














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REVISIONS		
CHG.	REV	DESCRIPTION
008023	-	INITIAL RELEASE 10-05-04
008578	A	PL LIST CHANGES 04-30-05

NOTES:

1. ASSEMBLE AND SOLDER PER ITEM 701.
2.  THIS ASSEMBLY INCLUDES COMPONENTS WHICH ARE SUBJECT TO DAMAGE BY ELECTROSTATIC CHARGES; THEREFORE, ALL COMPONENTS SHALL BE HANDLED IN ACCORDANCE WITH GUIDELINES FOR ELECTROSTATIC DISCHARGE CONTROL.
3. MAXIMUM COMPONENT HEIGHT SIDE B SHALL BE:
 CONDUCTIVE CASE .350, UNDER ITEM 4 .295.
 NONCONDUCTIVE OR GROUNDED CASE .400, UNDER ITEM 4 .345.
4. SIDE A SHALL BE FREE OF COMPONENTS AND LEADS, EXCEPT J1 AND J2.
5.  APPLY A TORQUE OF 5 ±0.5 INCH-POUNDS TO ITEM 7 SECURING Q2, Q3, Q27, Q29 AND Q30 TO ITEM 3.
6.  J1 AND J2 MUST BE FLUSH TO WITHIN .010 OF SIDE A OF THE PWB (ITEM 1).
7.  MOUNT LEADS OF C126, C127, C128 AND C129 AT EDGE OF RUN AS SHOWN.
8.  SHADED COMPONENTS ARE NOT INSTALLED.
9. SMOOTH CONTACT AT THE INTERFACE OF SIDE A OF THE PWB (ITEM 1) AND THE HOUSING (ITEM 3) IS CRITICAL. THEREFORE, SIDE A OF THE PWB (ITEM 1) SHALL HAVE NO SOLDER PROTRUSIONS OR LUMPS GREATER THAN .005 IN HEIGHT ABOVE THE NORMAL PLATED SURFACE.
10. SMOOTH CONTACT AT THE INTERFACE OF SIDE B OF THE PWB (ITEM 1) AND THE SHIELD (ITEM 4) IS CRITICAL. THEREFORE, SIDE B OF THE PWB (ITEM 1) SHALL HAVE NO SOLDER PROTRUSIONS OR LUMPS GREATER THAN .005 IN HEIGHT ABOVE THE NORMAL PLATED SURFACE.
11. APPLY IDENTIFICATION LABEL 2 PLACES, AS SHOWN ON SHEET 2.
12.  ORIENT ALL 7022905 CAPACITORS VERTICALLY, WITH SMALL SURFACE DOWN AS SHOWN IN SECTION F-F, EXCEPT C130.
13.  ORIENT SLANT CUT LEAD OF U9 AS SHOWN.
14.  APPLY CONFORMAL COAT PER ITEM 702 TO THE AREAS SHOWN. TRACES WITHIN THE AREAS ARE TO BE ENTIRELY COATED. IT IS NOT NECESSARY TO COAT ALL THE PWB MATERIAL WITHIN THE AREAS. DO NOT ALLOW COATING TO COVER ANY OF THE SOLID COPPER AREAS SURROUNDING THE AREAS TO BE COATED.
15.  APPLY CONFORMAL COATING TO ALL FOUR SIDES AND TO THE TOP OF STACKED CAPACITORS C2, C3, C4, C7, C38, C46, C71, C74 AND C105, PER ITEM 702.
16.  REMOVE A .080 INCH ±.010 INCH PORTION OF MICROSTRIP TRANSMISSION LINE APPROXIMATELY AS SHOWN IN DETAIL H. INSTALL C130 (ITEM 133) IN THE GAP CREATED BY THE REMOVAL OF THE MICROSTRIP TRANSMISSION LINE.
17.  APPLY ITEM 708 AS REQUIRED TO ITEM 1. SOLDER, ANYWHERE WITHIN AREAS INDICATED TO ACHIEVE PERFORMANCE REQUIREMENTS OF IT 7517900. CONFORMAL COAT PER ITEM 702 AFTER APPLICATION OF ITEM 708.
18.  TORQUE ITEM 8 TO 7.0±0.5 INCHES-POUNDS.
19.  ITEM 708 IN THIS AREA MAY BE A MAXIMUM OF 0.130 WIDE, MUST BE FREE OF SHARP CORNERS AND MUST HAVE A MINIMUM SPACING OF 0.100 TO THE GROUND TRACES ON EITHER SIDE. WHEN ITEM 708 IS REQUIRED, IT MUST BE APPLIED TO A CIRCUIT TRACE AREA FREE OF CONFORMAL COAT. APPLY CONFORMAL COAT PER ITEM 702 OVER THE ENTIRE CIRCUITRY IN THIS AREA, INCLUDING ITEM 708.

