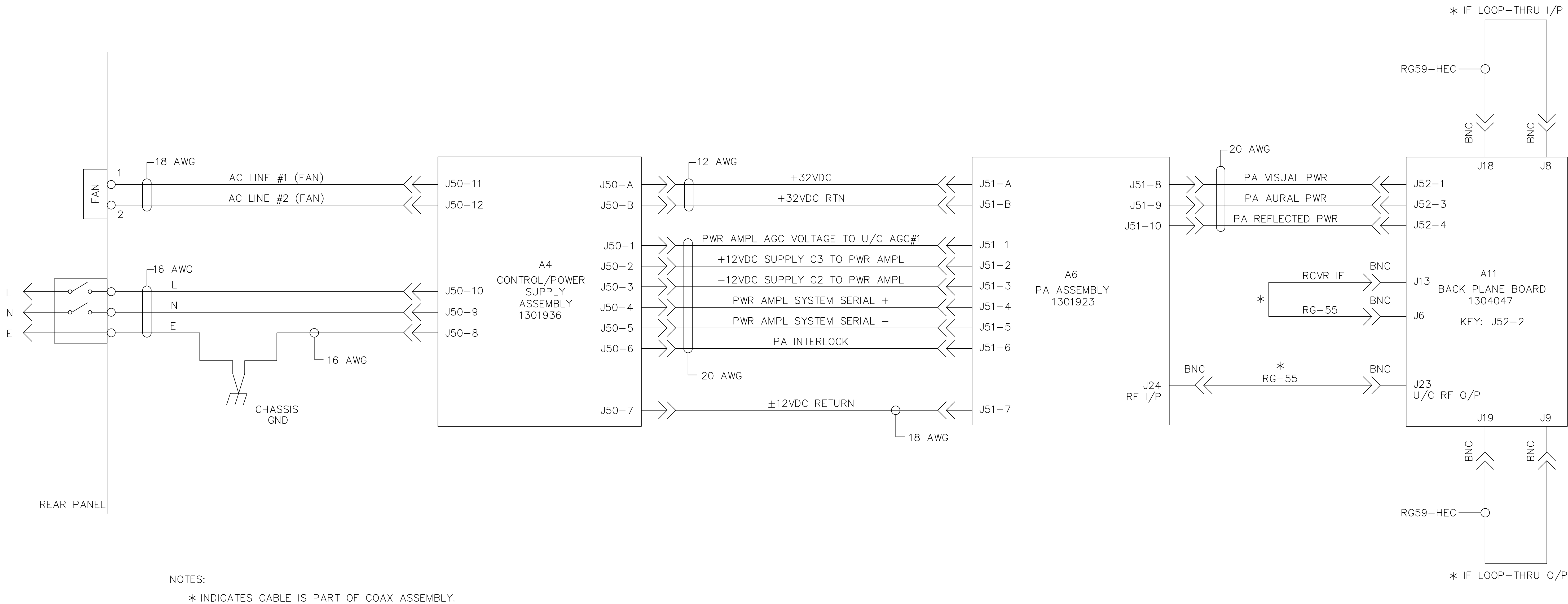
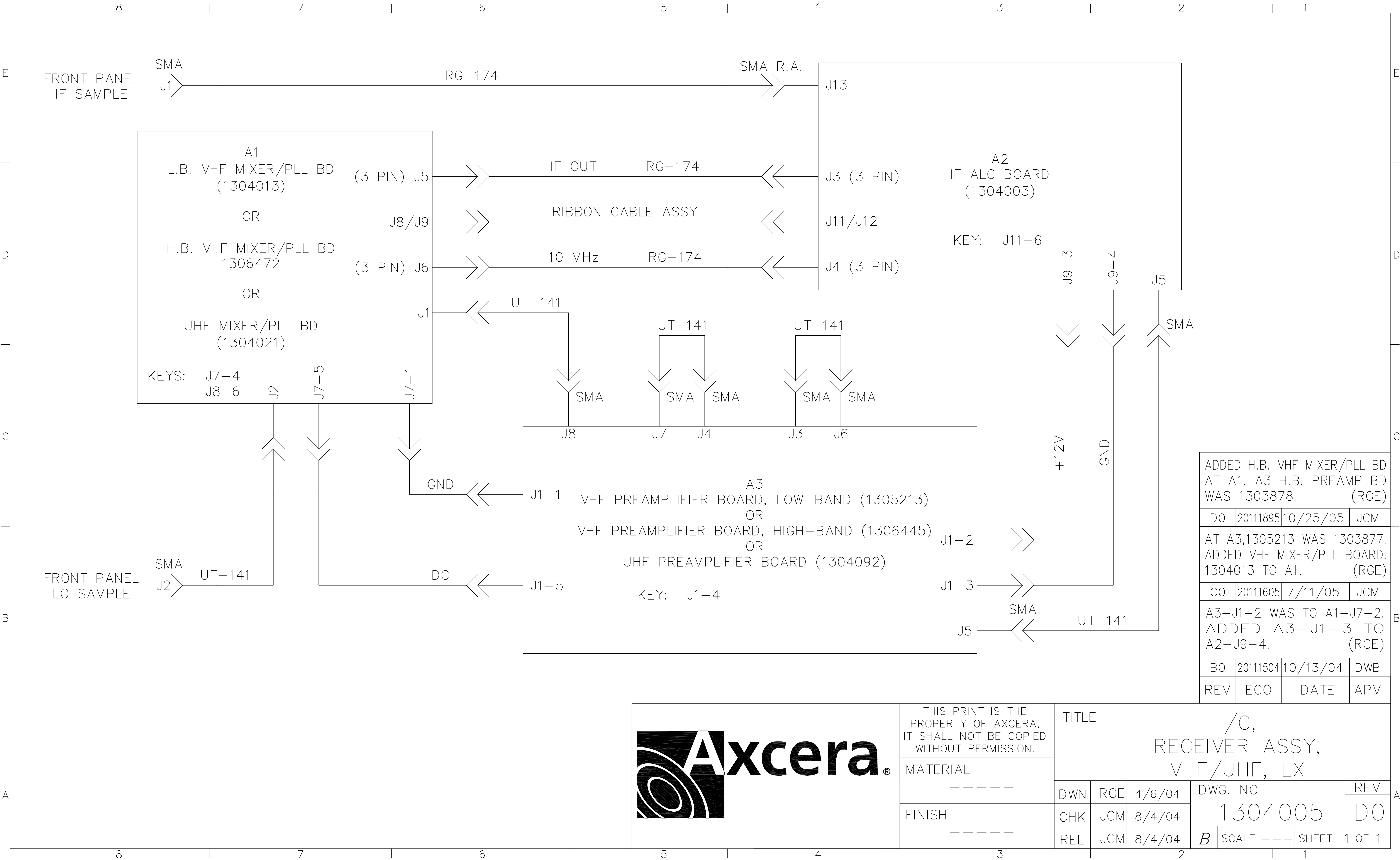






ADDED H.B. VHF MIXER/PLL BD AT A1. A3 H.B. PREAMP BD WAS 1303878. (RGE)			
DO	20111895	10/25/05	JCM
AT A3,1305213 WAS 1303877. ADDED VHF MIXER/PLL BOARD. 1304013 TO A1. (RGE)			
CO	20111605	7/11/05	JCM
A3-J1-2 WAS TO A1-J7-2. ADDED A3-J1-3 TO A2-J9-4. (RGE)			
B0	20111504	10/13/04	DWB
REV	ECO	DATE	APV



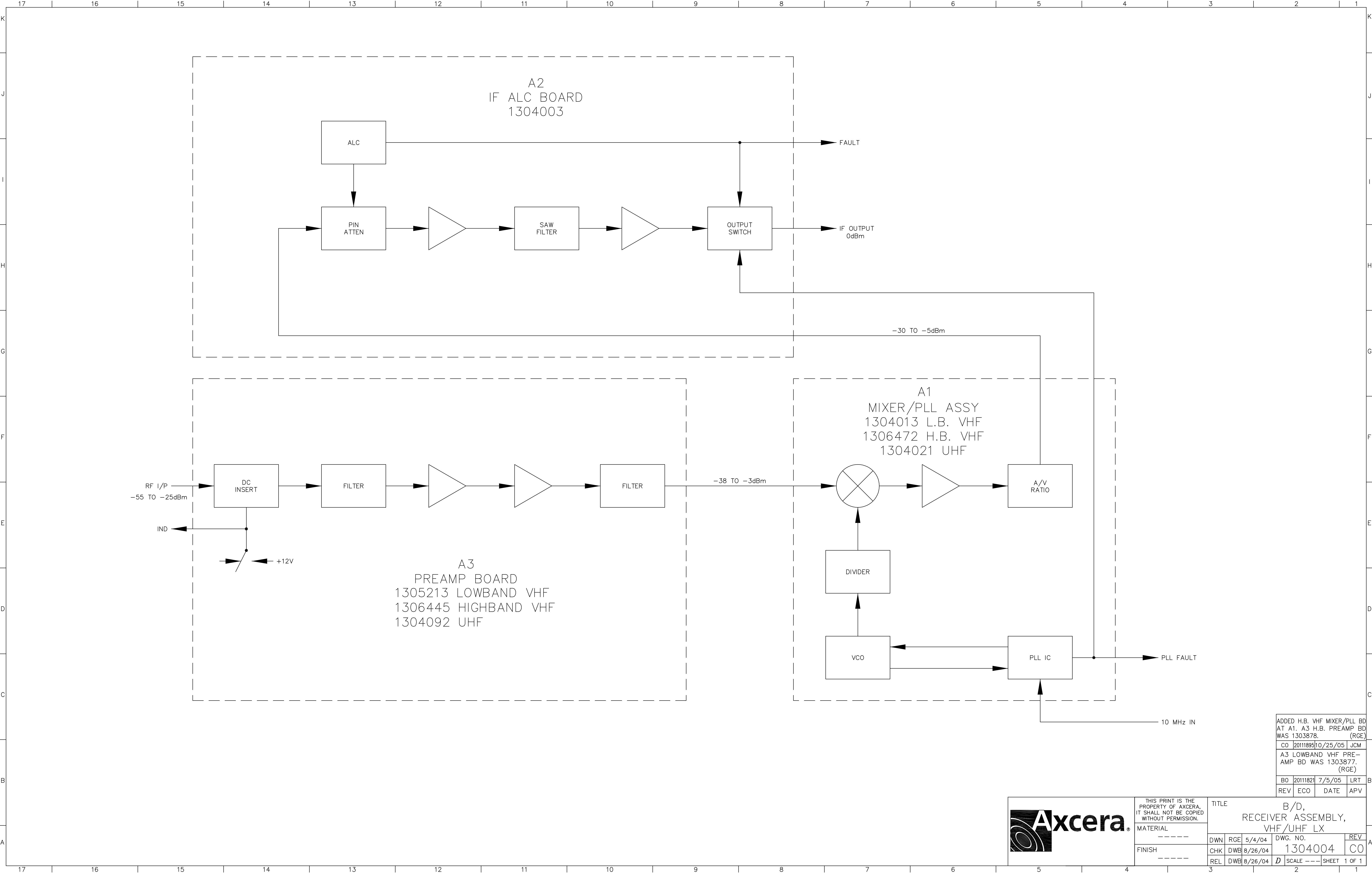
THIS PRINT IS THE PROPERTY OF AXCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION.

MATERIAL

FINISH

TITLE
I/C,
RECEIVER ASSY,
VHF/UHF, LX

DWN	RGE	4/6/04	DWG. NO. 1304005	REV DO
CHK	JCM	8/4/04		
REL	JCM	8/4/04	B	SCALE --- SHEET 1 OF 1



ADDED H.B. VHF MIXER/PLL BD
AT A1. A3 H.B. PREAMP BD
WAS 1303878. (RGE)

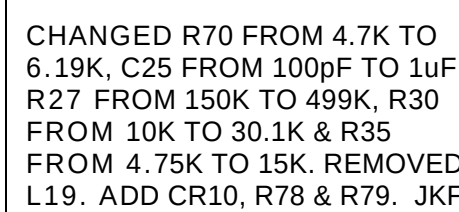
CO 2011189510/25/05 JCM
A3 LOWBAND VHF PRE-
AMP BD WAS 1303877.
(RGE)

BO	20111821	7/5/05	LRT
REV	ECO	DATE	APV



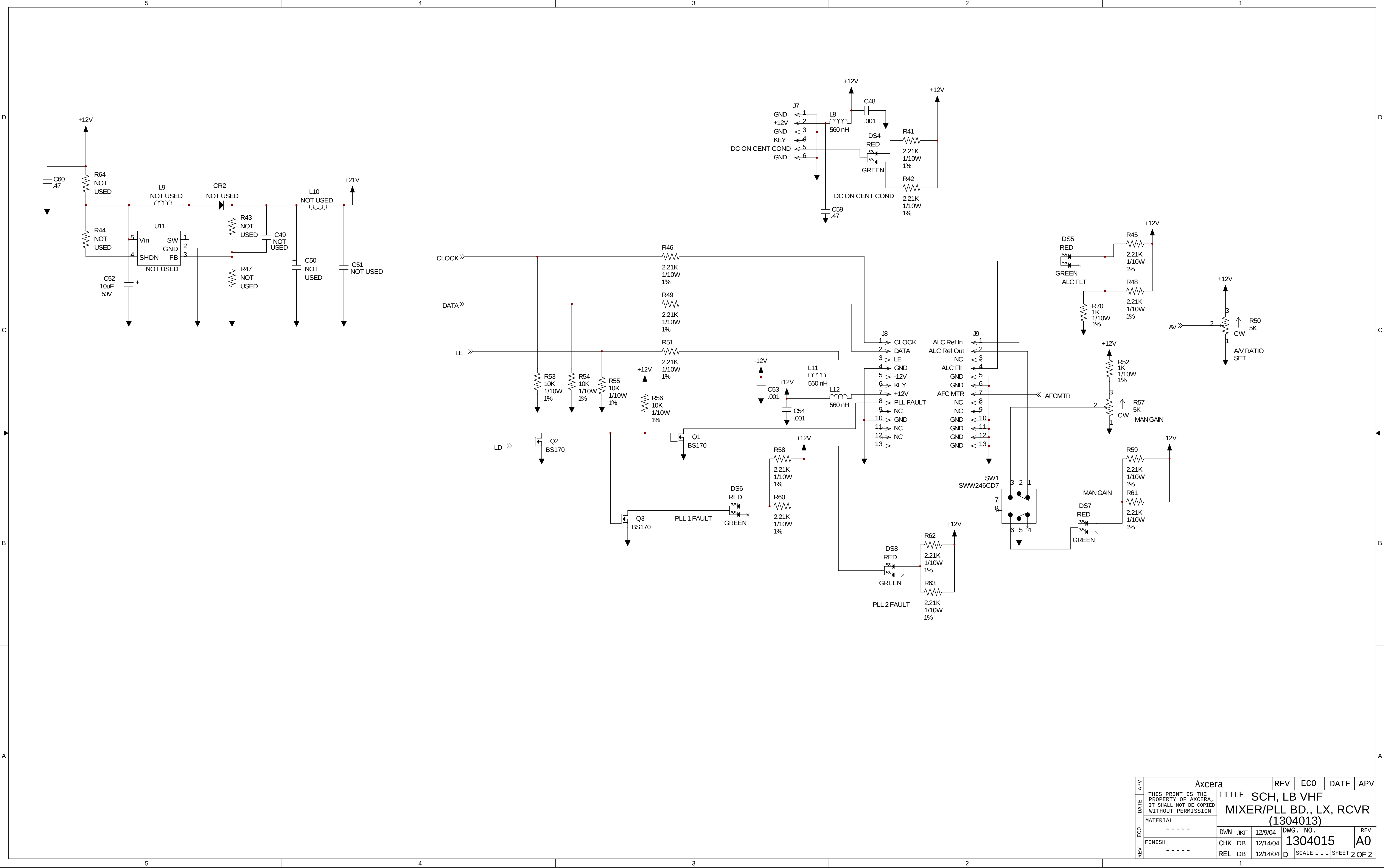
THIS PRINT IS THE PROPERTY OF AXCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION.				B/D, RECEIVER ASSEMBLY, VHF/UHF LX			
				DWN	RGE	5/4/04	DWG. NO.
MATERIAL				CHK	DWB	8/26/04	1304004
FINISH				REL	DWB	8/26/04	1
				D	SCALE	---	SHEET 1 OF 1

