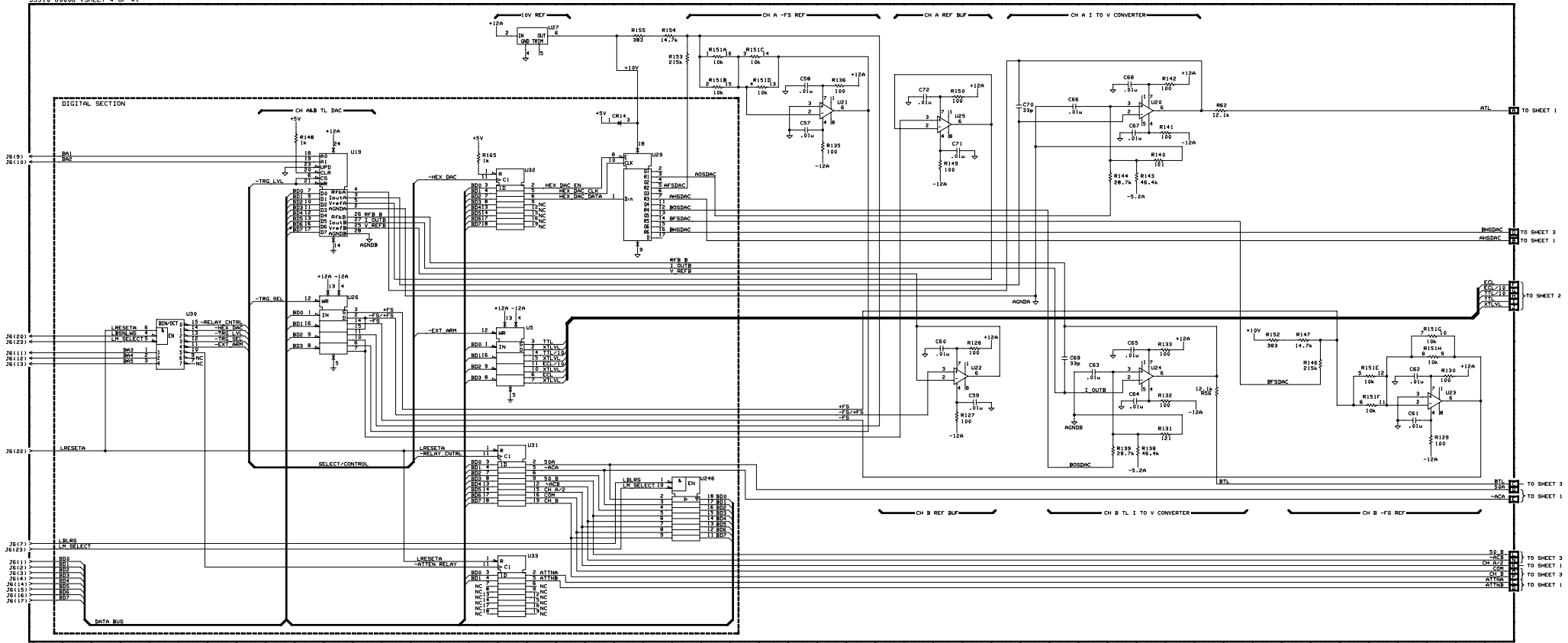


EXTERNAL ARM CHANNEL





Agilent E1420B  
 Universal Counter  
 53310-60008  
 VXI Schematic



### 53310-60008 Parts List

(Input board for the E1420A)