REVISION STATUS OF PARTS LIST SHALL BE THE SAME AS THE BASIC DRAWING NUMBER. SEE SEPARATE PARTS LIST.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES: TOLERANCES: ANGLES A - 2 PL DEC 1 - 3 PL DEC 1 -		THIRD ANGLE PROJECTION	OPERATIONAL NOTE
INTERPRET DIMENSIONS AND TOLERANCES PER ANSE Y14.5M-1994			
FOR REFERENCE		ORIGINAL C.R.	TITLE
		PRODUCT LINE NO.	CIRCUIT CARD
		ANALYSIS BY	ASSEMBLY - XMTR A3A2
		REF ENG	REF SPEC
7517935-903	9003000-55001		ITERATION CODE
NEXT ASSY	END ITEM		DRAWING NO. 7517935-912
APPLICATION			SCALE NONE

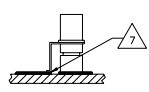
ACSS Aviation Communication & Signal Systems Phoenix, Arizona 85027-4600

REV 10-2003 (REV 11-16-11-1993)

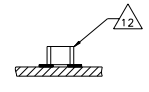
7517935-912

SHEET 1 OF 11

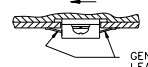
REVISONS		DESCRIPTION	DATE
008978	A	LIGHTENED SHADED AREAS	04-30-05



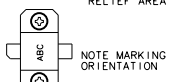
C126 THRU C129
SECTION D-D



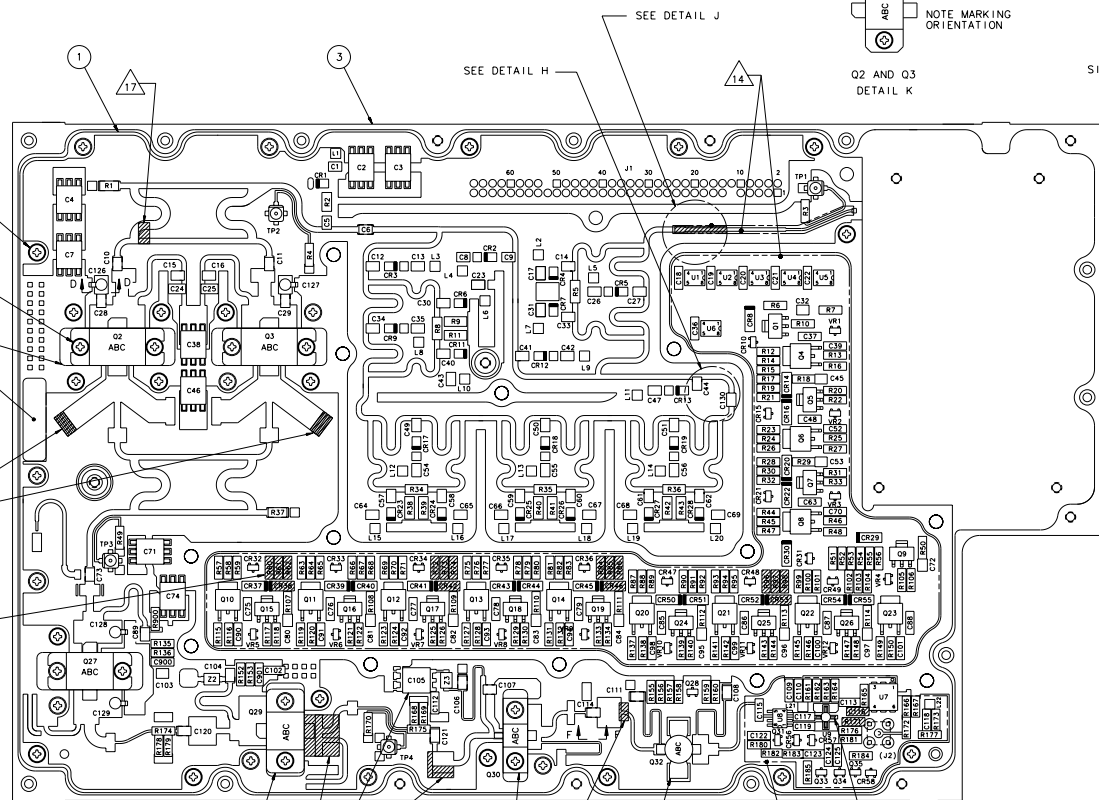
SECTION F-F



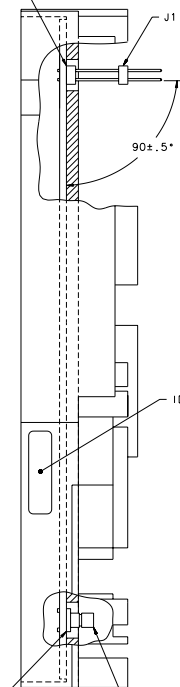
GENTLY BEND END OF TRANSISTOR LEAD DOWN AGAINST PAD. SOLDER THE END OF THE LEAD ONLY. DO NOT LET SOLDER FLOW INTO STRESS RELIEF AREA OF THE LEAD.



