

ASSEMBLY 3370005 (cont.)

47005	1.00	BATCLP 9V NON-INS. 6" LEADS	CABEL A
48220	2.00	LABEL, RIBBON CABLE 1"X1"X3"	
48223	2.00	LABEL, CABLE .50 X .35 X .75	
49156	4.00	FOOT RUBBER GREY	
49499	2.00	SPACER .315IDX.125THK SS	
5022016	5.00	INSERT MOLDED	
5022017	5.00	ECG CONTACT POST MALE	
52039	1.00	KEYPAD 1X5 COM.BUS 3/4"C-C	
5382001	5.00	ECG POST CAP	
5382002	5.00	ECG POST SPRING	
66006	0.00	LOCTITE 242 BLUE	
66007	0.00	SILICON SEALANT AQUARIUM	A/R
71042	0.67	CABLE FLAT 34-COND 28 AWG	8" CABEL C
71051	0.62	WIRE HOOK UP 22AWG W/RED	2,5"3X CABEL B

7770107	1.00	TAG S/N (AW)
3362010	1.00	QED-5 PLATE COVER KNOB
3362011	1.00	QED-5 PLATE COVER
42313	1.00	BANANA PLUG MIDGET 6-32 1/2L
66281	0.00	LOCKTITE 242 BLUE 10CC

ASSEMBLY: 3370002
SHIPPING ACCESS

3360501	2.00	QED-5 PLATE COVER ASBY
3371002	1.00	MANUAL QED-6 M/H OPERATORS
93006	1.00	TAG QEDR 100/ROLL
94075	1.00	SHIPPING DOCUMENT KIT

ASSEMBLY: QED-6
DEFIB ANALYZER W/PACER

PART NUMBER	QTY PER ASSEMBLY	DESCRIPTION	REFERENCE INFORMATION
3360001	1.00	SHIPPING ASBY	
3370002	1.00	SHIPPING ACCESS	
3370005	1.00	FINAL ASBY QED-6	