APV	Axcera				REV	ECO	DATE	APV
DATE	THIS PRINT IS THE PROPERTY OF AXCCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION	TITLE SCH, HIGH BAND VHF PREAMPLIFIER (1303878)						
ECO	MATERIAL							
	-----	DWN	DB	2/26/04	DWG. NO.			REV
	FINISH	CHK	DB	2/26/04	1303901			A0
REV	-----	REL	DB	2/26/04	D	SCALE	SHEET	1 OF 1

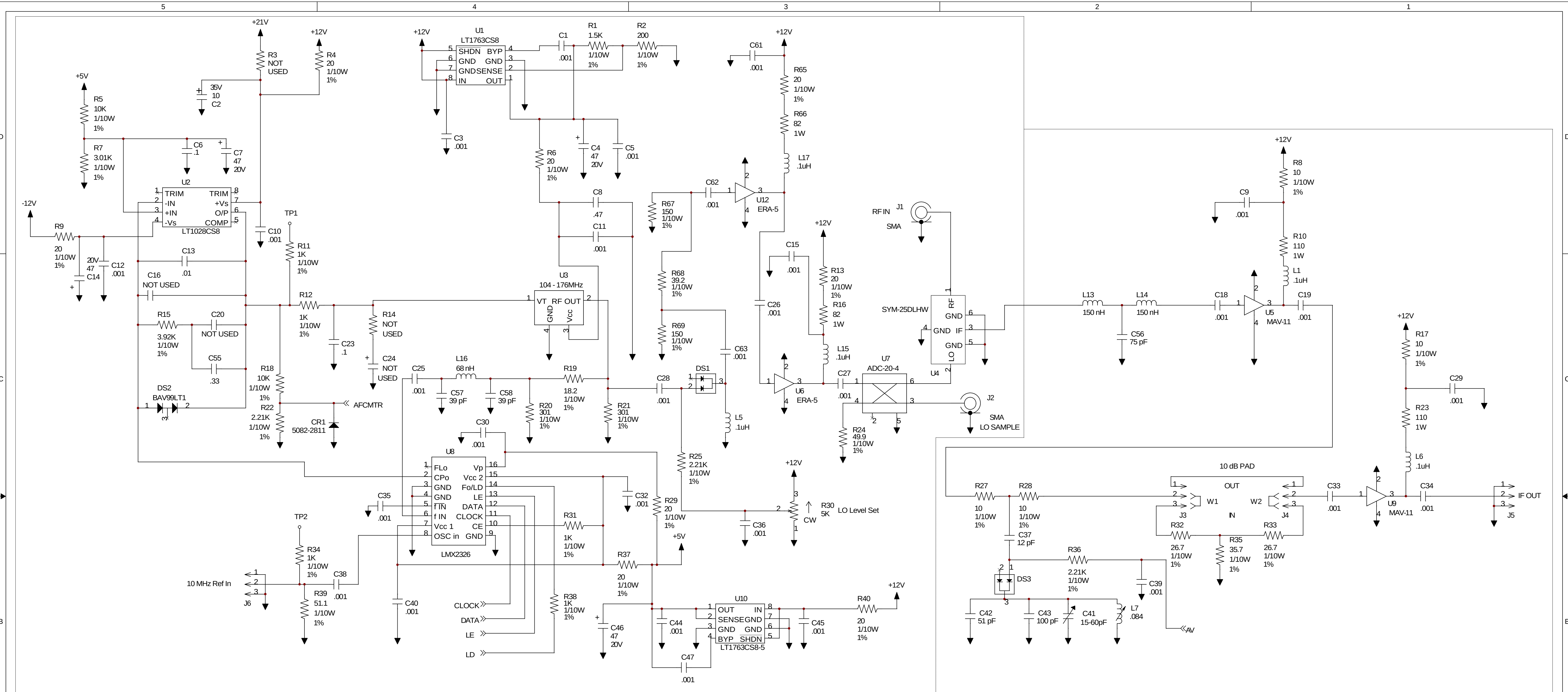


DELETED C30, C67, C71, C72, C79, CR1, CR5, L8, L9, L13, Q1, Q2, R15, R18, R21, R24. R32 WAS 10K. U4 AND U6 WERE MAV-11. ADDED C87, C88, J13, R76, R77. C73 WAS CONNECTED TO L13 & CR1. U1 PIN 6 WAS CONNECTED TO CR5 & C30. U9 PINS 6 AND 7 CONNECTIONS WERE REVERSED. (CR)

APV		Axcera				REV				ECO	DATE	APV		
DATE		THIS PRINT IS THE PROPERTY OF AXCPERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION				TITLE SCH, IF ALC BOARD (LX) (1304003)								
ECO						MATERIAL				DWG. NO.				REV
FINISH						1304011				C				
REV		-----				DWN	DB	3/10/04						
						CHK	DB	3/15/04						
						REL	DB	3/15/04	D	SCALE - - -	SHEET 1 OF 2			



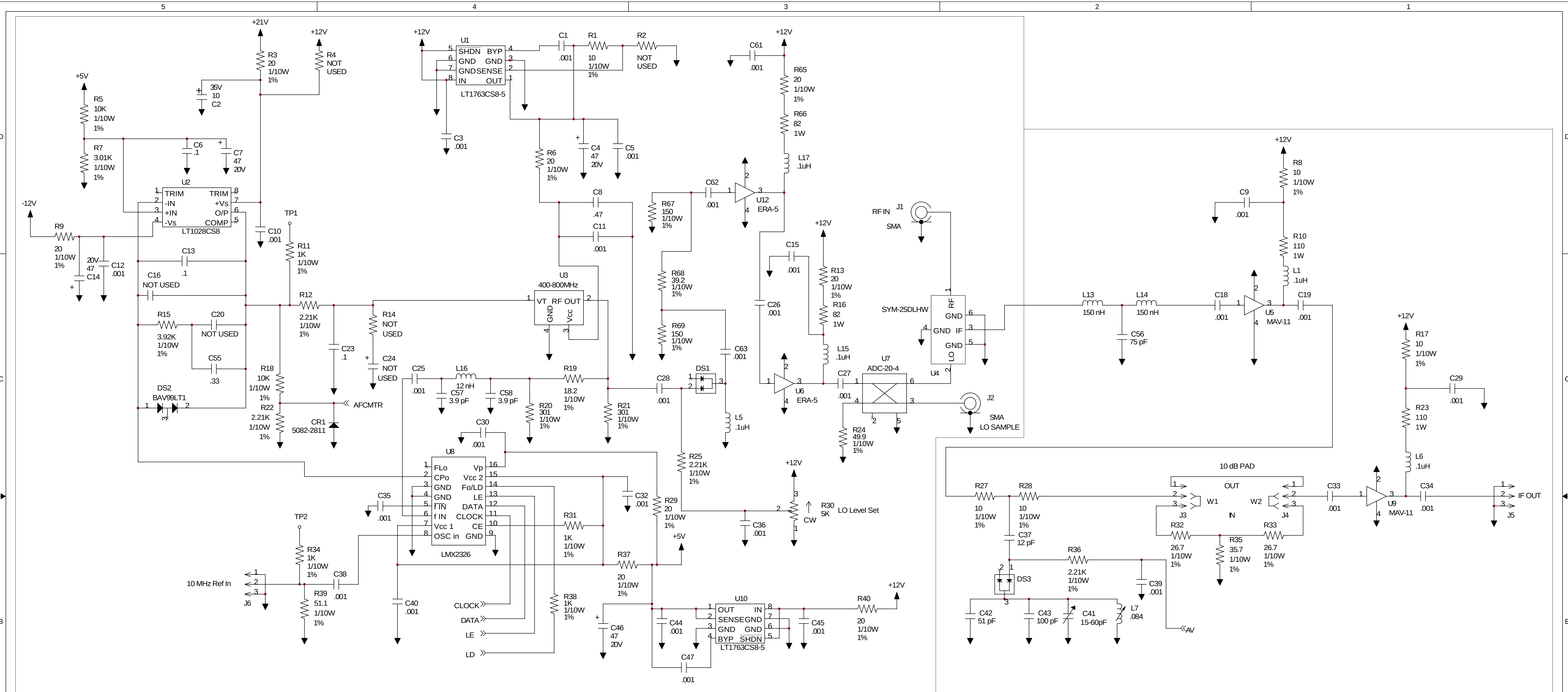
APV	Axcera				REV	ECO	DATE	APV
DATE	THIS PRINT IS THE PROPERTY OF AXCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION				TITLE SCH, LB VHF MIXER/PLL BD., LX, RCVR (1304013)			
MATERIAL					DWG. NO.			
ECO	-----	DWN	JKF	12/9/04	1304015		REV	A0
FINISH	-----	CHK	DB	12/14/04	1304015		A0	
REV	-----	REL	DB	12/14/04	D	SCALE - - -	SHEET 2 OF 2	



NOTE:

- 1) ALL RESISTORS ARE 1/8W UNLESS OTHERWISE NOTED.
- 2) ALL CAPACITORS ARE IN uF UNLESS OTHERWISE NOTED.
- 3) ALL INDUCTORS ARE IN uH UNLESS OTHERWISE NOTED.
- 4) Bd Material 30 mil FR4

APV	Axcera				REV	ECO	DATE	APV
DATE	THIS PRINT IS THE PROPERTY OF AXCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION				TITLE SCH, LB VHF MIXER/PLL BD., LX, RCVR (1304013)			
MATERIAL	-----				DWN	JKF	12/9/04	DWG. NO. 1304015
FINISH	-----				CHK	DB	12/14/04	A0
REV	-----				REL	DB	12/14/04	SCALE --- SHEET 1 OF 2



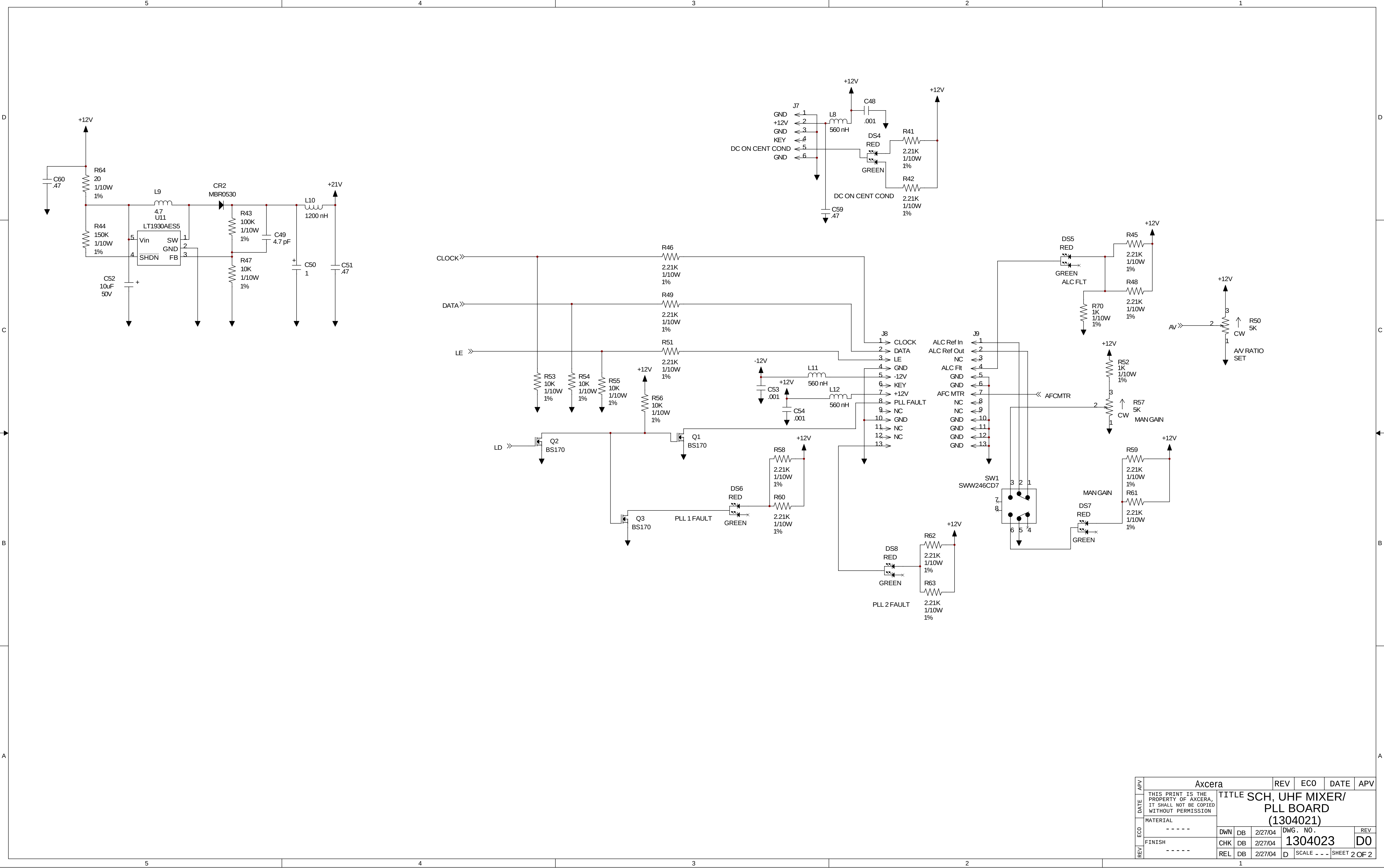
NOTE:

- 1) ALL RESISTORS ARE 1/8W UNLESS OTHERWISE NOTED.
- 2) ALL CAPACITORS ARE IN uF UNLESS OTHERWISE NOTED.
- 3) ALL INDUCTORS ARE IN uH UNLESS OTHERWISE NOTED.
- 4) Bd Material 30 mil FR4

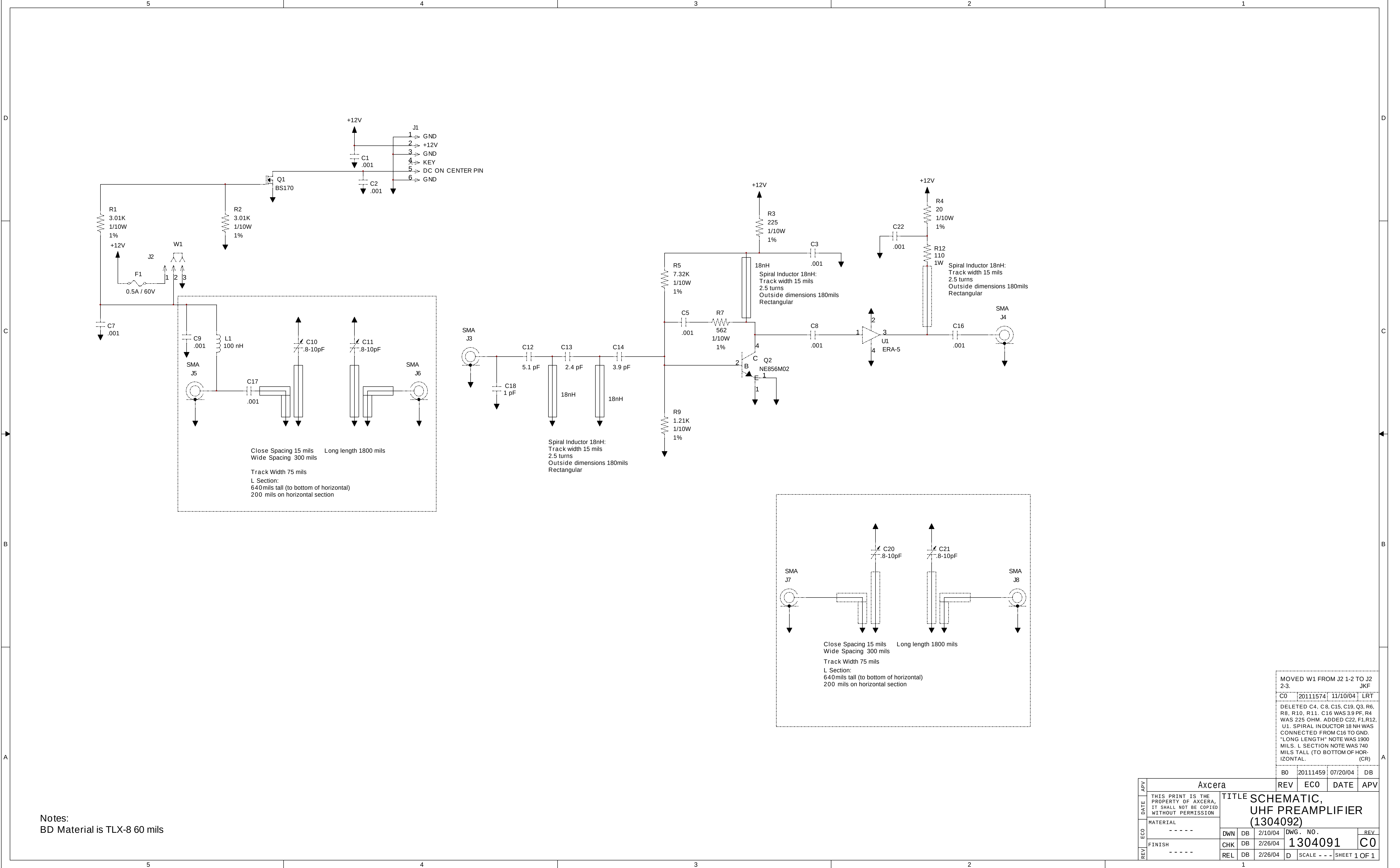
ADDED NOTE "NOT USED" AT C16, C20, R12 WAS 1K, R15 WAS 3.01K, C55 WAS 0.33UF. U2 WAS AD797BR C13 & C23 WERE SURFACE MOUNT. ADDED C61, C62, C63, L17, R65 THRU R70, U12. C15 WAS CONNECTED TO +12V. (CR)