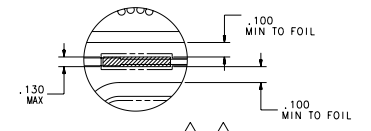
NOTE MARKING ORIENTATION



VIEWING SIDE B
SHIELD (ITEM 4) AND COVER (ITEM 5) REMOVED FOR CLARITY.
SEE SHEET 3.

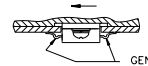


IDENTIFICATION LABEL

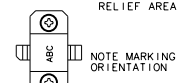


DETAIL J
SCALE: NONE

BEFORE TIGHTENING SCREWS, MOVE PART AS CLOSE AS POSSIBLE AGAINST INDICATED EDGE OF BOARD CUTOUT.

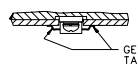


GENTLY BEND END OF TRANSISTOR LEAD DOWN AGAINST PAD. SOLDER THE END OF THE LEAD ONLY. DO NOT LET SOLDER FLOW INTO STRESS RELIEF AREA OF THE LEAD.

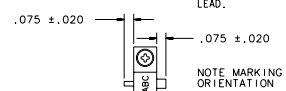


Q27 AND Q29
DETAIL C

BEFORE TIGHTENING SCREWS, MOVE PART AS CLOSE AS POSSIBLE AGAINST INDICATED EDGE OF BOARD CUTOUT.

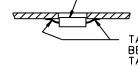


GENTLY BEND TABS DOWN AGAINST PAD. TABS MUST BE SOLDERED UP TO EDGE OF PAD. DO NOT LET SOLDER FLOW INTO STRESS RELIEF AREA OF THE LEAD.

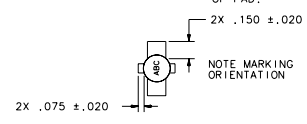


Q30
DETAIL B

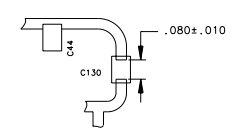
Q32 SHALL NOT PROTRUDE BEYOND THE SURFACE OF SIDE A OF PWB.



TABS MAY BE FLUSH WITH THE PWB OR BENT DOWN SLIGHTLY TO MEET PAD. TABS MUST BE SOLDERED UP TO EDGE OF PAD.