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C14,C1,C5	3	0160-7573	CAP-FXD 330pF +-5pct 50 V CER C0G	12067A331JATA	AVX
C15,C49,C13,C90,C89,C2	6	0160-5967	CAP-FXD 100pF +-5pct 50 V CER C0G	08055A101JAT A C0805C101J5GAC C2012COG1H101J GRM2165C1H101JA01D VJ0805A101JXAMT	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C207,C201,C210,C211, C212,C213,C208,C209	8	0180-3751	CAP-FXD 1uF +-20PCT 35V TA	TAJB105M035 293D105X0035B2E3 ESVB21V105M SK-1V105M-RB	AVX VISHAY NEC ELECTRONICS ELNA
C22,C32,C12	3	0160-6100	CAP-FXD 1000pF +-5pct 50 V CER C0G	12065A102JAT A C1206C102J5GAC C3216CH1H102J GRM3195C1H102JD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C220,C57,C58,C10,C59, C24,C25,C72,C6,C21,C60,C6 1,C62,C27,C206,C29,C205,C 30,C31,C204,C63,C34,C35,C 36,C37,C38,C39,C64,C40,C4 1,C65,C66,C67,C68,C17,C71 ,C16,C51,C52,C53,C54,C11, C56,	43	0160-6736	CAP-FXD 0.01uF +-10pct 50 V CER X7R	12065C103KAT A C1206C103K5RAC C3216X7R1H103K GRM316R71H103KD01D VJ1206Y103KXAMT	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY
C232,C230	2	0160-7629	CAP-FXD 8.2pF +-6.1pct 500 V CER C0G	12067A8R2DATMA	AVX
C233,C231	2	0160-5956	CAP-FXD 56pF +-5pct 50 V CER C0G	08055A560JAT A C0805C560J5GAC C2012COG1H560J GRM2165C1H560JD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C264,C263,C262,C33,C19, C260,C203,C20,C7,C9,C23	11	0160-6222	CAP-FXD 0.1uF +-10pct 50 V CER X7R	12105C104KAT A C1210C104K5RAC C3225X7R1H104K GRM32MR71H104KA01L VJ1210Y104KXAMT	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING VISHAY

### 53310-60008 Parts List

(Input board for the E1420A)

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
C28,C18	2	0160-5952	CAP-FXD 330pF +-5pct 50 V CER C0G	08055A331JAT A C0805C331J5GAC C2012COG1H331J GRM2165C1H331JA01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C3,C26	2	0160-5943	CAP-FXD 2.7pF 50 V CER C0G	08051A2R7CAT A C0805C279D5GAC C2012COG1H2R7C GRM2165C1H2R7CD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C43,C45,C42,C55,C46,C50	6	0180-3922	CAP-FXD 15uF +-20PCT 20V TA	TAJD156M020 NRD156M20R12	AVX NEC ELECTRONICS
C69,C70,C261	3	0160-5959	CAP-FXD 33pF +-5pct 50 V CER C0G	08055A330JAT A C0805C330J5GAC C2012COG1H330J GRM2165C1H330JD01D	AVX KEMET ELECTRONICS TDK MURATA MANUFACTURING
C74,C77,C73	3	0180-3755	CAP-FXD 33uF +-20PCT 10V TA	TAJD336M010 293D336X0010D2E3 ESVD1A336M T491D336M010AS	AVX VISHAY NEC ELECTRONICS KEMET ELECTRONICS
C75,C76	2	0180-3753	CAP-FXD 6.8uF +-20PCT 35V TA	TAJD685M035 ESVD1V685M	AVX NEC ELECTRONICS
C8,C4	2	0160-7276	CAP-FXD 1800pF +-10pct 500 V CER X7R	12107C182KAT A	AVX
CR14,CR15,CR10,CR13, CR7,CR6,CR11,CR9,CR8	9	1901-1227	DIODE-SWITCHING 75V 200MA 6NS TO-236	BAS16 BAS16 BAS16LT1G BAS16	PHILIPS VISHAY ON SEMICONDUCTOR NXP
CR21,CR12,CR18,CR17, CR19,CR16,CR20	7	1906-0387	DIODE-DUAL 30V TO-236AB (SOT-23)	MMBD1703A	FAIRCHILD SEMICONDUCTOR
D3	1	1900-0221	DIODE-SCHOTTKY SM SIG	HSMS-2818-TR1G	AVAGO TECHNOLOGIES
DS1,DS2,DS3	3	1990-1362	LED-LAMP LUM-INT 1.5MCD IF 15MA-MAX		
DS4,DS5,DS6	3	1990-1267	LED-LAMP LUM-INT=8MCD IF=30MA-MAX	AM23ID-F	KINGBRIGHT AMERICAN
H10,H9,H14,H13,H12,H11	6	0590-1089	THREADED INSERT-NUT M2.5 X 0.45	S-M2.5-2-ZI	PENN ENGINEERING & MFG

### 53310-60008 Parts List

(Input board for the E1420A)