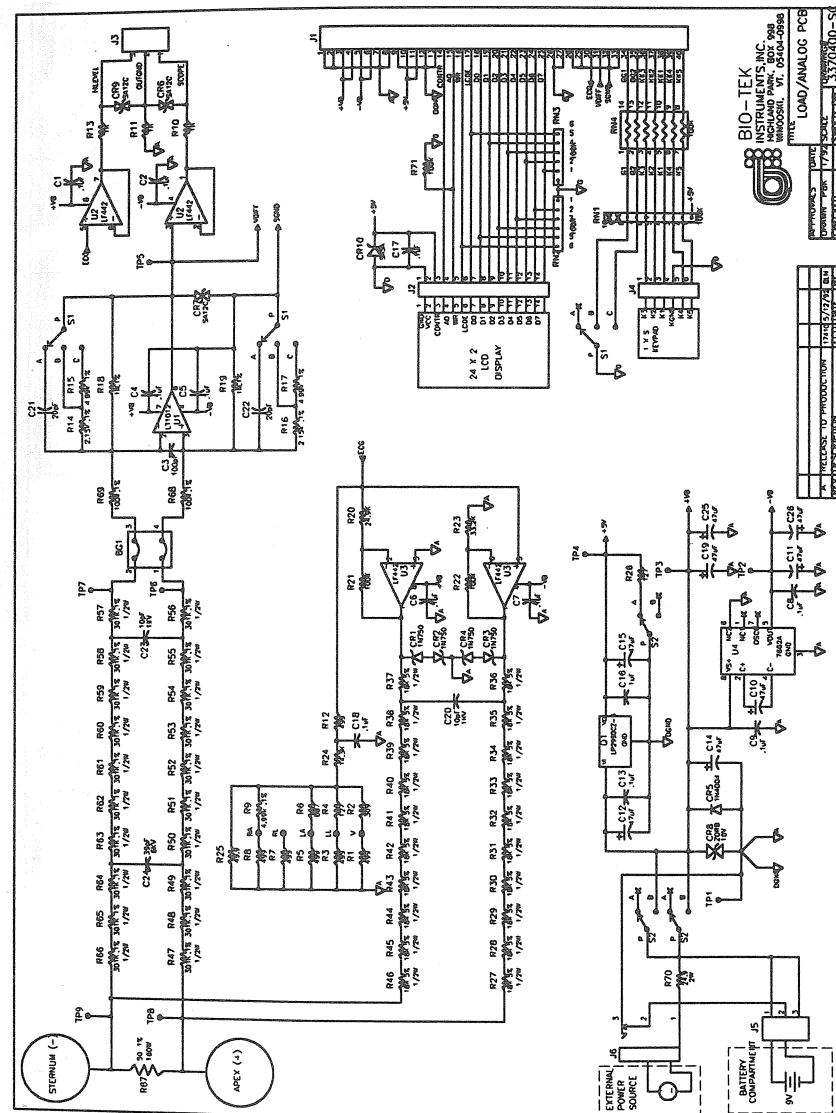


Figure 7.1. Load PCB Schematic

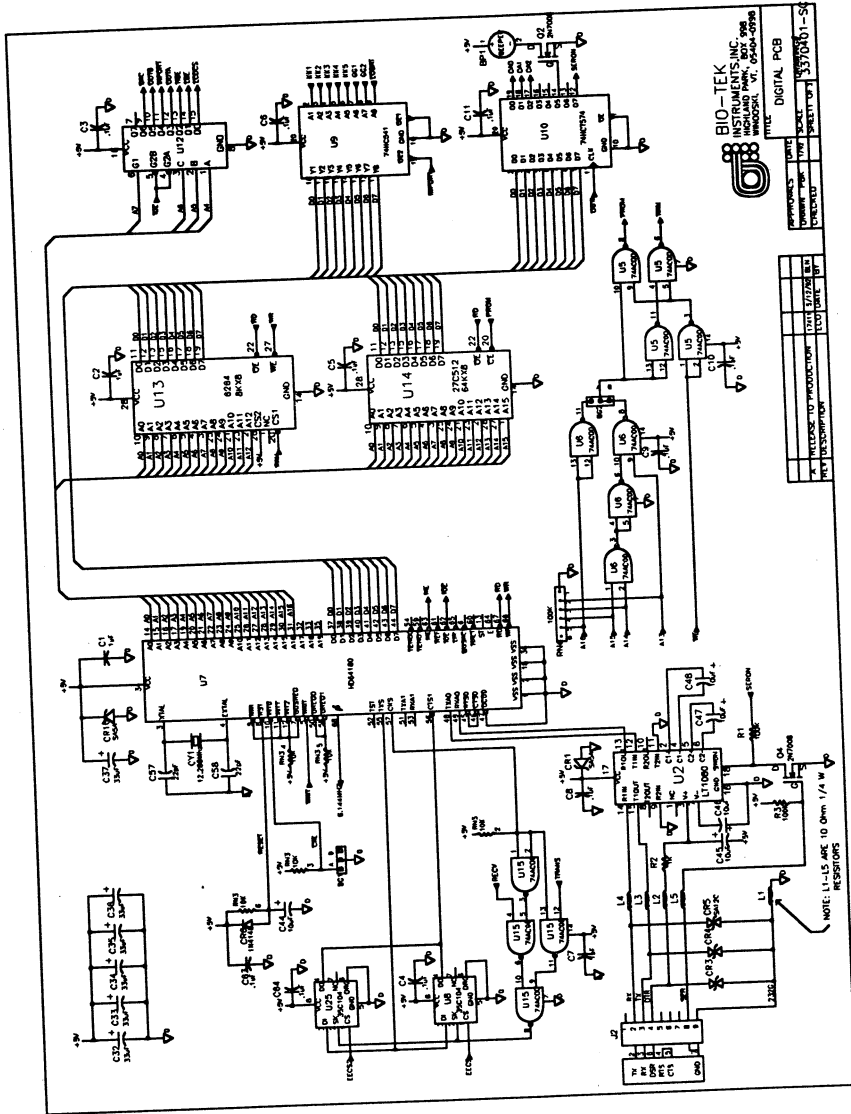


Figure 7.2. Digital Board Schematic (1 of 3)