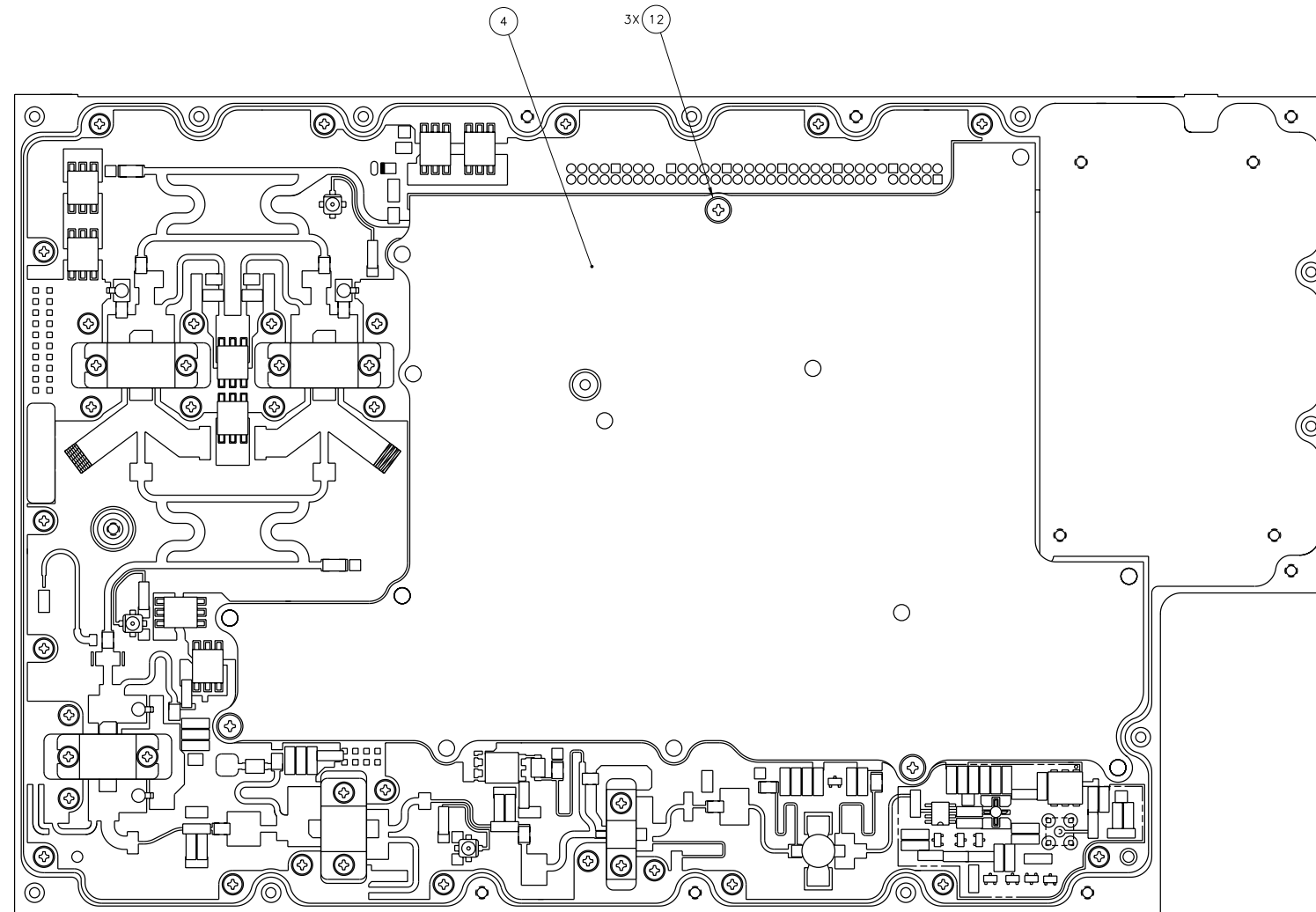


Q32
DETAIL A



DETAIL H
SCALE: NONE

REVNO.		REV	DESCRIPTION

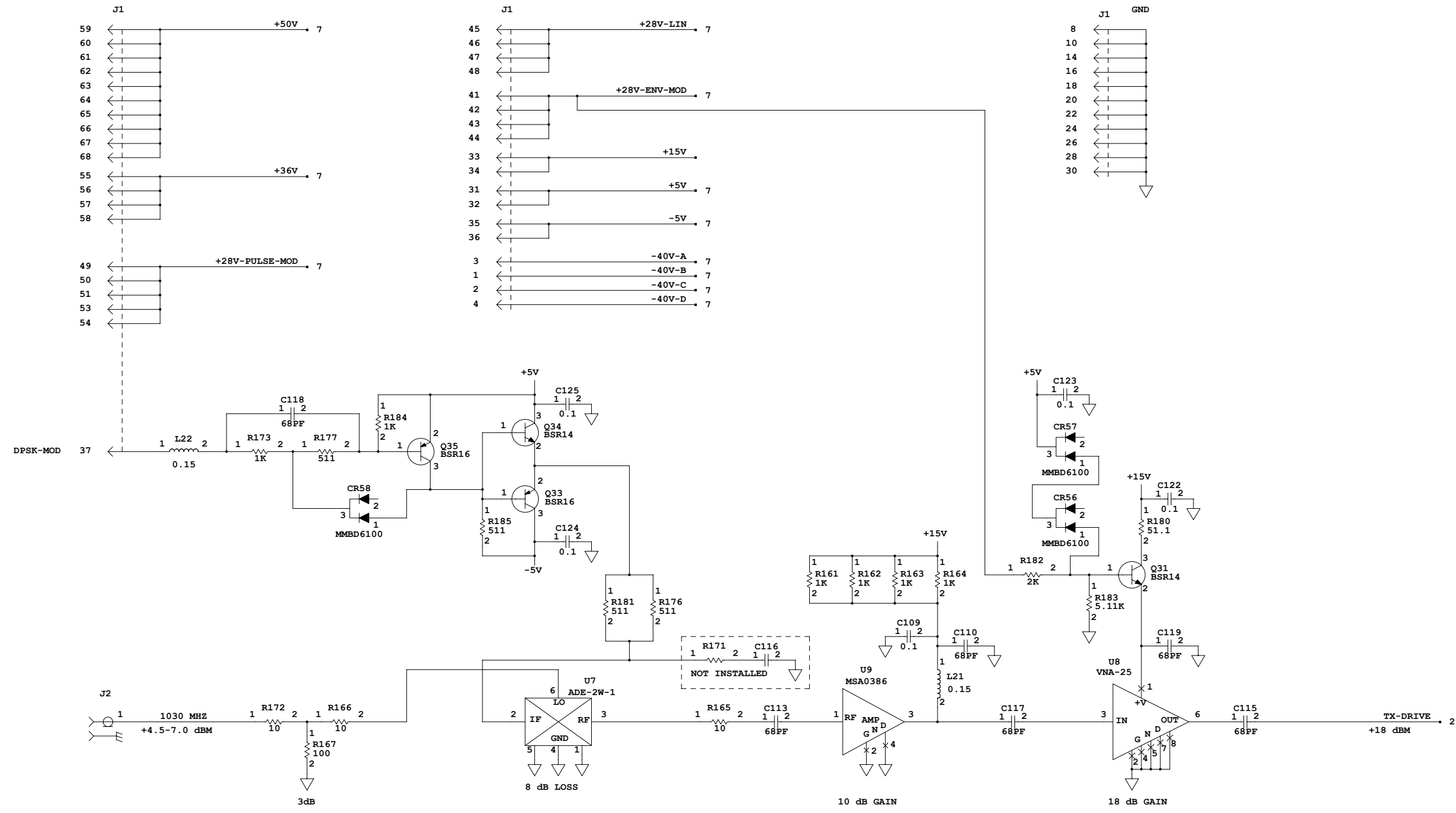


VIEWING SIDE B

	<small>SEE FIRST SHEET FOR CONTRACT NUMBER, USE OR DISCLOSURE OF INFORMATION ON THIS SHEET IS SUBJECT TO THE RESTRICTIONS ON THE FIRST SHEET OF THIS DOCUMENT.</small>	<small>SIZE/CAGE CODE</small> E11WYD3	<small>DRAWING NO.</small> 7517935-912	<small>REV</small> -
	<small>SCALE</small> 1/1	<small>SHEET</small> 3	<small>REV</small> -	<small>REV</small> -

DWG NO. 7517935-912 SH. 3

REV		REVISIONS	
CR	REV	DESCRIPTION	DATE
008578	A	U7 TYPE WAS JMS-2W.	04/30/2005



- NOTES:
UNLESS OTHERWISE SPECIFIED:
1. ALL CAPACITANCE VALUES ARE IN MICROFARADS.
 2. ALL RESISTANCE VALUES ARE IN OHMS.
 3. ALL INDUCTANCE VALUES ARE IN MICROHENRIES.
 4. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATIONS PREFIX PART DESIGNATION WITH SUBASSEMBLY DESIGNATION.
 5. INTERPRET DRAWING PER ANSI Y32.2-1975 AND ANSI/IEEE STD 991-1986. LOGIC SYMBOLS CONFORM TO ANSI/IEEE STD 91-1984.