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
H6,H5,H1,H4,H3,H2	6	0515-0368	SCREW-MACHINE ASSY M2.5 X 0.45 ; 12 MM LONG; TORX T8 ; RECESS; CREST CUP CONICAL ; WASHER	0515-0368	TEXTRON
J1,J2,J3	3	1250-0524	CONNECTOR-RF BNC FEMALE SGL-HOLE-RR	28JR251-1	SOURIAU
J4,J6,J5	3	1251-5927	CONN-POST TYPE . 100-PIN-SPCG-MTG-END	67997-626HLF	FCI FRAMATOME BERG
K3	1	0490-1554	RELAY 1C 5VDC-COIL 0.5A 30VAC/DC	G6Y-1-DC5	OMRON
K5,K4,K1,K2	4	0490-1747	RELAY-REED 1A 1A 200VAC 5VDC-COIL	9200-0066	COTO WABASH
K7,K6	2	0490-1828	RELAY 2C 5VDC-COIL 2A 30VDC	TQ2SA-5V G6H-2F-DC5	MATSUSHITA OMRON
L1	1	9100-0541	INDUCTOR RF-CH-MLD 250uH +-10pct	1670-1 9100-0541 ICS-1041-1	CADDELL-BURNS ARROW ELECTRONICS VISHAY
L2, L3, L4, L5	4	9100-3922	INDUCTOR FIXED Z GREATER THAN 1200 OHMS 120 TO 650	99ZSPA45165 51-088	TECHNITROL GOWANDA ELECTRONICS
L6,L7	2	9140-1098	INDUCTOR 150nH +-5pct 2.8W-mmX3.4LG-mm	NLV32T-R15J -PF KL32T___R15J	TDK KOA
MP1	1	53310-20008	BD-BLANK		
Q13,Q21,Q23	3	1853-0516	TRANSISTOR PNP SI SOT-23 (TO-236AB)	MMBTH81	FAIRCHILD SEMICONDUCTOR
Q14,Q15,Q10	3	1855-0807	TRANSISTOR J-FET N-CHAN D-MODE SOT-23	BF511 BF511	PHILIPS NXP
Q17,Q22,Q9	3	1853-0567	TRANSISTOR PNP SI SOT-23 (TO-236AB)	MMBT3906 SST3906T116 MMBT3906LT1G	FAIRCHILD SEMICONDUCTOR ROHM ON SEMICONDUCTOR
Q19,Q18,Q11	3	1854-1102	TRANSISTOR NPN SI SOT-23 (TO-236AB)	MMBTH24	FAIRCHILD SEMICONDUCTOR
Q20,Q16,Q12	3	1854-1148	TRANSISTOR NPN SI SOT-23 (TO-236AB)	MMBTH10 MMBTH10LT1G	FAIRCHILD SEMICONDUCTOR ON SEMICONDUCTOR
Q6,Q3,Q5	3	1854-1037	TRANSISTOR NPN SI TO-236AA PD=350MW	MMBT3904 SST3904T116 MMBT3904LT1G	FAIRCHILD SEMICONDUCTOR ROHM ON SEMICONDUCTOR

### 53310-60008 Parts List

(Input board for the E1420A)

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R10,R4	2	0699-1337	RESISTOR 383K +-1pct .125W TKF TC=0+-100	CRCW1206383KFKE_ RK73H2BT_3833F MCR18__F3833 232272463834	VISHAY KOA ROHM YAGEO
R11,R237,R240,R46,R54	5	0699-1418	RESISTOR 133 +-1pct .125W TKF TC=0+-100	CRCW1206133RFKE_ RK73H2BT_1330F MCR18__F1330 232272461331	VISHAY KOA ROHM YAGEO
R113,R114,R217,R147, R154,R216,R212,R213	8	0699-1394	RESISTOR 14.7K +-1pct .125W TKF TC=0+-100	CRCW120614K7FKE_ RK73H2BT_1472F MCR18__F1472 232272461473L	VISHAY KOA ROHM YAGEO
R123,R12,R112,R119,R87, R82,R285,R160,R94,R161,R 63,R225,R162,R49,R165,R17 ,R18,R148,R229,R23,R211,R 279,R210,R277,R26,R29	26	0699-1318	RESISTOR 1K +-1pct .125W TKF TC=0+-100	CRCW12061K00FKE_ RK73H2BT_1001F MCR18__F1001 232272461002L	VISHAY KOA ROHM YAGEO
R137,R108,R110,R118, R109,R117	6	0699-1365	RESISTOR 75 +-1pct .125W TKF TC=0+-100	CRCW120675R0FKE_ RK73H2BT_75R0F MCR18__F75R0 232272467509	VISHAY KOA ROHM YAGEO
R14,R234,R235,R3,R13	5	0699-1356	RESISTOR 31.6 +-1pct .25W TKF TC=0+-100	CRCW120631R6FKE_ RK73H2BT_31R6F MCR18__F31R6 232272463169	VISHAY KOA ROHM YAGEO
R140,R99,R100,R131	4	0699-1417	RESISTOR 121 +-1pct .125W TKF TC=0+-100	CRCW1206121RFKE_ RK73H2BT_1210F MCR18__F1210 232272461211	VISHAY KOA ROHM YAGEO