C0	20111504	09/28/04	DB
DELETED R26, C17, C21, C22, C31, L2, L3, L4. ADDED NOTE "NOT USED" AT R2, R14, C24. R1 WAS 243 OHM, R13 WAS 82 OHM, R15 WAS 18 OHM, C8 & C51 WERE 0.1UF, C20 WAS 10UF, U1 & U10 WERE LT1763CS8, U3 WAS ROS-1500 (1000-1500 MHZ), L9 WAS 15 UH. ADDED C56 THRU C60, L13 THRU L16, R64. REWIRED SW1. (CR)			
B0	20111458	07/16/04	DB

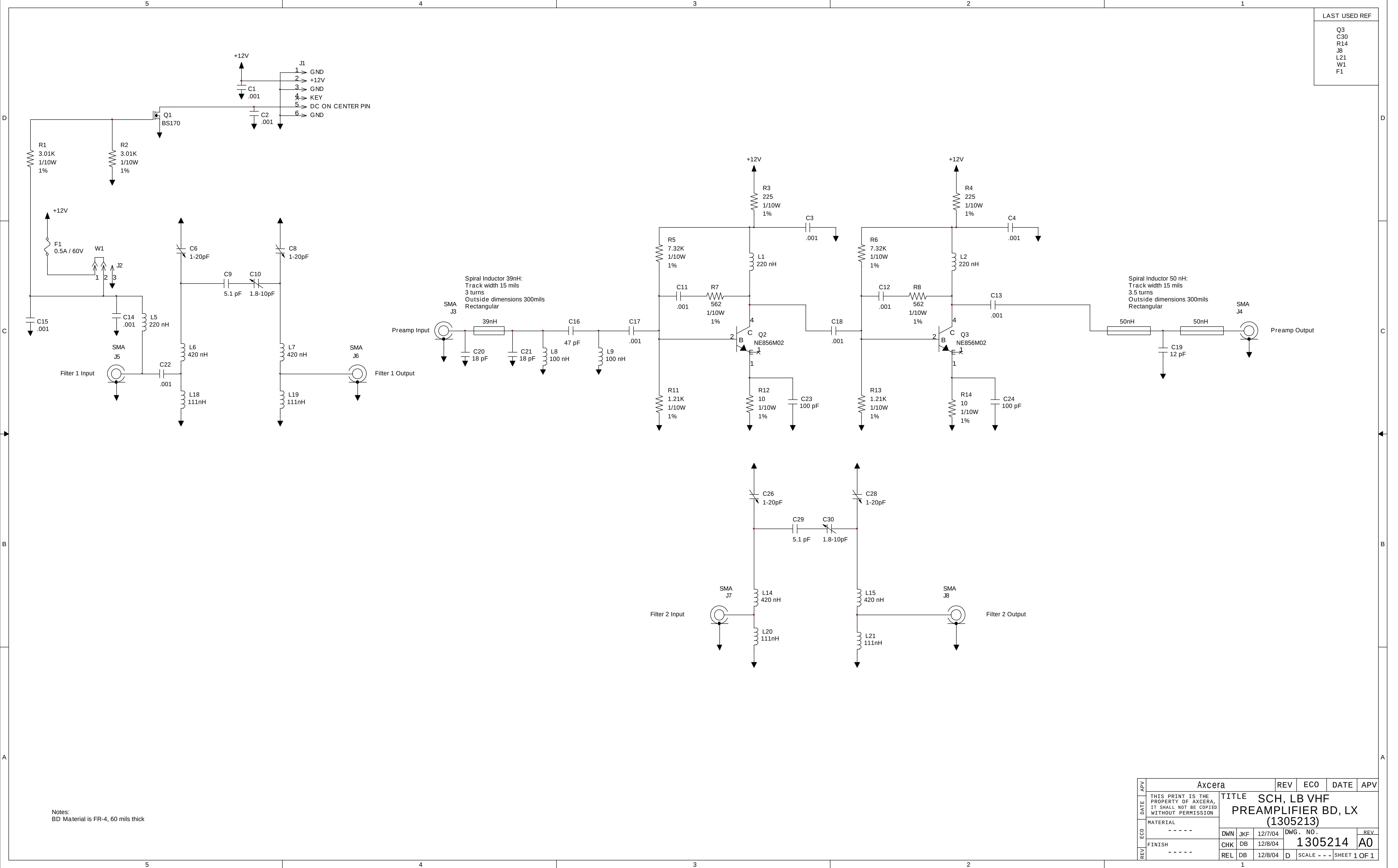
R43 WAS 150K DO20111572 11/8/04	JKF	Axcera				REV		ECO		DATE		APV			
	DATE	THIS PRINT IS THE PROPERTY OF AXCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION				TITLE SCH, UHF MIXER PLL BOARD (1304021)									
	MATERIAL	-----				DWN		DB		2/27/04		DWG. NO. 1304023		REV D0	
	FINISH	-----				CHK		DB		2/27/04					
	REL	DB		2/27/04		D		SCALE ---		SHEET 1		OF 2			

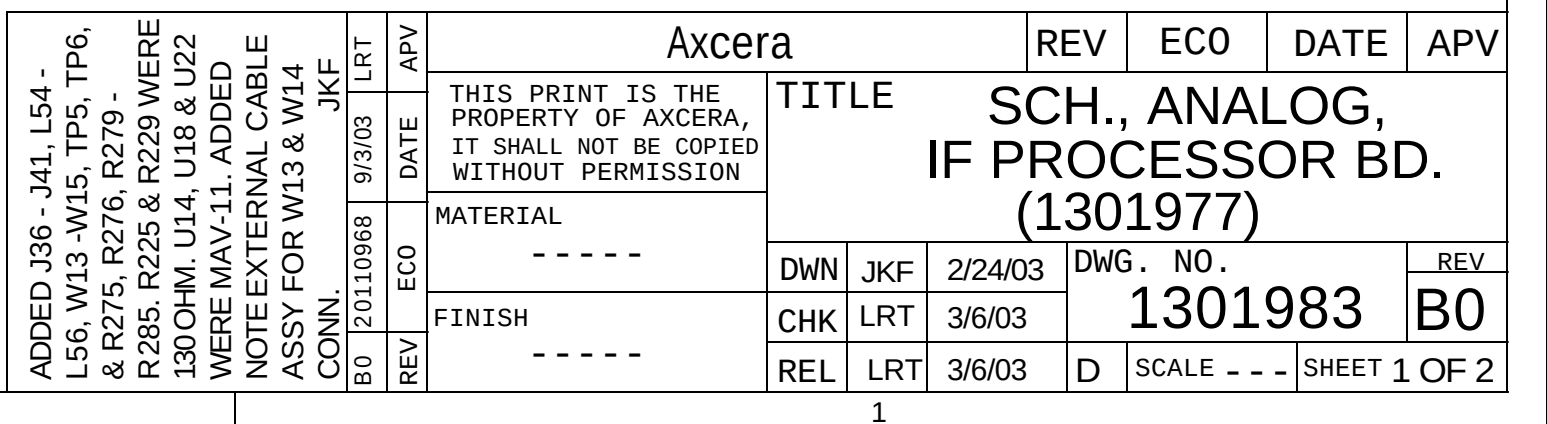


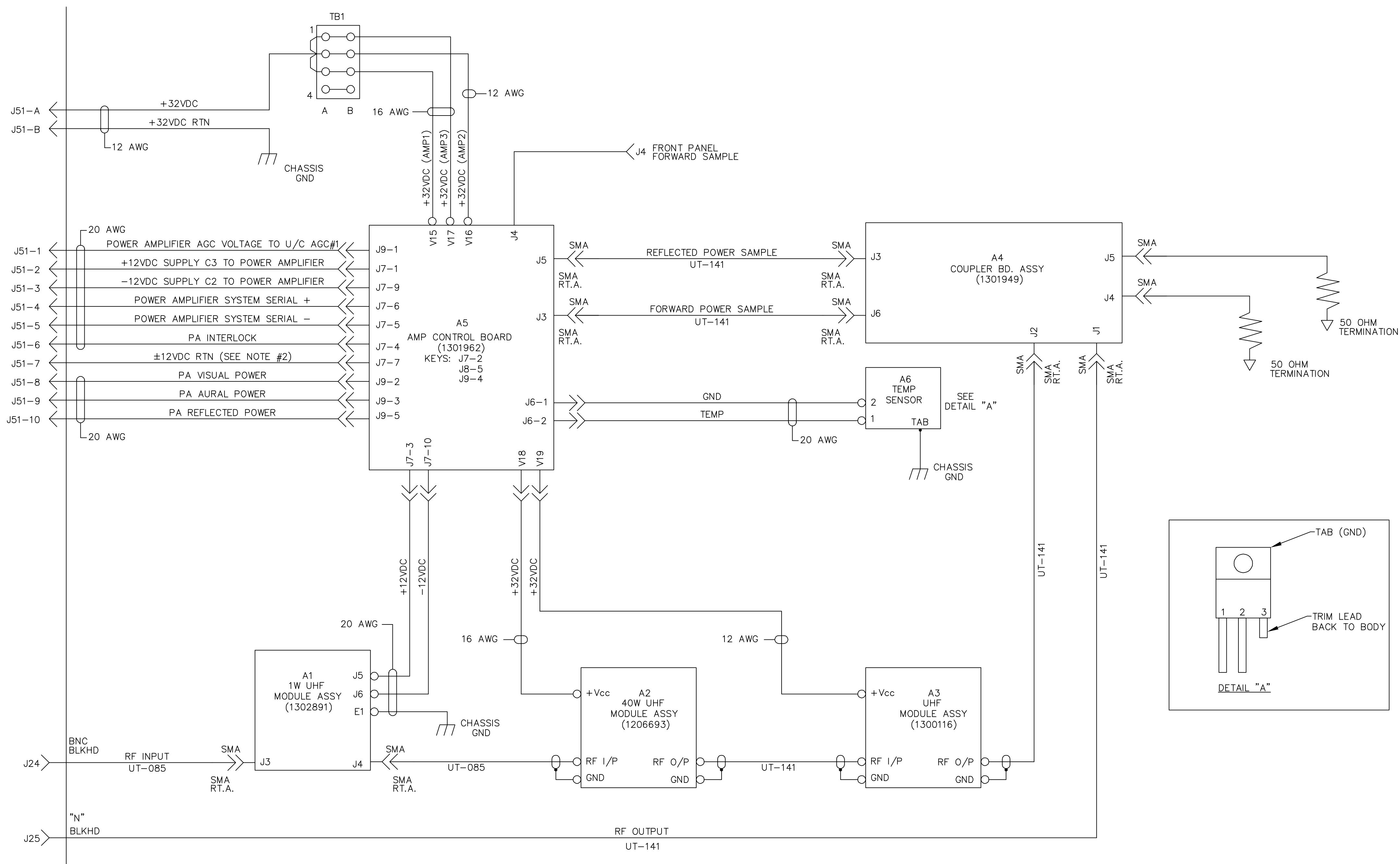
APV	Axcera				REV	ECO	DATE	APV
DATE	THIS PRINT IS THE PROPERTY OF AXCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION				TITLE SCH, UHF MIXER/ PLL BOARD (1304021)			
MATERIAL	-----							
ECO	-----				DWN	DB	2/27/04	DWG. NO.
FINISH	-----				CHK	DB	2/27/04	1304023
REV	-----				REL	DB	2/27/04	D
				SCALE --- SHEET 2 OF 2				



LAST USED REF
Q3
C30
R14
J8
L21
W1
F1



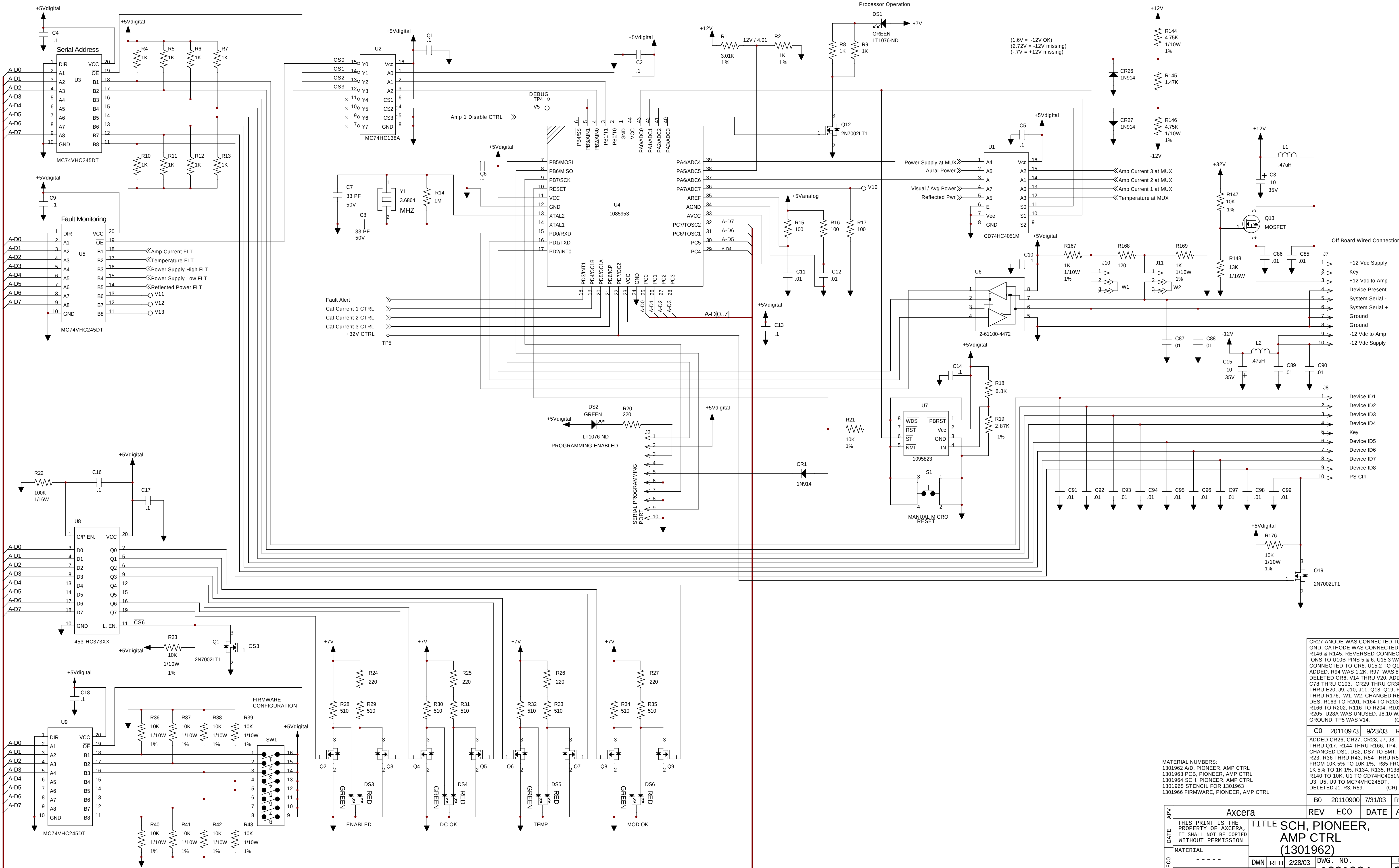




NOTE:
 1. ALL WIRE IS 18AWG UNLESS OTHERWISE NOTED.
 2. THIS CONNECTION MUST BE EQUIPPED WITH LONGER GROUND PIN. (MAKE FIRST BREAK LAST)