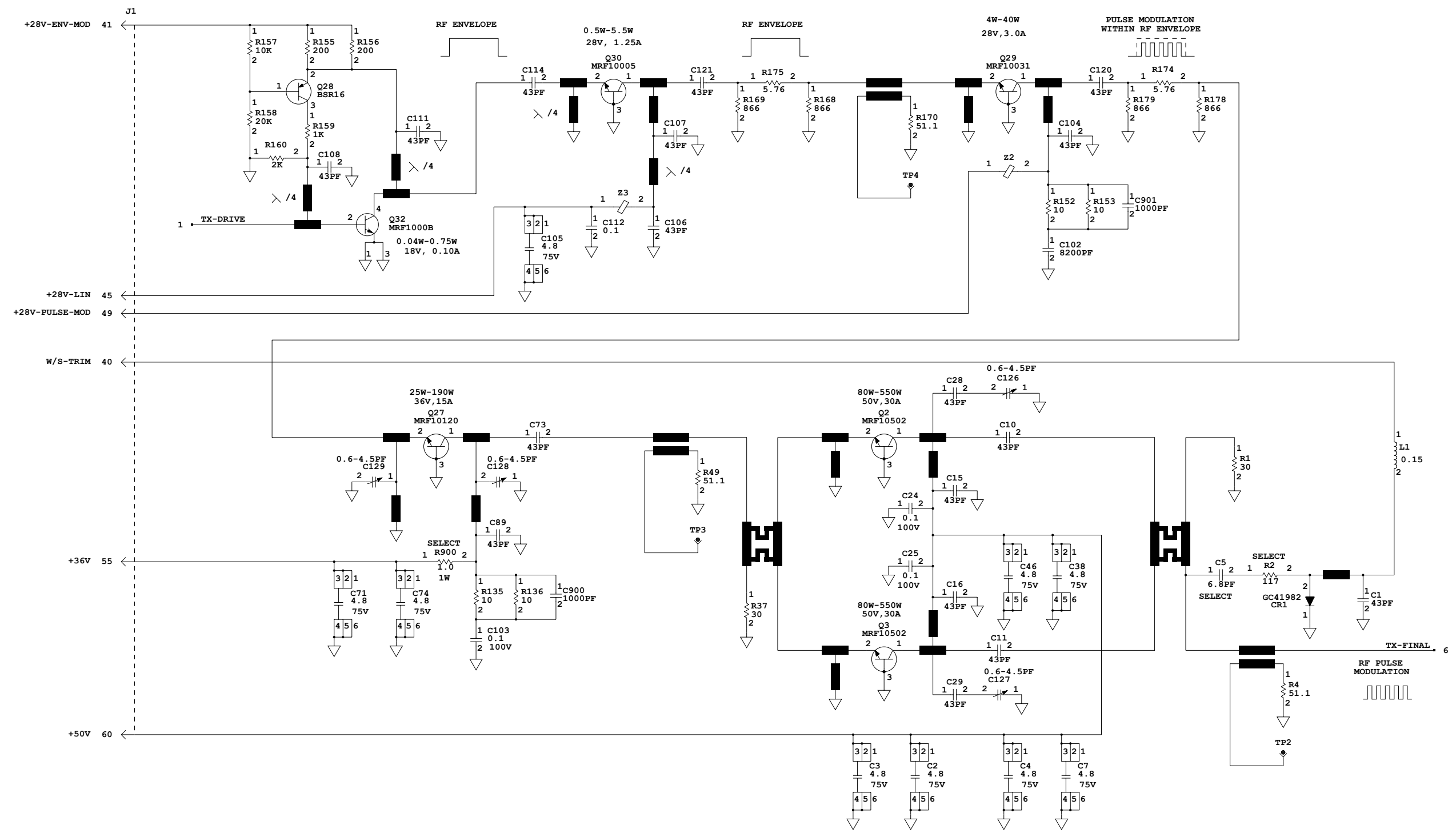
INPUT POWER/DPSK MODULATOR
SCHEMATIC DIAGRAM SHEET NO. 1 OF 8

COMPUTER GENERATED

ACSS	SEE FIRST SHEET FOR CONTRACT NUMBER.	SIZE	CAGE CODE	DRAWING NO.	REV
	USE OR DISCLOSURE OF INFORMATION ON THIS SHEET IS SUBJECT TO THE RESTRICTIONS ON THE FIRST SHEET OF THIS DOCUMENT.	E	1WYD3	7517935-912	A
		SCALE	SHEET 4		