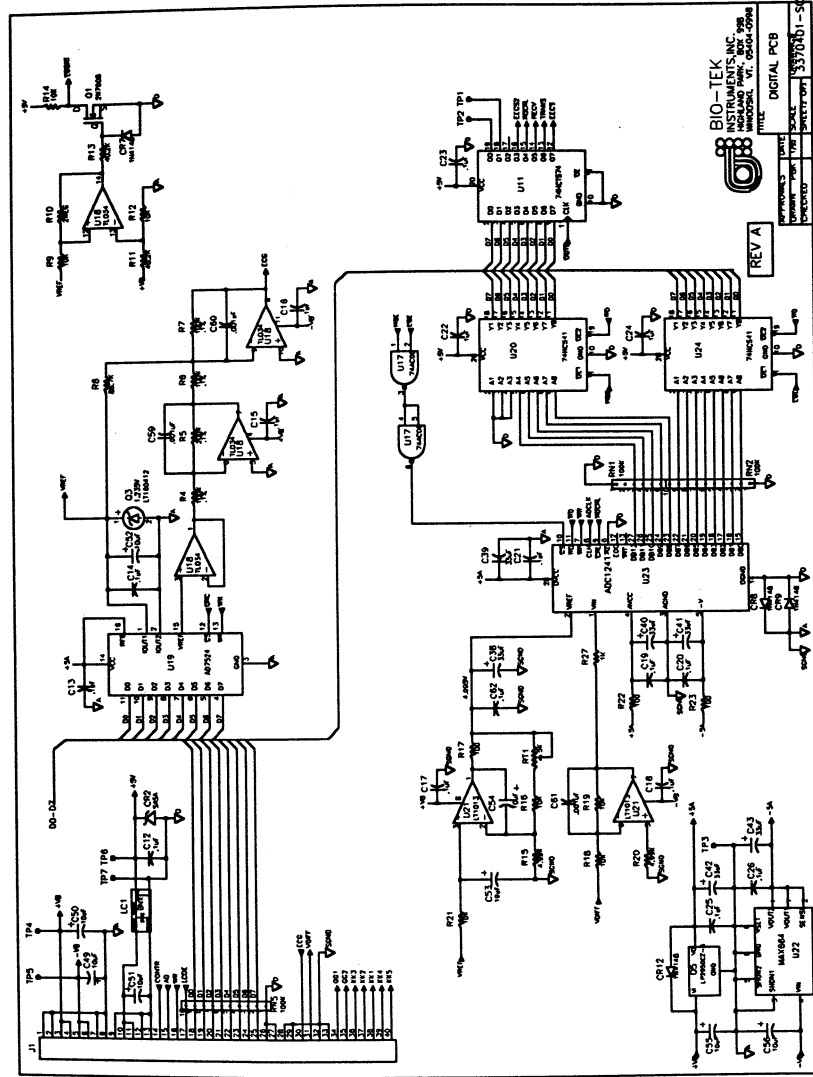


Figure 7.3. Digital Board Schematic (2 of 3)