### 53310-60008 Parts List

(Input board for the E1420A)

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R146,R16,R153	3	0699-1445	RESISTOR 215K +-1pct .125W TKF TC=0+-100	CRCW1206215KFKE_ RK73H2BT_2153F MCR18__F2153 232272462154L	VISHAY KOA ROHM YAGEO
R15	1	0699-1453	RESISTOR 464K +-1pct .125W TKF TC=0+-100	CRCW1206464KFKE_ RK73H2BT_4643F MCR18__F4643	VISHAY KOA ROHM
R151	1	1810-1139	NET-RES 8 10.0K OHM 16-PIN	GM8A-03-1002-D-B TOMC-1603-1002D	TT ELECTRONICS VISHAY
R152,R155	2	0699-1429	RESISTOR 383 +-1pct .125W TKF TC=0+-100	CRCW1206383RFKE_ RK73H2BT_3830F MCR18__F3830 232272463831	VISHAY KOA ROHM YAGEO
R2	1	0699-1448	RESISTOR 316K +-1pct .125W TKF TC=0+-100	CRCW1206316KFKE_ RK73H2BT_3163F MCR18__F3163 232272463164	VISHAY KOA ROHM YAGEO
R202,R220,R224,R204, R226,R221	6	0699-1421	RESISTOR 178 +-1pct .125W TKF TC=0+-100	CRCW1206178RFKE_ RK73H2BT_1780F MCR18__F1780 232272461781	VISHAY KOA ROHM YAGEO
R207,R206,R208,R205	4	0699-1374	RESISTOR 1.78K +-1pct .125W TKF TC=0+-100	CRCW12061K78FKE_ RK73H2BT_1781F MCR18__F1781 232272461782L	VISHAY KOA ROHM YAGEO
R22,R139,R144,R103,R102	5	0699-1401	RESISTOR 28.7K +-1pct .125W TKF TC=0+-100	CRCW120628K7FKE_ RK73H2BT_2872F MCR18__F2872 232272462873	VISHAY KOA ROHM YAGEO

### 53310-60008 Parts List

(Input board for the E1420A)

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R222,R209,R227,R223, R200,R203	6	0699-1416	RESISTOR 110 +-1pct .125W TKF TC=0+-100	CRCW1206110RFKE_ RK73H2BT_1100F MCR18___F1100 232272461101L	VISHAY KOA ROHM YAGEO
R230,R232	2	0699-1454	RESISTOR 487K +-1PCT .125W TKF TC=0+-100	2322724X4874 CRCW1206487KFKE_ RK73H2BT_4873F MCR18___F4873 2322724X4874	PHILIPS VISHAY KOA ROHM NXP
R231,R233	2	0699-1439	RESISTOR 110K +-1pct .125W TKF TC=0+-100	CRCW1206110KFKE_ RK73H2BT_1103F MCR18___F1103 232272461104L	VISHAY KOA ROHM YAGEO
R238,R241	2	0699-1350	RESISTOR 17.8 +-1pct .125W TKF TC=0+-100	CRCW120617R8FKE_ RK73H2BT_17R8F MCR18___F17R8 232272461789	VISHAY KOA ROHM YAGEO
R24,R50,R64	3	0699-1904	RESISTOR 1.62K +-1pct .125W TKF TC=0+-100	CRCW12061K62FKE_ RK73H2BT_1621F MCR18___F1621 232272461622L	VISHAY KOA ROHM YAGEO
R281,R219,R273,R276,R201	5	0699-1431	RESISTOR 464 +-1pct .125W TKF TC=0+-100	CRCW1206464RFKE_ RK73H2BT_4640F MCR18___F4640 232272464641	VISHAY KOA ROHM YAGEO
R283	1	0699-1387	RESISTOR 6.81K +-1pct .125W TKF TC=0+-100	CRCW12066K81FKE_ RK73H2BT_6811F 232272466812L MCR18___F6811	VISHAY KOA YAGEO ROHM

### 53310-60008 Parts List

(Input board for the E1420A)