		THIS PRINT IS THE PROPERTY OF AXCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION.		TITLE I/C, PA ASSEMBLY, 100W PIONEER SERIES			
				DWG. NO. 1302061			
MATERIAL		FINISH		CHK	JCM	8/27/03	REL
-----		-----		REL	JCM	8/27/03	REL
				SCALE	---	SHEET	1 OF 1

DELETED .141 RIGID BETWEEN A5-J4 AND J1.	(SAK)
BO	20110990
REV	ECO
DATE	9/11/03
APV	JCM

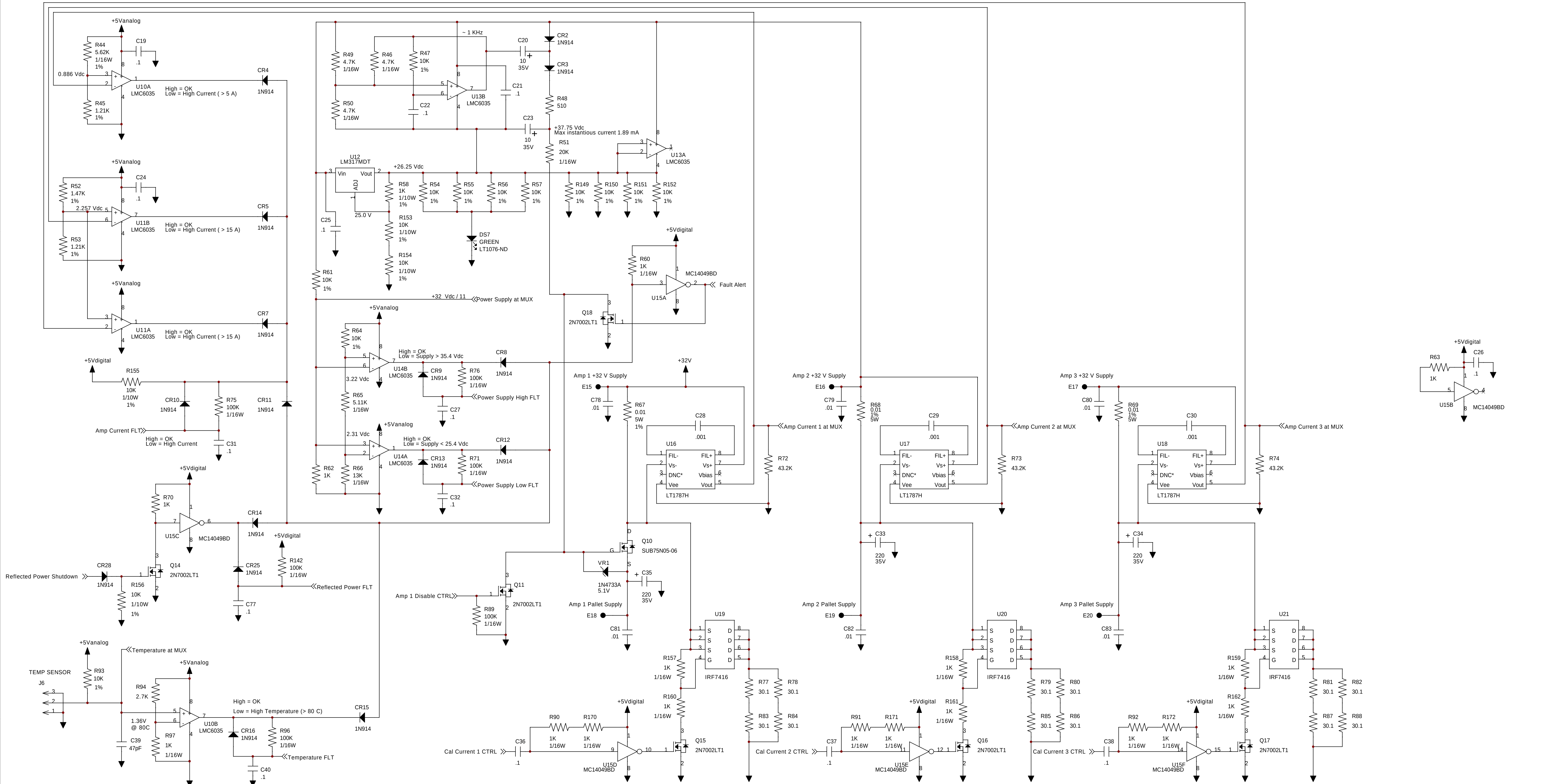


MATERIAL NUMBERS:
1301962 A/D, PIONEER, AMP CTRL
1301963 PCB, PIONEER, AMP CTRL
1301964 SCH, PIONEER, AMP CTRL
1301965 STENCIL FOR 1301963
1301966 FIRMWARE, PIONEER, AMP CTRL

CR27 ANODE WAS CONNECTED TO GND, CATHODE WAS CONNECTED TO R146 & R145. REVERSED CONNECTIONS TO U10B PINS 5 & 6. U15.3 WAS CONNECTED TO CR8. U15.2 TO Q18.1 ADDED. R94 WAS 1.2K. R97 WAS 8.25K. DELETED CR6, V14 THRU V20. ADDED C78 THRU C103. CR29 THRU CR38. E15 THRU E20. J9, J10, J11, J18, Q19, R167 THRU R176. W1, W2. CHANGED REF. DES. R163 TO R201. R164 TO R203, R166 TO R202. R116 TO R204, R102 TO R205. U28A WAS UNUSED. J8.10 WAS GROUND. TP5 WAS V14. (CR)

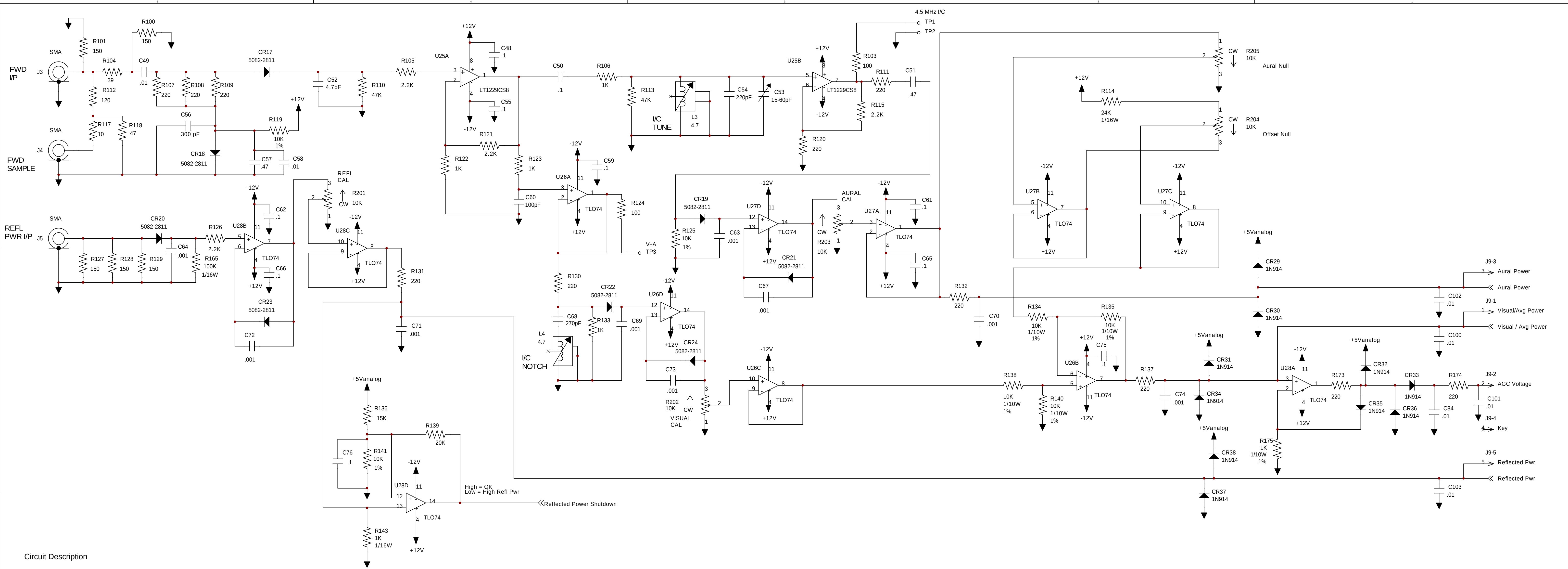
C0	20110973	9/23/03	REH
ADDED CR26, CR27, CR28, J7, J8, Q12 THRU Q17. R144 THRU R166. TP4. CHANGED DS1, DS2, DS7 TO SMT. R23, R36 THRU R43, R54 THRU R57 FROM 10K 5% TO 10K 1%. R85 FROM 1K 5% TO 1K 1%. R134, R135, R138, R140 TO 10K. U1 TO CD74HC4051M. U3, U5, U9 TO MC74VHC245DT. DELETED J1, R3, R59. (CR)			

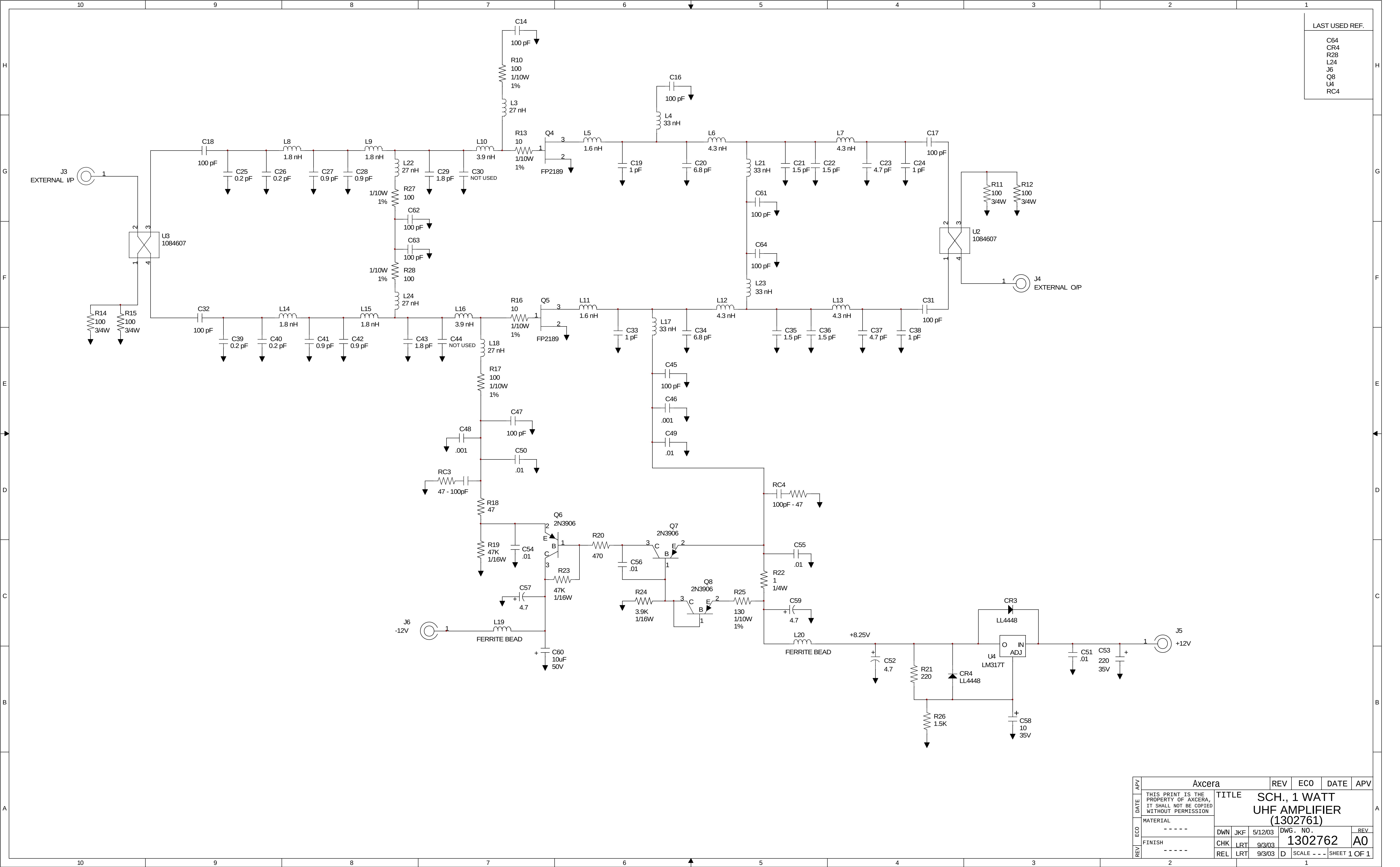
APV	Xacera			REV	ECO	DATE	APV			
DATE	THIS PRINT IS THE PROPERTY OF XACERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION			TITLE SCH, PIONEER, AMP CTRL (1301962)						
ECO								MATERIAL		
REV								FINISH		
-----		DWN	REH	2/28/03	DWG. NO.		REV			
-----		CHK	REH	3/6/03	1301964		C0			
-----		REL	REH	3/6/03	D	SCALE ---	SHEET 1 OF 3			



NOTE:
A track width of 0.3 inch is needed between power input vias and sense resistors R55,R56,R57. 0.3 inch track width is also needed between the output of the sense resistors and the output vias that provide power to the amplifier pallets.

APV		Xxcera		REV	ECO	DATE	APV
DATE		THIS PRINT IS THE PROPERTY OF Xxcera, IT SHALL NOT BE COPIED WITHOUT PERMISSION		TITLE SCH, PIONEER, AMP CTRL (1301962)		DWG. NO. 1301964	
ECO		MATERIAL		DWN	REH	2/28/03	REV
REV		FINISH		CHK	REH	3/6/03	C0
				REL	REH	3/6/03	D
				SCALE - - - SHEET 2 OF 3			





REV	ECO	DATE	APV	DATE	APV	TITLE			
1	2	3	4	5	6	SCH., 1 WATT UHF AMPLIFIER (1302761)			
7	8	9	10	11	12	DWG. NO. 1302761			
13	14	15	16	17	18	REV. A0			
19	20	21	22	23	24	SCALE --- SHEET 1 OF 1			

Maschinell erzeugt!
Nicht manuell ändern!

Schutzvermerk nach DIN 34 beachten!
NOTE: copyright protected as in DIN 34!

OrCAD SCHEMATIC
SN79-308
SCHEMATIC1
G:\PROJ\ORCAD\WSP\6379\308-02\SN79-308.DSN

- * gedr. Bauelement
PRINTED COMPONENT
- ** Montage auf Kühlkörper
MOUNTED ON HEATSINK
- *** Abgleichwert
FACTORY SET VALUE
- 2) R839 entfällt, wenn X805 genutzt wird
R839 IS REMOVED WHEN X805 IS USED
- 3) C833, C851 entfallen bei Bestückung von R816, R818
u. R819
C833, C851 ARE REMOVED WHEN R816, R818, R819 ARE INSTALLED

GAIN
CONTROL

Leiterplattenbestückung siehe
PC BOARD LAYOUT SEE
51-5379-308-00 (1)

				Datum	Name
				Bearb. 22.04.98	Schenk
				Gepr.	
				Norm. 4.3.99	Nickel
02	E185	26.10.98	Sche		
01		8.5.98	Sche		
Zust.	Änderung	Datum	Name	Urspr.:	

TELEFUNKEN
Sendertechnik

40W-Modul UHF
40W MODULE UHF

51-5379-308-00 WSP XB

Blatt
1
Bf.