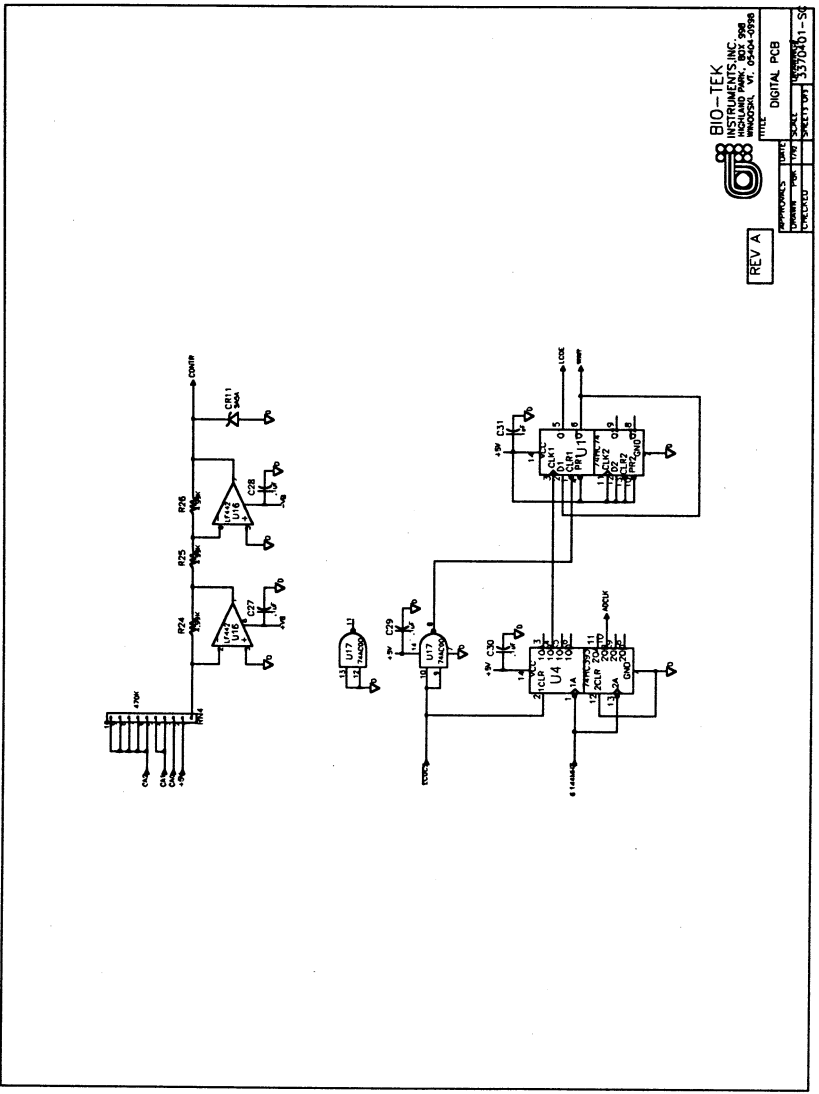


Figure 4.4. Digital Board Schematic (3 of 3)



Closed Box Test Procedure

Appendix A

The following procedure has been written to provide a closed box test to verify performance of QED-6 measurements and simulations.

Equipment Required:

- DMM (HP 34401A, Keithly 191, or equivalent)
- DC Power Supply (capable of 0-12 Volts DC 250 mA)
- Function Generator (4 Hz 20% duty cycle, 50 ms pulse width, 4 Volts square wave)
- Digital Oscilloscope (HP54502A or equivalent)
- Defibrillator
- Defibrillator Analyzer (Electronics Unlimited DT-650)
- Bio-Tek RS232 cable (BTI# 3360500)
- IBM compatible computer
- Terminal Emulation Software such as Qmodem or Procomm

Schematics and Parts

ASSEMBLY: 3370401 (cont.)

PART NUMBER	QTY PER ASSEMBLY	DESCRIPTION	REFERENCE INFORMATION
25116	1.00	IC 74HC74 DUAL D-FLIP FLOP	U1
27013	3.00	TRANSISTOR 2N7008 N-CH	Q1,2,4
28043	1.00	VOLT REF 1.2 LT1004 +/-4MV	Q3
28050	1.00	VOLT REG +5V LOW-DROP-OUT	Q5
28051	1.00	VOLT REG -5V MAX664	U22
28090	4.00	IC 74AC00 QUAD NAND	U5,6,15,17
29008	1.00	IC 7524 8-BIT BUF D/A CON	U19
29073	1.00	IC 6264ALP-12 RAM 8KX8 LOW PWR	U13
29091	2.00	IC 35C104 SER EEPROM	U8,25
29102	1.00	IC 64180 UP PLCC 6 MHZ	U7
29108	3.00	TRANSIENT SUPPRESSOR 12V	CR3-5
29109	4.00	TRANSIENT SUPPRESSOR 5V	CR1,2,10,11
32019	2.00	RES 40.20K OHM 1% 1/4W	R11,13
32030	2.00	RES 100.0K OHM 1% 1/4W	R1,3
32042	7.00	RES 10.00K OHM 1% 1/4W	R9,12,14,16,18,19,21
32047	2.00	RES 1.000K OHM 1% 1/4W	R2,27
32052	1.00	RES 2.00M OHM 1% 1/4W	R10
32077	1.00	RES 88.70K OHM 1% 1/4W	R8
32099	5.00	RES 10.00 OHM 1% 1/4W	L1-5
32100	3.00	RES 100.00 OHM 1% 1/4W	R17,22,23
32222	5.00	RES 4.99K OHM 1% 1/4W	R15,20,24-26
3370401-AS	0.00	DIGITAL PCB ASBY	
3370401-SC	0.00	DIGITAL PCB ASBY SCHEMATIC	
3371401	1.00	DIGITAL PCB	
35006	1.00	TRIMPOT 5K, 25T	RT1
37002	1.00	RESNET 10K OHM 5R 6P SIP	RN3
37034	2.00	RESNET 100K OHM 9R 10P SIP	RN2,5
37055	2.00	RESNET 100K SIP 5R6P	RN1,6
37057	1.00	RES 200K .1% 1/4W	R5
37058	3.00	RES 100K .1% 1/4W	R4,6,7
37081	1.00	RESNET 9R10P 470K SIP	RN4
42305	1.00	CONN 9PIN DSUB PCB MOUNT MALE	J2
49014	7.00	TERM PCB	TP1-7
49021	2.00	SOCKET I.C. 8-PIN DIP	U8,25 SOCKETS
49149	3.00	SOCKET E.C. 28-PIN DIP	U13,14,23 SOCKETS
49389	1.00	SOCKET 68P PLCC	U7 SOCKET

Schematics and Parts

ASSEMBLY: 3370401 (cont.)