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R30,R31	2	0699-1359	RESISTOR 42.2 +-1pct .125W TKF TC=0+-100	CRCW120642R2FKE_ RK73H2BT_42R2F MCR18__F42R2 232272464229	VISHAY KOA ROHM YAGEO
R35,R73,R143,R138,R76	5	0699-1407	RESISTOR 46.4K +-1pct .125W TKF TC=0+-100	CRCW120646K4FKE_ RK73H2BT_4642F MCR18__F4642 232272464643	VISHAY KOA ROHM YAGEO
R38,R19,R272,R271,R274, R25,R280,R65,R275,R278,R 47,R48	12	0699-1360	RESISTOR 46.4 +-1pct .125W TKF TC=0+-100	CRCW120646R4FKE_ RK73H2BT_46R4F MCR18__F46R4 232272464649	VISHAY KOA ROHM YAGEO
R39,R37	2	0699-2859	RES-FXD 51 OHM +-5PCT 1W TC 0+-200	CRCW251251R0JNE_ RK73B3AT__510J MCR100__J510	VISHAY KOA ROHM
R41	1	0699-1372	RESISTOR 1.47K +-1pct .125W TKF TC=0+-100	CRCW12061K47FKE_ RK73H2BT_1471F MCR18__F1471 232272461472	VISHAY KOA ROHM YAGEO
R42,R32	2	0699-1370	RESISTOR 1.21K +-1pct .125W TKF TC=0+-100	CRCW12061K21FK E_ RK73H2BT_1211F MCR18__F1211 232272461212	VISHAY KOA ROHM YAGEO
R51,R214	2	0699-1413	RESISTOR 82.5K +-1pct .125W TKF TC=0+-100	CRCW120682K5FKE_ RK73H2BT_8252F MCR18__F8252 232272468253	VISHAY KOA ROHM YAGEO
R52,R55,R6	3	0699-1424	RESISTOR-FXD 237 +-1pct .25W TC 0+-100 1206	CRCW1206237RFKE_ RK73H2BT_2370F MCR18__F2370	VISHAY KOA ROHM

### 53310-60008 Parts List

(Input board for the E1420A)

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R56,R62	2	0699-1319	RESISTOR 12.1K +-1pct .125W TKF TC=0+-100	CRCW120612K1FKE_ RK73H2BT_1212F MCR18___F1212 232272461213L	VISHAY KOA ROHM YAGEO
R58,R45	2	0699-1443	RESISTOR 147K +-1pct .125W TKF TC=0+-100	CRCW1206147KFKE_ RK73H2BT_1473F MCR18___F1473 232272461474	VISHAY KOA ROHM YAGEO
R59	1	0699-1381	RESISTOR 3.48K +-1pct .125W TKF TC=0+-100	CRCW12063K48FKE_ RK73H2BT_3481F MCR18___F3481 232272463482	VISHAY KOA ROHM YAGEO
R61,R70,R44	3	0699-1378	RESISTOR 2.61K +-1pct .125W TKF TC=0+-100	CRCW12062K61FKE_ RK73H2BT_2611F MCR18___F2611 232272462612L	VISHAY KOA ROHM YAGEO
R7,R21,R27	3	0699-1466	RESISTOR 10M +-10pct .125W TKF TC=0+-200	CRCW1206106KJNE_ RK73B2BT_106J MCR18___K106 232271161106	VISHAY KOA ROHM YAGEO
R74,R36,R53,R34,R67,R72	6	0699-2120	RESISTOR 2.7 +-5pct .125W TKF TC=0+-200	MCR18___J2R7	ROHM
R77,R33	2	0699-1408	RESISTOR 51.1K +-1pct .125W TKF TC=0+-100	CRCW120651K1FKE_ RK73H2BT_5112F MCR18___F5112 232272465113L	VISHAY KOA ROHM YAGEO
R8,R28,R1	3	0699-1332	RESISTOR 196K +-1pct .125W TKF TC=0+-100	CRCW1206196KFKE_ RK73H2BT_1963F MCR18___F1963 232272461964	VISHAY KOA ROHM YAGEO

### 53310-60008 Parts List

(Input board for the E1420A)