Ers. f.:

Ers. d.:

Detektor-
ausgang
DETECTOR OUT

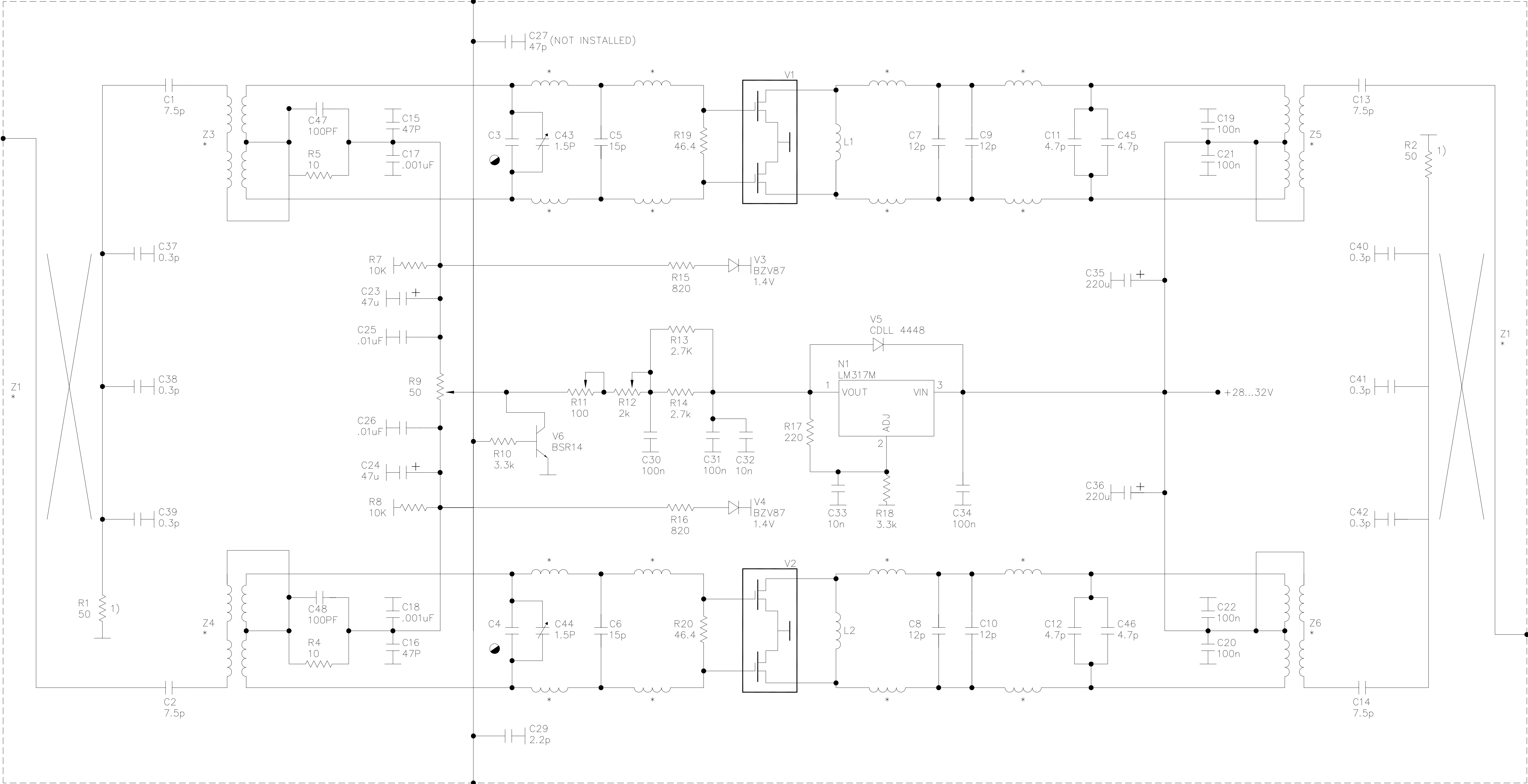
HF-Eingang
RF INPUT

32V

HF-Ausgang
RF OUTPUT

1)





* PRINTED COMPONENT

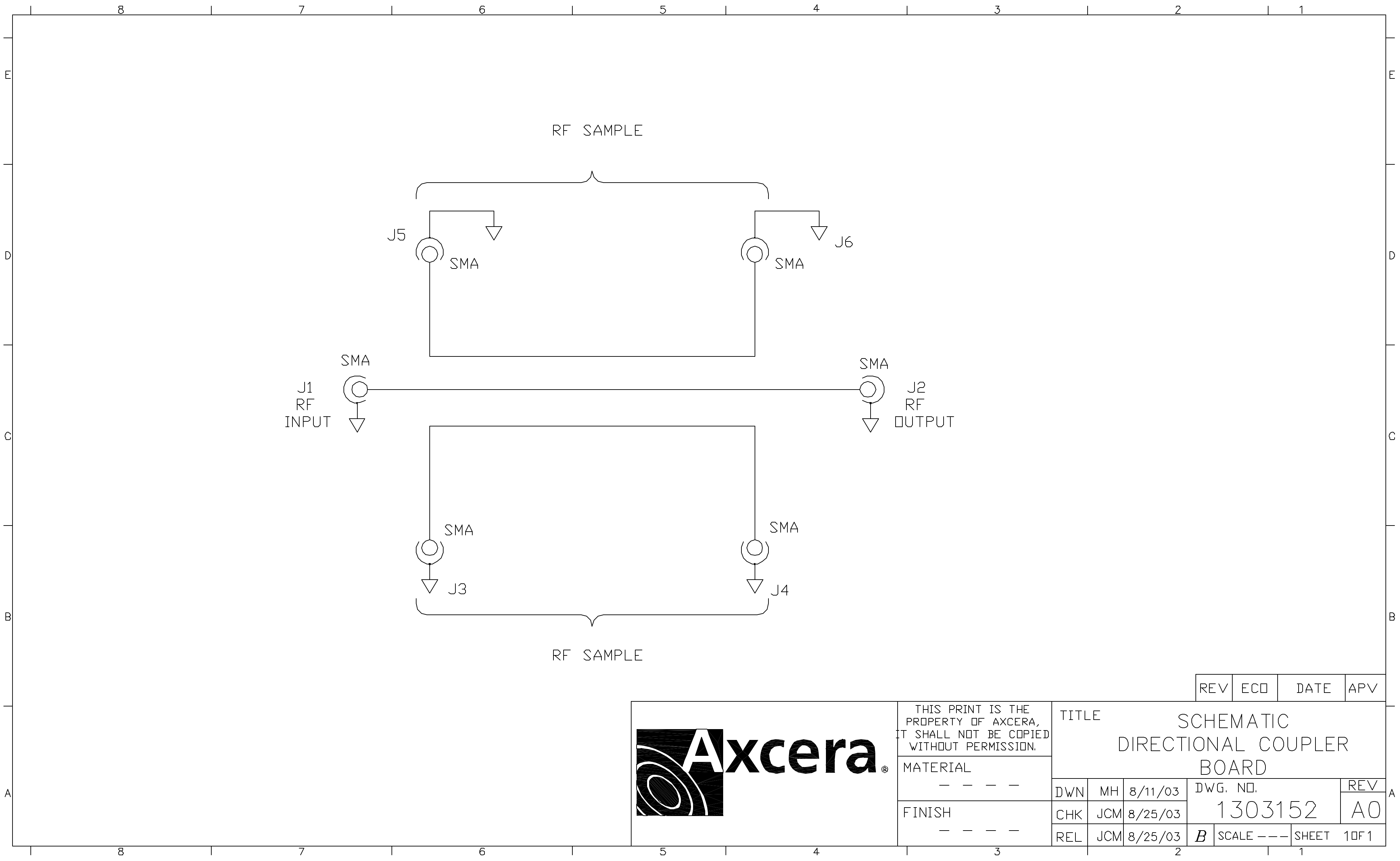
FACTORY SET VALUE

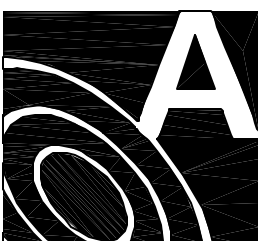
PC BOARD LAYOUT SEE
51-5379-309-00 (2)

CHANGE R3 FROM A 22 OHM RESISTOR TO C47, SM, CAP, 100PF, 500WDC, 100PF, CHANGE R6 FROM A 22 OHM RESISTOR TO C48, SM, CAP, 100PF, 500WDC, 100PF, CHANGE R4 FROM A 22 OHM RESISTOR TO 15906003SMT SM,, RES, 10 OHM 5% 1/8W CHANGE R5 FROM A 22 OHM RESISTOR TO 15906003SMT SM,, RES, 10 OHM 5% 1/8W CHANGE C17 FROM A 47PF CAP FIXED CERAMIC, 47 PF TO 15906160SMT SM,, CAP, .001 UF, 50 WVDC CHANGE C18 FROM A 47PF CAP FIXED CERAMIC, 47 PF TO 15906160SMT SM,, CAP, .001 UF, 50 WVDC ADD C23 1301246 SM, CAP, 47MF, 50V, LOW ESR ADD C24 1301246 SM, CAP, 47MF, 50V, LOW ESR ADD C25 15906161SMT SM,, CAP, .01 UF, 50 WVDC ADD C26 15906161SMT SM,, CAP, .01 UF, 50 WVDC PWN	DO 20100449/18/02 RJ
---	----------------------

		THIS PRINT IS THE PROPERTY OF AXCIERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION.		TITLE AMPLIFIER MODULE	
MATERIAL		FINISH		DWN PWN04/01/02	
REL LRT04/03/02		CHK LRT04/03/02		DWG. NO. 51-5379-309-00 WSP	
REV ECO DATE APV		SHEET 1 OF 1		REV DO	

DELETED PTF10159 P/N FROM LDMOS. ADDED C23,C24 & C27. CDD/CR
CO 20110221 5/17/02 RE
R15 AND R16 WERE 680 OHMS. PWN
BO 2010031604/02/02 LRT
REV ECO DATE APV



 Axcera®	THIS PRINT IS THE PROPERTY OF AXCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION.				TITLE SCHEMATIC DIRECTIONAL COUPLER BOARD							
	MATERIAL — — — —				DWN	MH	8/11/03	DWG. NO.			REV	
	FINISH — — — —				CHK	JCM	8/25/03	1303152			A0	
					REL	JCM	8/25/03					

**Axcera®**

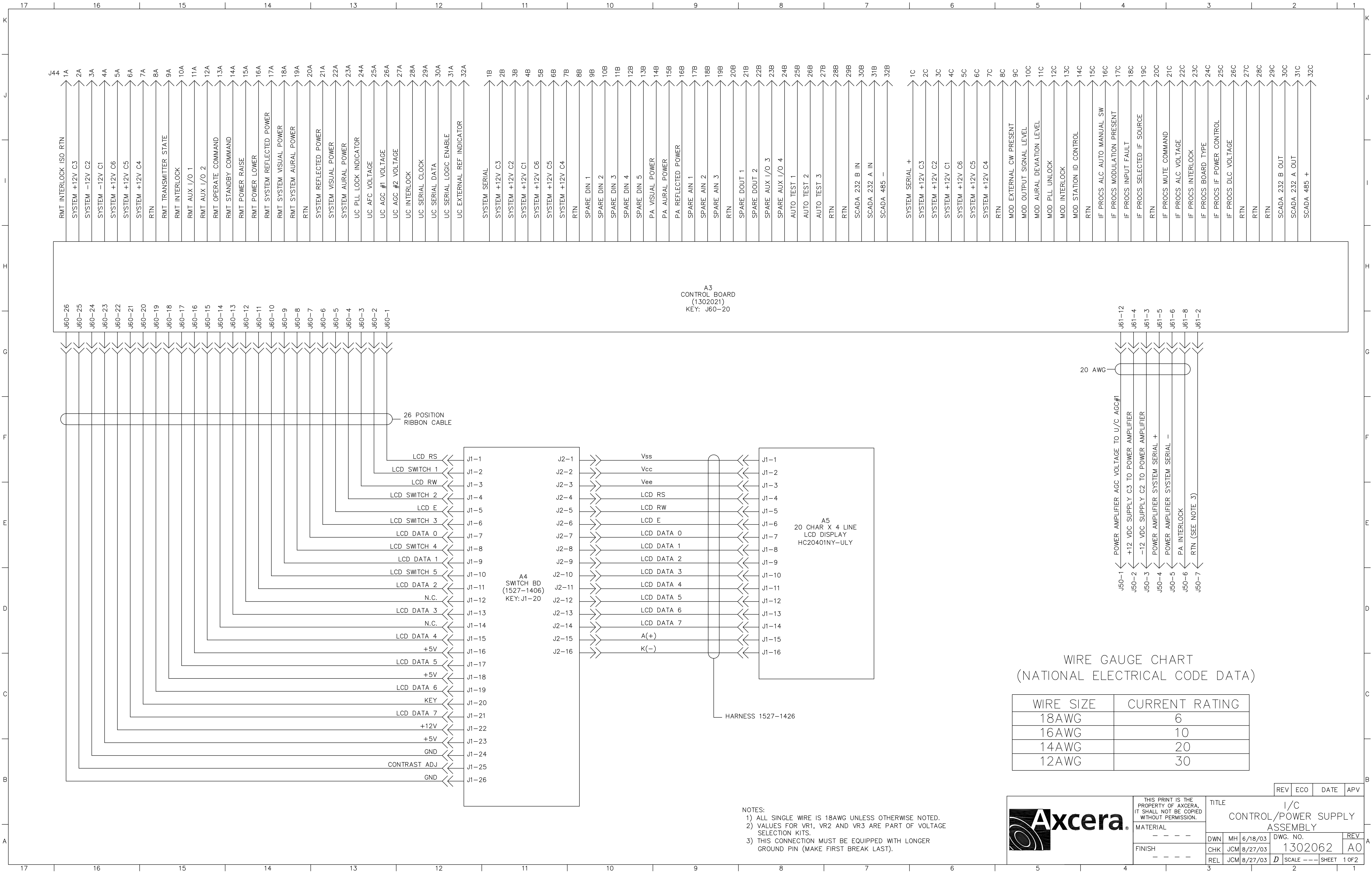
THIS PRINT IS THE
PROPERTY OF AXCERA,
IT SHALL NOT BE COPIED
WITHOUT PERMISSION.