PART NUMBER	QTY PER ASSEMBLY	DESCRIPTION	REFERENCE INFORMATION
49460	1.00	CRYSTAL 12.288 MHZ	CY1
49525	1.00	HDR 40-P .1X.1 STRT WALLED	J1
61036	1.00	ALARM PIEZP 3.3KHZ	BP1
62027	1.00	FILTER EMI SUPPR .5-1GHZ	LC1
82002	12.00	CAP 33 uF 10V TANT	C32-43
82003	13.00	CAP 10 uF 25V TANT	C44-56
83004	3.00	CAP .001uF 1KV DISC	C59-61
83019	34.00	CAP .1 uF 100V DISC	C1-31,62-64
83029	2.00	CAP 22 pF 100V DISC	C57,58

ASSEMBLY: 3370005

FINAL ASBY QED-6

12005	2.00	SCR PAN 4-40X3/8 SS SLOT	
14022	2.00	NUT 1/4-20 W/STAR WSHR ZINC PL	
14023	2.00	NUT HEX 5/16-24 W/LOCKWSHR	
16002	2.00	LKWSHR #4 HELICAL SPR SS	
17047	5.00	WSHR FL #12 .04" TK	
19209	4.00	SEMS 8-32X1/4 ST PHIL	
19219	9.00	SEMS 8-32X3/8 ST PHIL ITOOTH	
3360502	1.00	QED-5 BASE PLATE ASBY	
3362003	2.00	QED-5 CONTACT PLATE	
3362006	10.00	SPACER HEX FOR QED-5 ECG	
3362007	1.00	QED-5 SHIELD INSULATOR	
3362008	5.00	ADHESIVE PAD DBL SIDED 3/4"	
3362009	1.00	QED-5 DIGITAL PCB SUPPORT	
3362021	2.00	SCREW STEPPED QED-5 PLATE	
3370005-AS	0.00	FINAL ASBY QED-6	
3370005-DS	0.00	FINAL ASBY QED-6 DATA SHT	
3370005-IP	0.00	FINAL ASBY QED-6 INSP PROCDR	
3370005-TP	0.00	FINAL ASBY QED-6 TEST PROCDR	
3370200	1.00	FIRMWARE ASBY	DIG BD U14
3370400	1.00	LOAD/ANALOG PCB ASBY	
3370401	1.00	DIGITAL PCB ASBY	
3371001	1.00	OVRLY FRONT QED-6	
3372005	1.00	TOP CASE MOLDED	
42158	2.00	INSD 34-S .1 x .1 28GA GOLD	
42181	2.00	INSD 3-S .100 22 GA	CABELA,B
42306	3.00	BANANA JACK GREY	
44108	1.00	ACC. COMP., 9V BAT. HOLDR,GREY	
47002	1.00	BATTERY 9V ALKALINE	