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
R83,R91,R92,R133,R136, R96,R71,R142,R43,R149,R4 0,R68,R78,R150,R69,R88,R1 35,R89,R141,R130,R127,R13 2,R111,R129,R128	25	0699-1415	RESISTOR 100 +-1pct .125W TKF TC=0+-100	CRCW1206100RFKE_ RK73H2BT_1000F MCR18__F1000 232272461001L	VISHAY KOA ROHM YAGEO
R86,R85,R60	3	0699-1426	RESISTOR 287 +-1pct .125W TKF TC=0+-100	CRCW1206287RFKE_ RK73H2BT_2870F MCR18__F2870 232272462871	VISHAY KOA ROHM YAGEO
R9,R5,R239,R236	4	0699-1452	RESISTOR 422K +-1pct .125W TKF TC=0+-100	CRCW1206422KFKE_ RK73H2BT_4223F MCR18__F4223 2322724X4224	VISHAY KOA ROHM YAGEO
R97,R81,R115,R104, R107,R101	6	0699-1376	RESISTOR 2.15K +-1pct .125W TKF TC=0+-100	CRCW12062K15FKE_ RK73H2BT_2151F MCR18__F2151 232272462152	VISHAY KOA ROHM YAGEO
R98,R284,R126,R121, R125,R120,R106	7	0699-1391	RESISTOR 10K +-1pct .125W TKF TC=0+-100	CRCW120610K0FKE_ RK73H2BT_1002F MCR18__F1002 232272461003L	VISHAY KOA ROHM YAGEO
U1,U2,U4	3	1826-2115	IC OP AMP LOW-BIAS-H-IMPD SINGLE 8 PIN	LT1008S8	LINEAR TECHNOLOGY
U10,U16,U7,U14,U17,U12	6	1826-1601	IC PWR MGT-V-REF-ADJ 2.5/36V 8 PINS	TL431CD LM431ACMNOPB	TEXAS INSTRUMENTS NATIONAL SEMICONDUCTOR
U15,U6,U8	3	1826-2229	IC COMPARATOR HS DUAL 20 PIN PLCC	AD96687BPZ	ANALOG DEVICES
U19	1	1826-2109	D/A 12-BIT 28-PLCC CMOS	AD7537JP	ANALOG DEVICES
U20,U24	2	1826-1991	IC OP AMP HS SINGLE 8 PIN PLSTC-SOIC	AD711JRZ	ANALOG DEVICES
U200	1	1820-5629	IC FF ECL/10KH D-M/S POS-EDGE-TRIG	MC10H131FNG	ON SEMICONDUCTOR
U201	1	1826-1602	IC MISC SINGLE 8 PIN PLSTC-SOIC	TLC555CD	TEXAS INSTRUMENTS
U202	1	1820-5469	IC GATE CMOS/HCT NAND QUAD 2-INP	74HCT00D 74HCT00D	PHILIPS NXP

### 53310-60008 Parts List

(Input board for the E1420A)

Reference Designator	Qty	Agilent P/N	Description	MPN	Manufacturer
U203,U245,U214,U248	4	1826-1594	IC COMPARATOR GP SINGLE 8 PIN PLSTC-SOIC	LM311D LM311MNOB	STMICROELECTRONICS NATIONAL SEMICONDUCTOR
U204,U205	2	1820-6872	IC MUXR/DATA-SEL ECL/10KH 4-TO-1-LINE	MC10H174FNG	ON SEMICONDUCTOR
U246	1	1820-4933	IC DRVR TTL/ALS LINE OCTL	DM74ALS541WMX SN74ALS541DW	FAIRCHILD SEMICONDUCTOR TEXAS INSTRUMENTS
U25,U21,U23,U22	4	1826-2114	IC OP AMP PRCN SINGLE 8 PIN PLSTC-SOIC	LT1001CS8	LINEAR TECHNOLOGY
U26,U5	2	1826-2119	ANALOG SWITCH 4 SPST 16 -P-SOIC	ADG221KRZ	ANALOG DEVICES
U27	1	1826-1687	IC PWR MGT-V-REF-FXD 9.95/10.05V 8 PINS	LT1021DCS8-10#PBF	LINEAR TECHNOLOGY
U29	1	5185-8481	D/A 6-BIT 18-PLASTIC CMOS		
U30	1	1820-4257	IC DCDR-DEMUXR TTL/ALS BIN 3-TO-8-LINE	DM74ALS138MX SN74ALS138AD	FAIRCHILD SEMICONDUCTOR TEXAS INSTRUMENTS
U31,U32,U33	3	1820-5475	IC FF CMOS/HCT D-TYPE POS-EDGE-TRIG COM	74HCT273D 74HCT273D	PHILIPS NXP
U34	1	1858-0104	TRANSISTOR ARRAY 16-PIN PLSTC SURFACE	ULN2003D1013TR ULN2003AD MC1413DG DS2003CMNOB	STMICROELECTRONICS TEXAS INSTRUMENTS ON SEMICONDUCTOR NATIONAL SEMICONDUCTOR

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