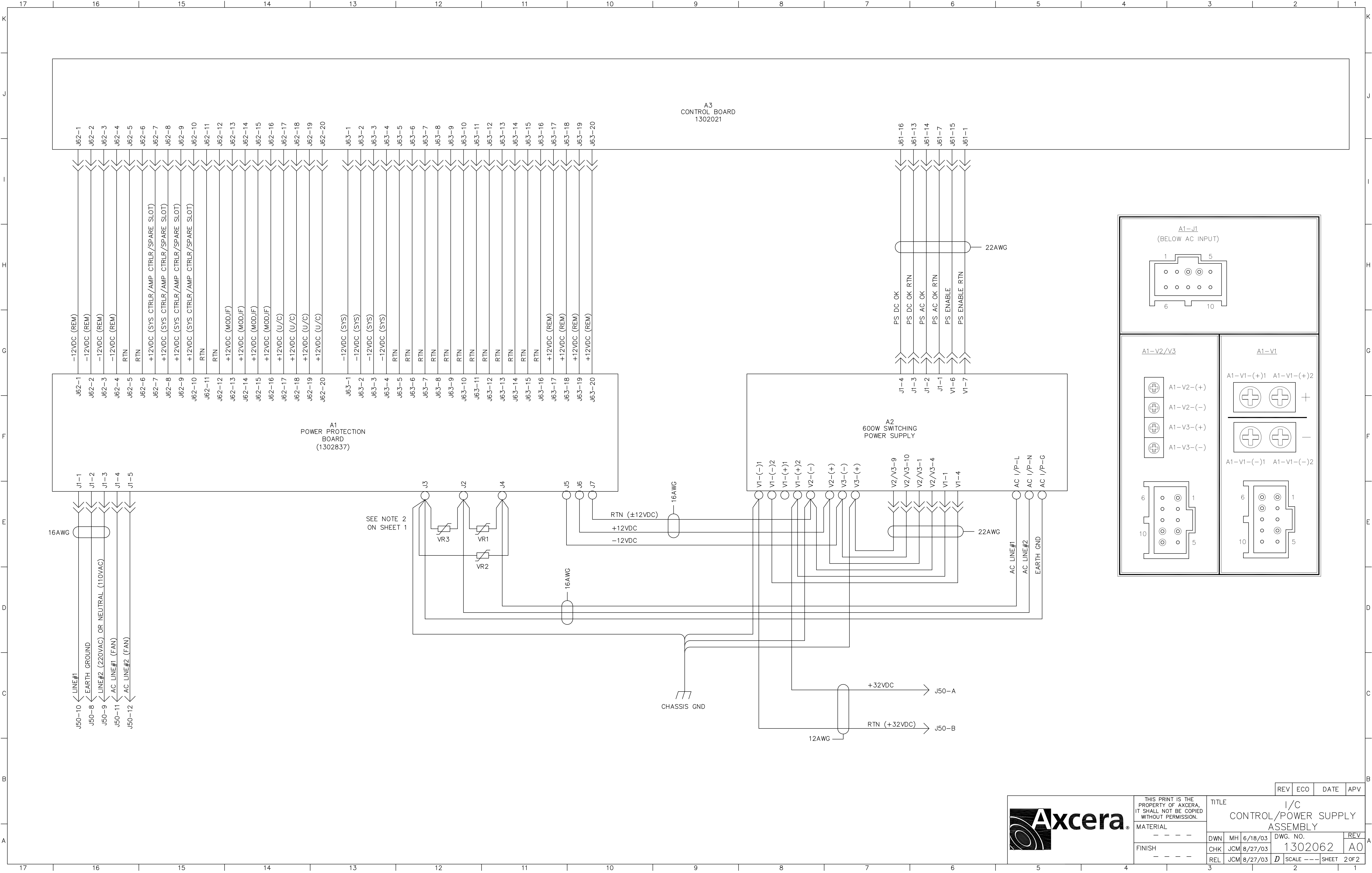
MATERIAL
- - - -

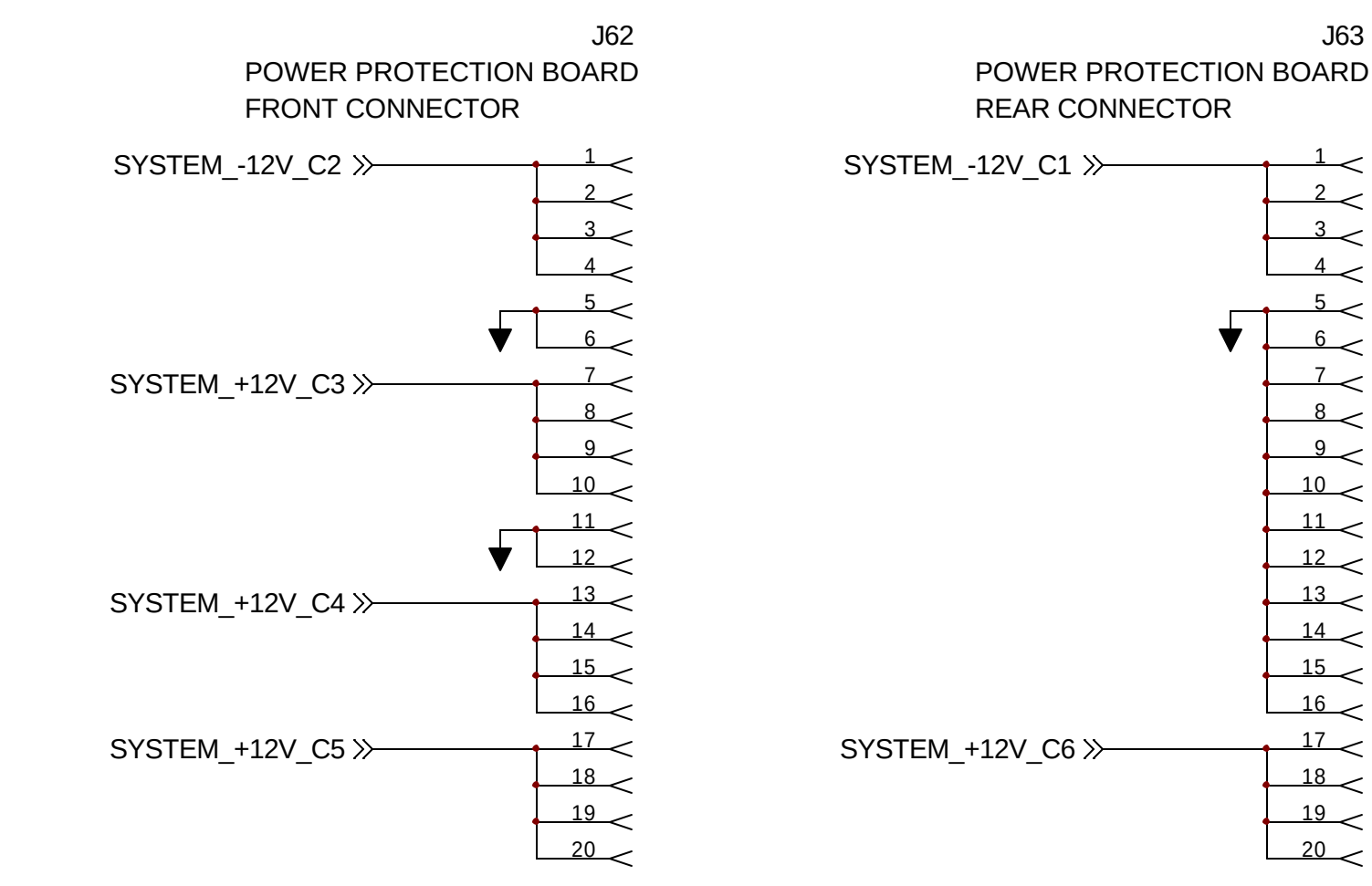
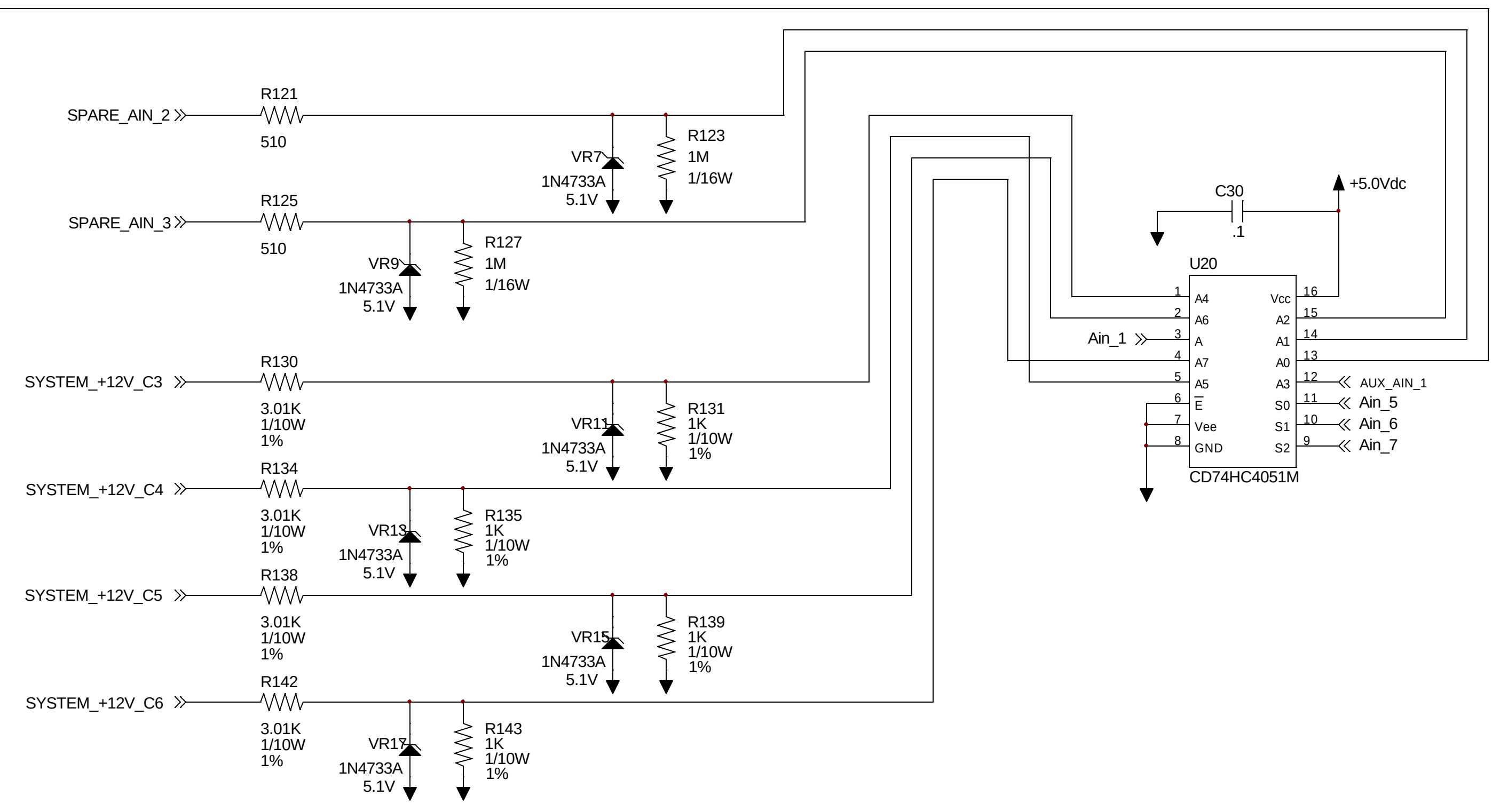
FINISH
- - - -