QED-6 Parts List

ASSEMBLY: 3370400
LOAD/ANALOG PCB ASBY

PART NUMBER	QTY PER ASSEMBLY	DESCRIPTION	REFERENCE INFORMATION
04018	1.00	LCD 2X24 SUPERTWIST DISPLAY	
12001	4.00	SCR PAN 2-56X1/4 SS SLOT	
12037	2.00	SCR PAN 6-32X5/16 PHILL SS	
15003	2.00	LOCKNUT 6-32 SS	
16001	4.00	LKWSHR #2 HELICAL SPR	
21003	1.00	DIODE 1N4004 1A 200V	CR5
22027	4.00	DIODE 1N750A ZENER 4.7V 5%	CR1-4
23012	2.00	OP-AMP DUAL LF442CN	U2,3
23013	1.00	OP AMP LT1012CN8 SINGLE	U1
25094	1.00	IC L7662CPA NEG CONVERTER	U4
28050	1.00	VOLT REG +5V LOW-DROP-OUT	Q1
29090	1.00	TRANS ZORB 1.5KE10A 10V	CR8
29108	3.00	TRANSIENT SUPPRESSOR 12V	CR6,7,9
29109	1.00	TRANSIENT SUPPRESSOR 5V	CR10
32011	1.00	RES 33.20K OHM 1% 1/4W	R23
32030	3.00	RES 100.0K OHM 1% 1/4W	R21,22,71
32045	1.00	RES 24.90K OHM 1% 1/4W	R20
32047	3.00	RES 1.000K OHM 1% 1/4W	R10,11,13
32092	1.00	RES 14.30K OHM 1% 1/4W	R24
32181	1.00	RES 49.90 OHM 1% 1/4W	R25
32199	6.00	RES 499.00 OHM 1% 1/4W	R1,3,5,7,8,12
32259	1.00	RES 309 OHM 1% 1/4W	R2
32260	1.00	RES 887 OHM 1% 1/4W	R6
32261	2.00	RES 127 OHM 1% 1/4W	R4,26
33067	1.00	RES 50.0 OHM 1% 160W NI WW	R67
33092	1.00	RES 24.9 OHM 2WATT 1%	R70
3370400-AS	0.00	LOAD/ANALOG PCB ASBY	
3370400-SC	0.00	LOAD/ANALOG PCB SCHEMATIC	
3370504	1.00	LOAD PCB W/SWAGES ASBY	
37034	1.00	RESNET 100K OHM 9R 10P SIP RN1	
37050	2.00	RES 1.00M OHM .1% RN55D 1/4W	R18,19
37052	3.00	RES 4.99K .1% 1/4WATT 50PPM	R9,15,17
37053	20.00	RES 301K .1% 1/2W 25PPM	R47-66
37054	20.00	RES 18K 5% 1/2W CARBON COMP	R27-46
37055	2.00	RESNET 100K SIP 5R6P	RN2,3
37056	1.00	RESNET 100K DIP 7R14P	RN4

ASSEMBLY: 3370400 (cont.)

PART NUMBER	QTY PER ASSEMBLY	DESCRIPTION	REFERENCE INFORMATION
37058	2.00	RES 100K .1% 1/4W	R68,69
38019	2.00	RES 2.15K .1% 50PPM	R14,16
42112	1.00	HEDR 4-PIN DUAL	BG1
42151	2.00	JUMPER .100 .025 SQ PINS	
42211	2.00	HEDR 3-P .100 CTR LOK GOLD	J3,5
42252	1.00	CONN MINI PWR 2COND PC MNT J6	
42309	1.00	HEDR 6PIN .100 RT.ANGLE	J4
42310	1.00	HEDR 14PIN FOR LCD MOUNTING J2	
42311	1.00	HEDR 14PIN .1X.1 FOR LCD	
49014	9.00	TERM PCB	TP1-9
49075	1.00	TIE CABLE 11" L 3" DIA	
49525	1.00	HDR 40-P .1X.1 STRT WALLED	J1
52044	1.00	SWITCH 3PST PCB MOUNT	S2
53002	1.00	SW SLIDE 3-POS 3-POLE GOLD	S1
82013	8.00	CAP 47UF TANT 16V	C10,12,14,15,19,25,26
83012	2.00	CAP 10 pF 1000V DISC	C20,23
83014	2.00	CAP 20 pF 1000V DISC	C21,22
83016	1.00	CAP 39 pF 6000V DISC	C24
83019	12.00	CAP .1 uF 100V DISC	C1,2,4-9,13,16-18
84052	1.00	CAP 100PF 100V CERAMIC 5%	C3

ASSEMBLY: 3370401
DIGITAL PCB ASBY

PART NUMBER	QTY PER ASSEMBLY	DESCRIPTION	REFERENCE INFORMATION
21004	5.00	DIODE 1N4148 SIGNAL	CR6-9,12
23010	1.00	IC 13BIT A/D BIPOLAR AD1241	U23
23011	1.00	OP-AMP TL034 QUAD	U18
23012	1.00	OP-AMP DUAL LF442CN	U16
25083	1.00	IC 74HC138 3 TO 8 DECODER	U12
25084	3.00	IC 74HC541TS OCTALBFR NONINV	U9,20,24
25086	2.00	IC 74HC574 OCTAL D FLIP-FLOP	U10,11
25090	1.00	IC 74HC393 BINARY CNTR 4-BIT	U4
25109	1.00	IC LT1013CN8 LOWOFFSET OPAMP	U21
25114	1.00	IC LT1080 RS232 DRU/RECEIVER	U2