TITLE

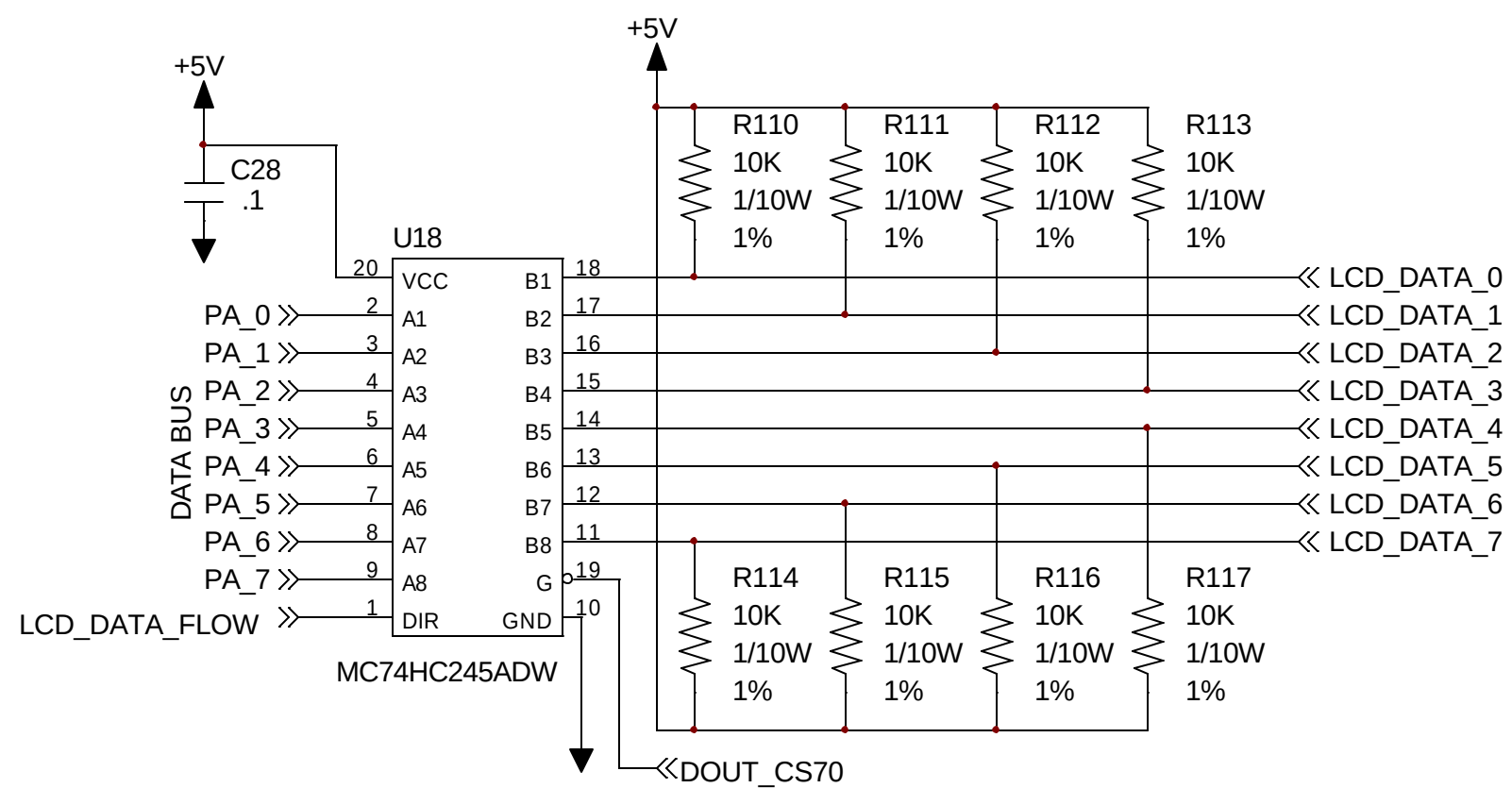
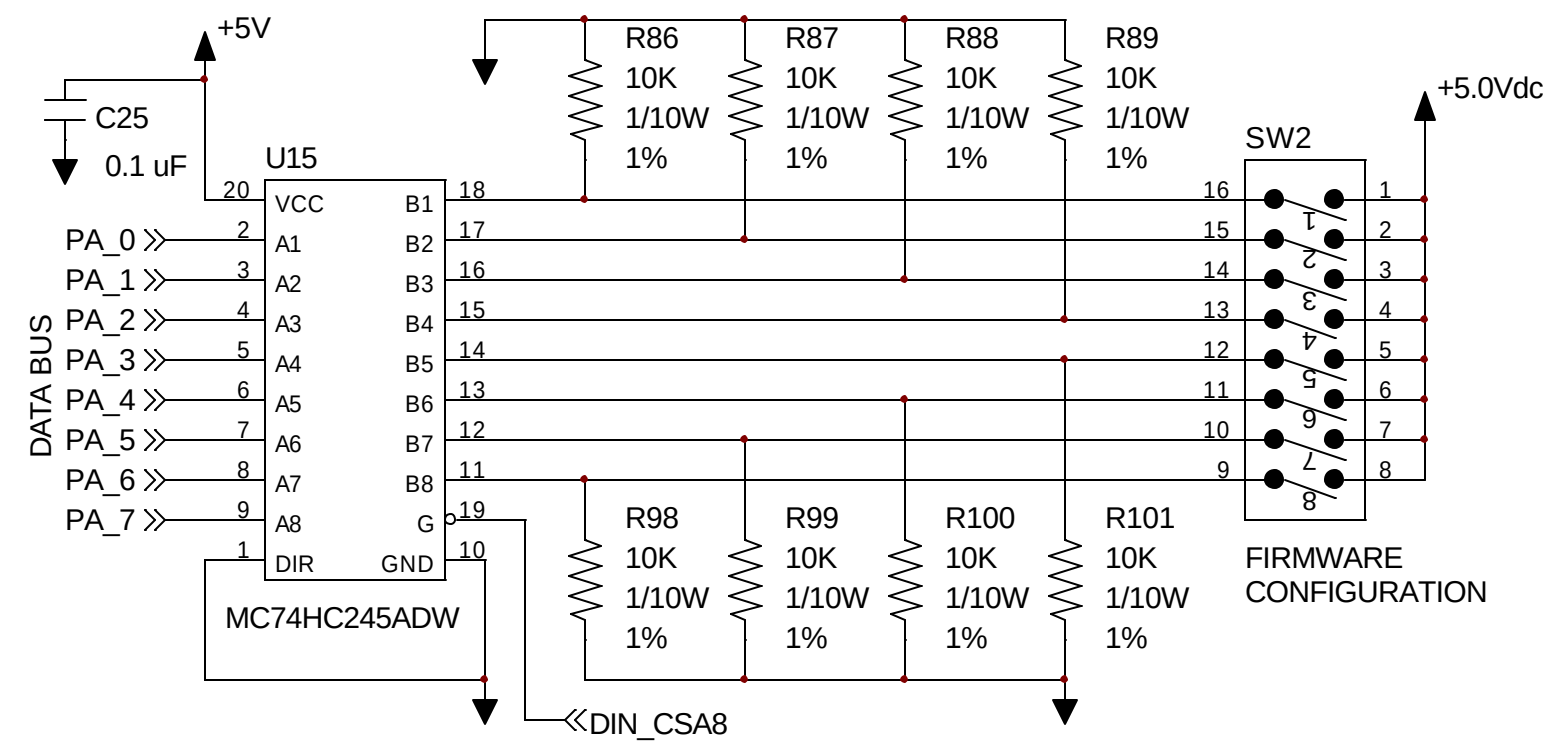
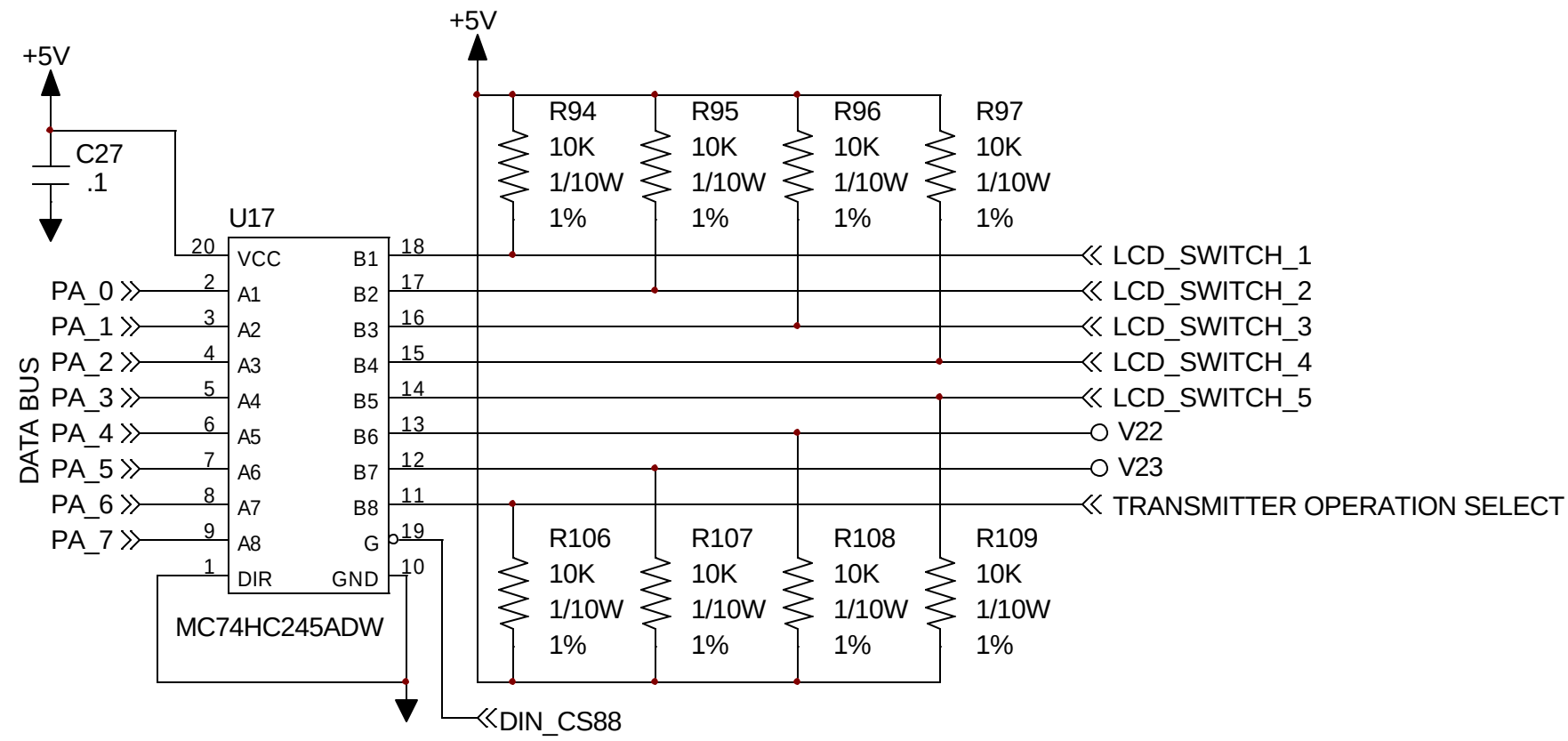
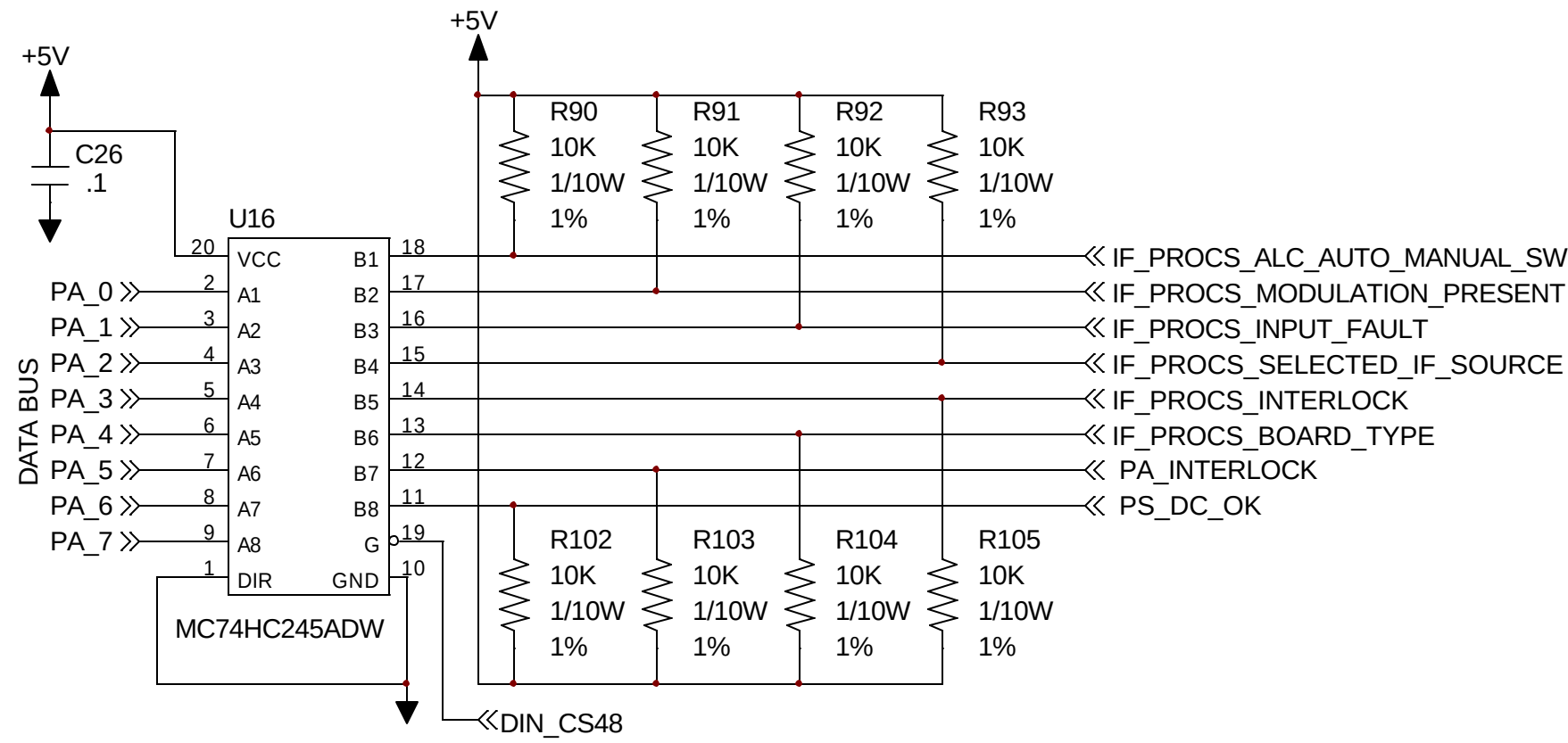
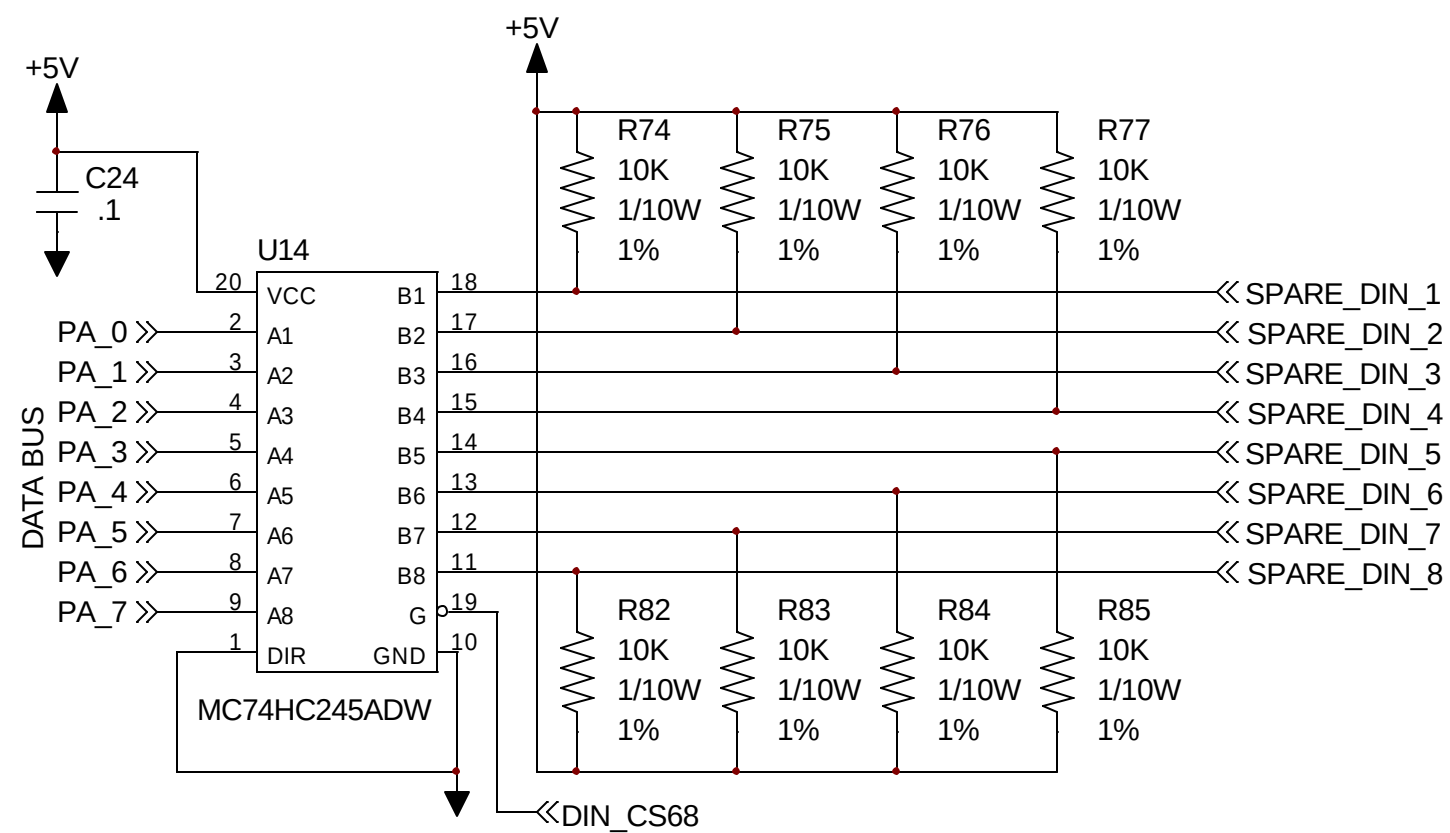
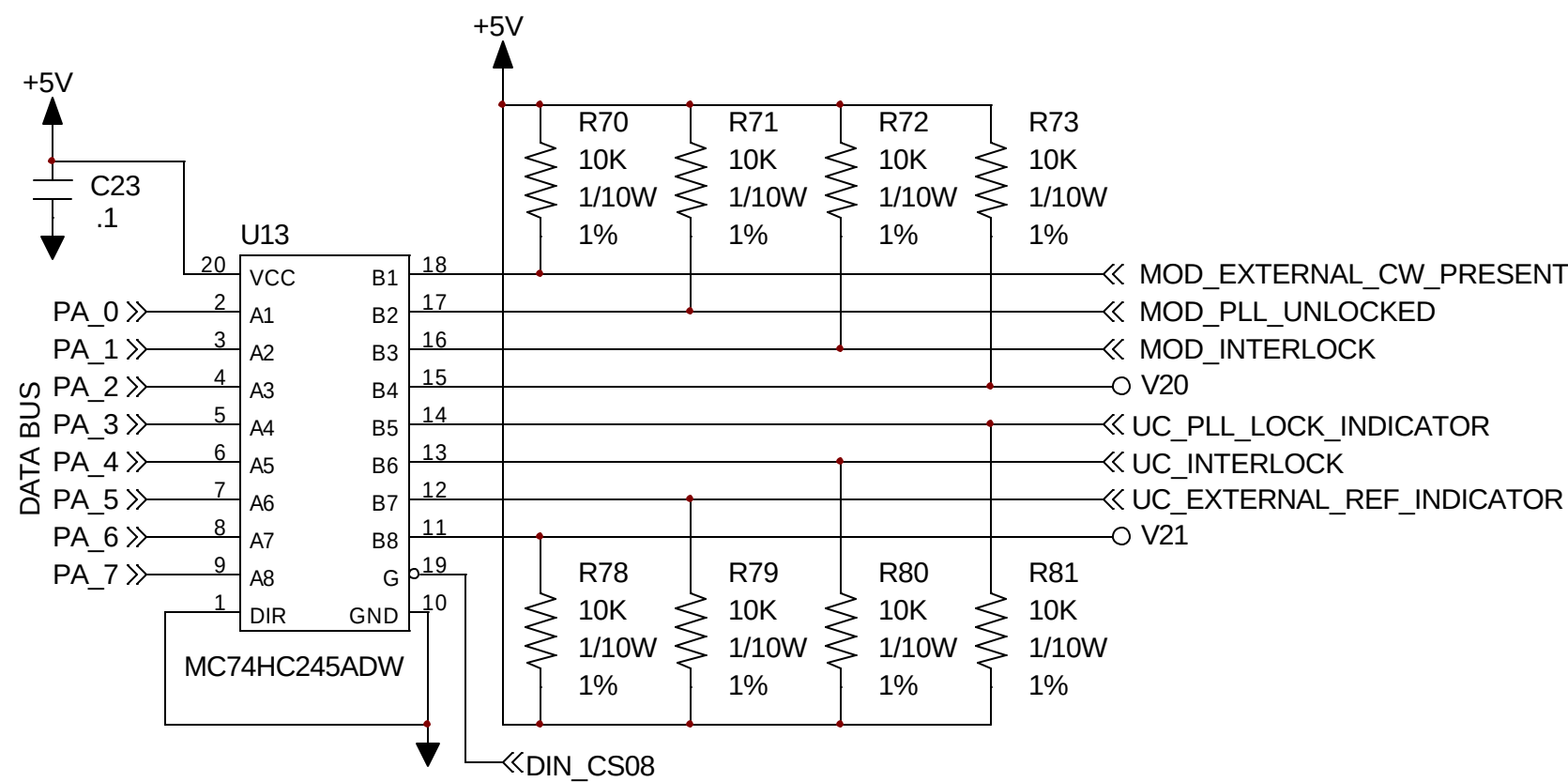
SCHEMATIC
DIRECTIONAL COUPLER
BOARD



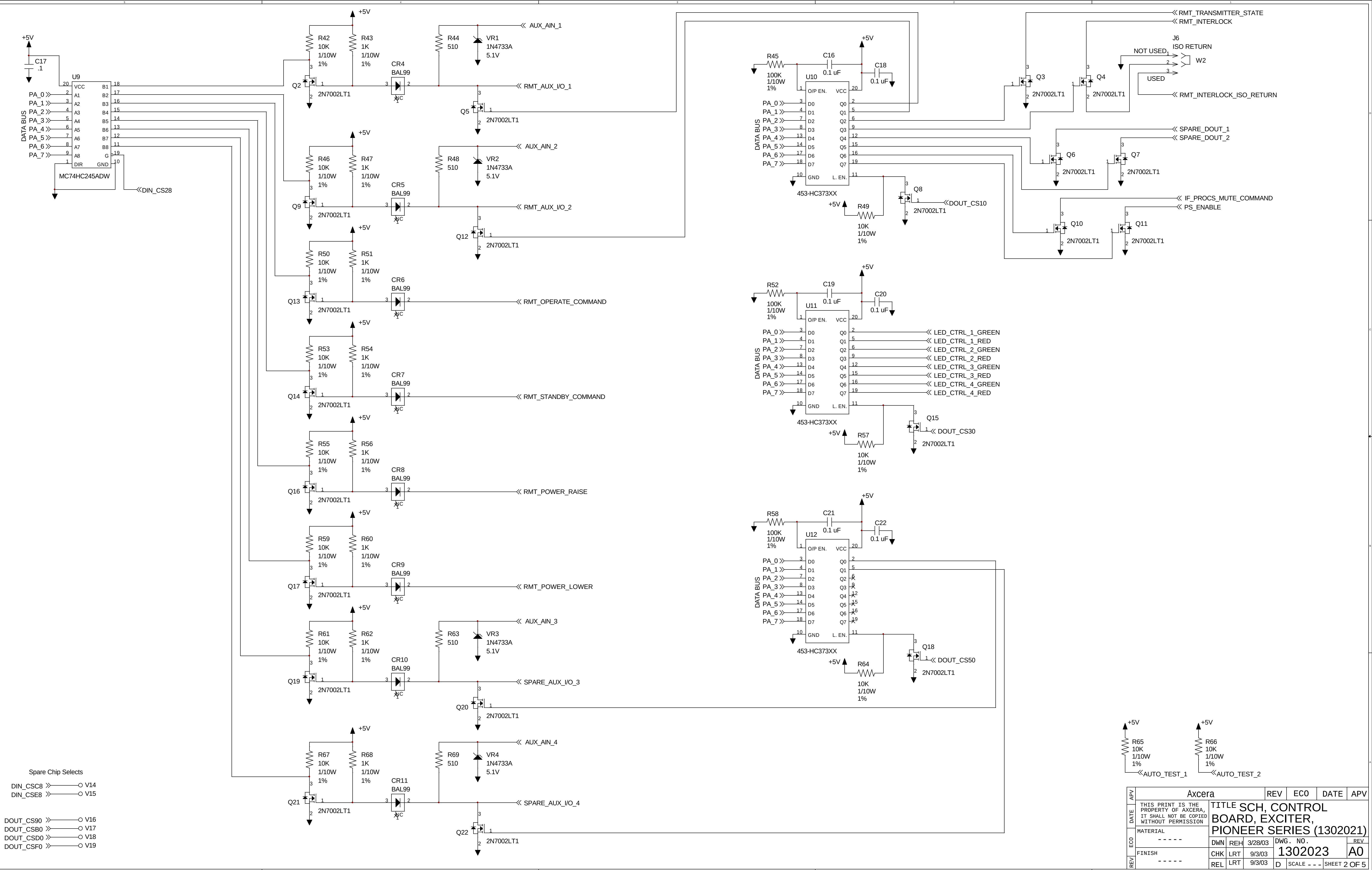




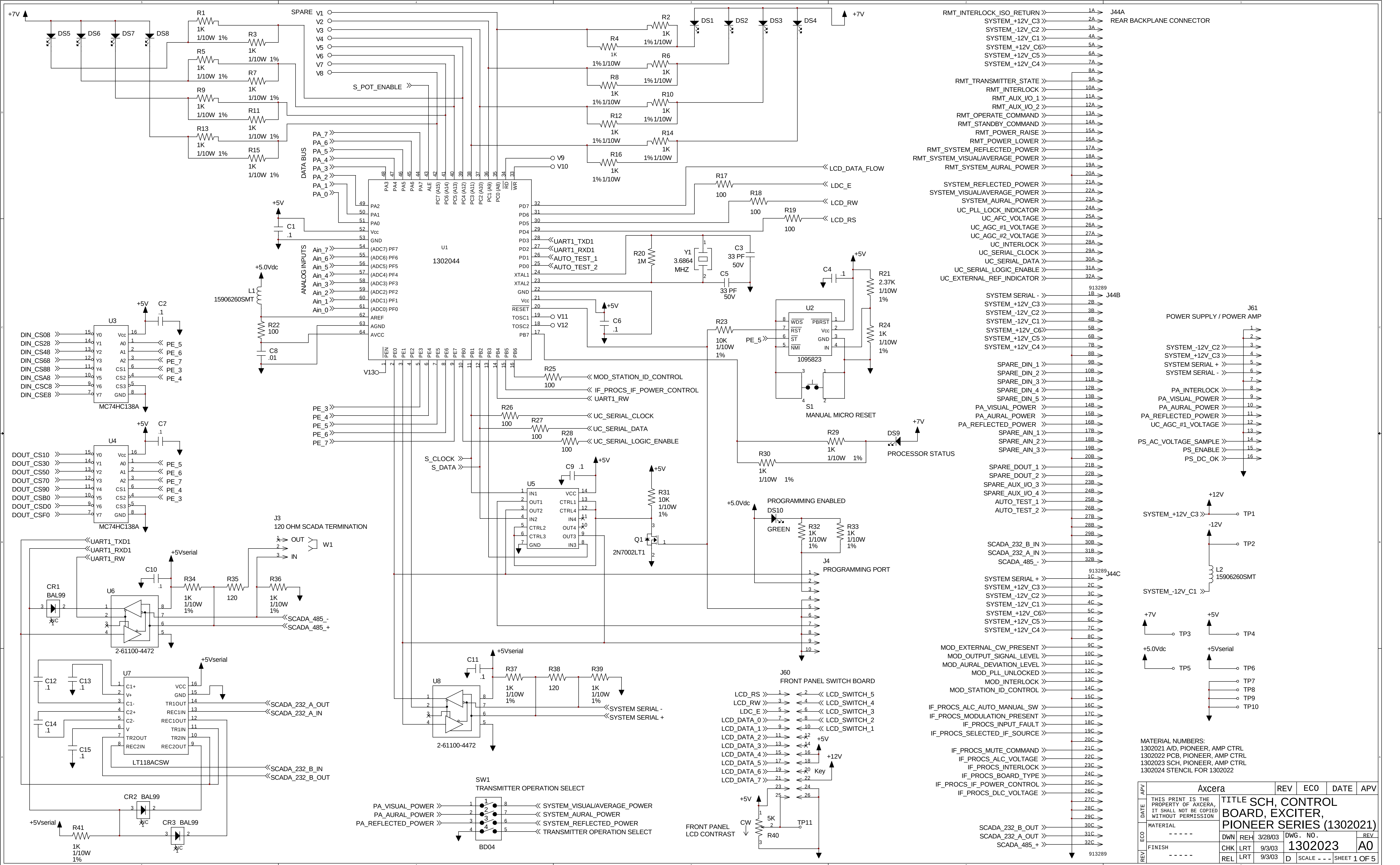
APV	Xxcera					REV	ECO	DATE	APV
DATE	THIS PRINT IS THE PROPERTY OF XXCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION		TITLE SCH, CONTROL BOARD, EXCITER, PIONEER SERIES (1302023)						
ECO	MATERIAL		DWN	REH	3/28/03	DWG. NO.		REV	
	-----		CHK	LRT	9/3/03	1302023		A0	
REV	FINISH		REL	LRT	9/3/03	D	SCALE ---	SHEET 4 OF 5	



APV	Axcera			REV	ECO	DATE	APV
DATE	THIS PRINT IS THE PROPERTY OF AXCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION			TITLE SCH, CONTROL BOARD, EXCITER, PIONEER SERIES (1302021)			
ECO	MATERIAL			DWN	REH	3/28/03	DWG. NO.
REV	FINISH			CHK	LRT	9/3/03	1302023
				REL	LRT	9/3/03	D SCALE - - - SHEET 3 OF 5



APV	Axcera				REV	ECO	DATE	APV
DATE	THIS PRINT IS THE PROPERTY OF AXCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION		TITLE SCH, CONTROL BOARD, EXCITER, PIONEER SERIES (1302021)					
ECO	MATERIAL -----		DWN	REH	3/28/03	DWG. NO.		REV
FINISH	-----		CHK	LRT	9/3/03	1302023		A0
REV	-----		REL	LRT	9/3/03	D	SCALE ---	SHEET 2 OF 5



MATERIAL NUMBERS:
1302021 A/D, PIONEER, AMP CTRL
1302022 PCB, PIONEER, AMP CTRL
1302023 SCH, PIONEER, AMP CTRL
1302024 STENCIL FOR 1302022

APV	Axcera		REV	ECO	DATE	APV
DATE	THIS PRINT IS THE PROPERTY OF AXCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION					
ECO	MATERIAL	DWN	REH	3/28/03	DWG. NO.	REV
REV	FINISH	CHK	LRT	9/3/03	1302023	A0
		REL	LRT	9/3/03	D	SCALE - - - SHEET 1 OF 5

TP1

TP2

TP3

TP4

TP5

TP6

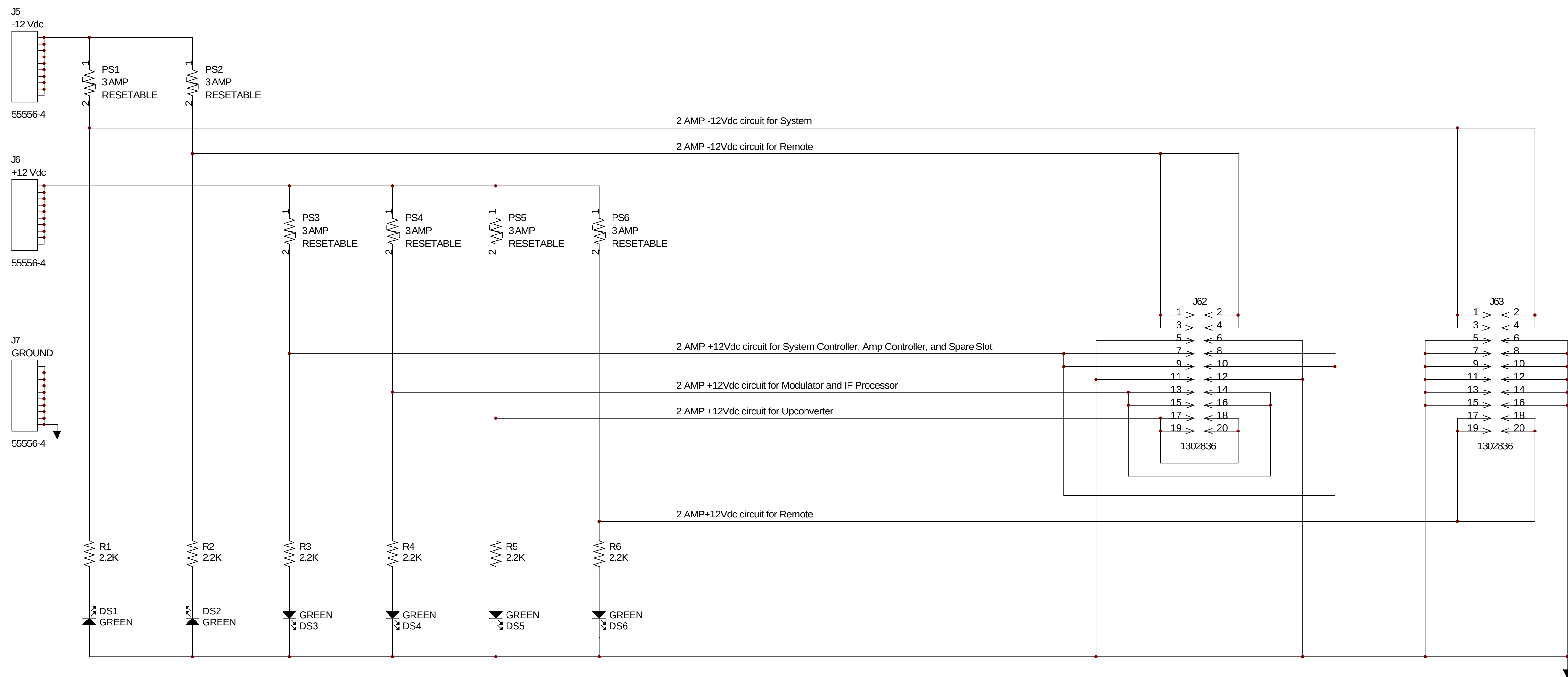
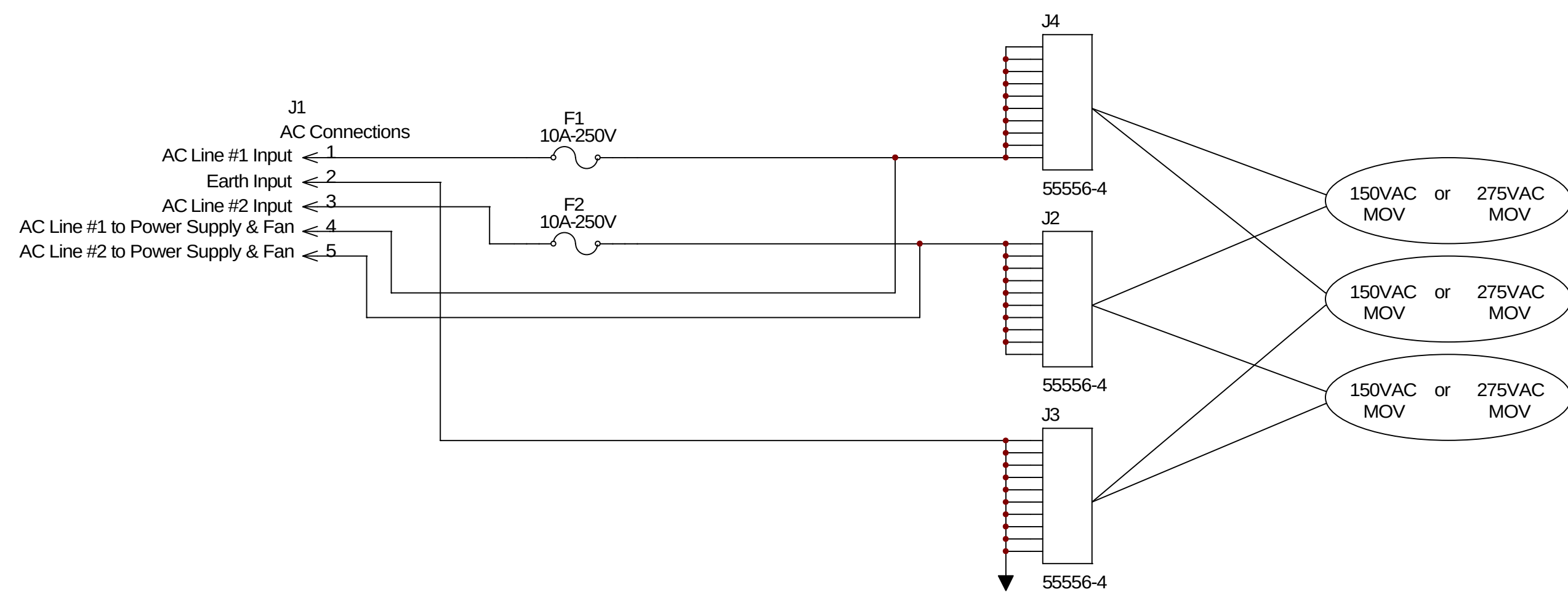
TP7

TP8

TP9

TP10

TP11



Circuit Design Notes:

1. Track widths of 0.140 inch minimum top and bottom of board shall be used to connections to J1, J2, J3, J4.
2. Track widths of 0.140 inch minimum top of board shall be used to connections to J5 and J6.
3. Track widths of 0.065 inch minimum shall be used to connections to J62 and J63.
4. Track widths of 0.020 inch minimum shall be used to connections between LEDs and resistors.
5. Board BOM needs the following items added to those exported from Orcad:

Part Number	Qty	Description
102071	4	Fuse Clip, PC BD Mnt., 15 Amp

MATERIAL NUMBERS:
1302837 PIONEER, POWER PROTECTION
1302838 PCB, PIONEER, PWR PROTECT
1302839 SCH, PIONEER, PWR PROTECT
1302840 STENCIL FOR 1302838

APV	Axcera				REV	ECO	DATE	APV
DATE	THIS PRINT IS THE PROPERTY OF AXCERA, IT SHALL NOT BE COPIED WITHOUT PERMISSION	TITLE SCH, PIONEER, PWR PROTECT (1302837)						
ECO		MATERIAL		DWN	REH	5/29/03	DWG. NO.	REV.
	FINISH	CHK	REH	5/29/03	1302839			AO
REV	-----	REL	REH	5/29/03	D	SCALE ---	SHEET 1 OF 1	