DRAWING NO. 7517935-912 SHEET 4 OF 4

REV		DESCRIPTION	DATE
008578	A	ADD SELECT TO R900, C5, R2.	04/30/2005



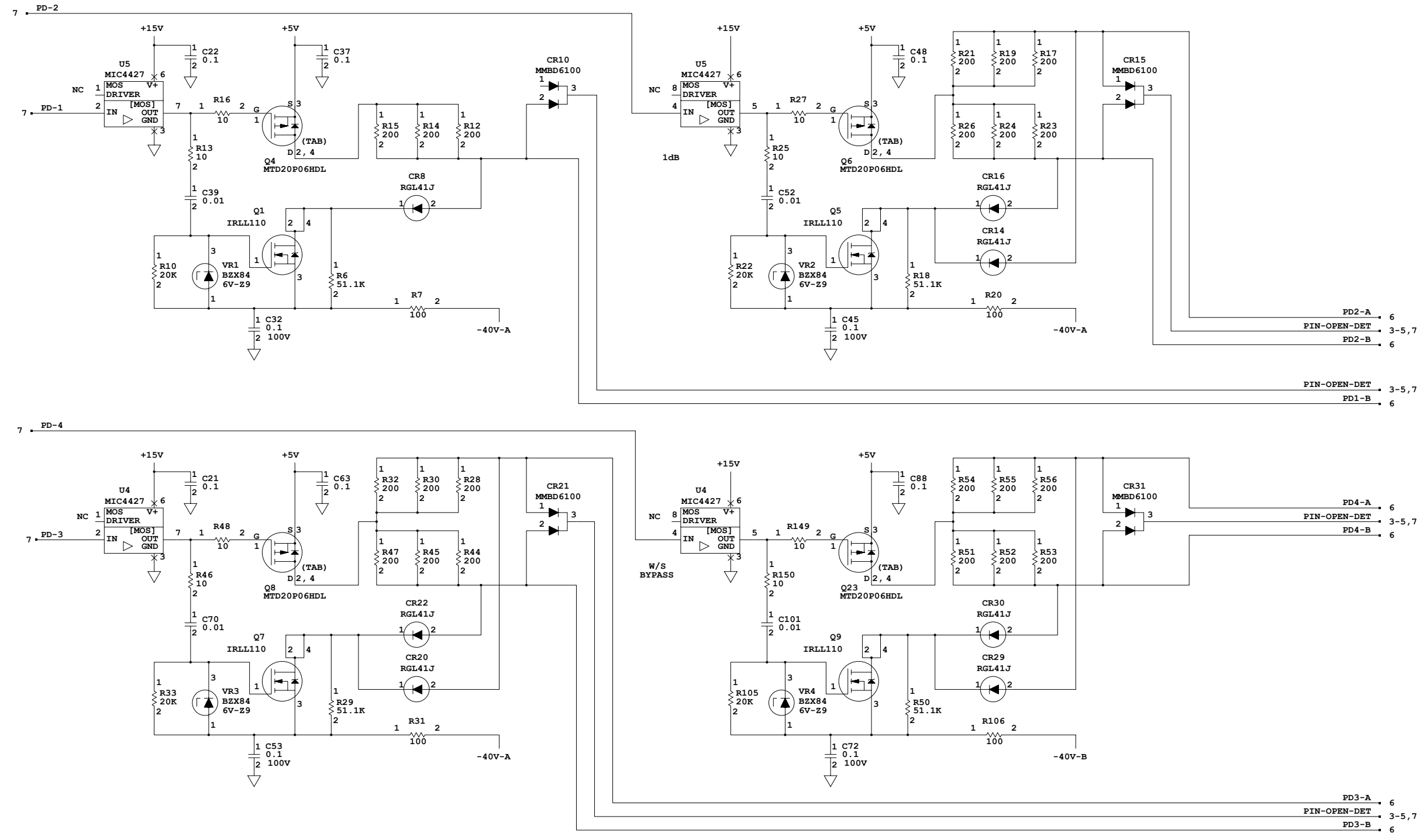
POWER AMPLIFIER
SCHEMATIC DIAGRAM SHEET NO. 2

COMPUTER GENERATED

ACSS	SEE FIRST SHEET FOR CONTRACT NUMBER. USE OR DISCLOSURE OF INFORMATION ON THIS SHEET IS SUBJECT TO THE RESTRICTIONS ON THE FIRST SHEET OF THIS DOCUMENT.	SIZE: E 1WYD3	DRAWING NO.: 7517935-912	REV: A
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DRAWING NO. 7517935-912 SHEET 5 OF 5

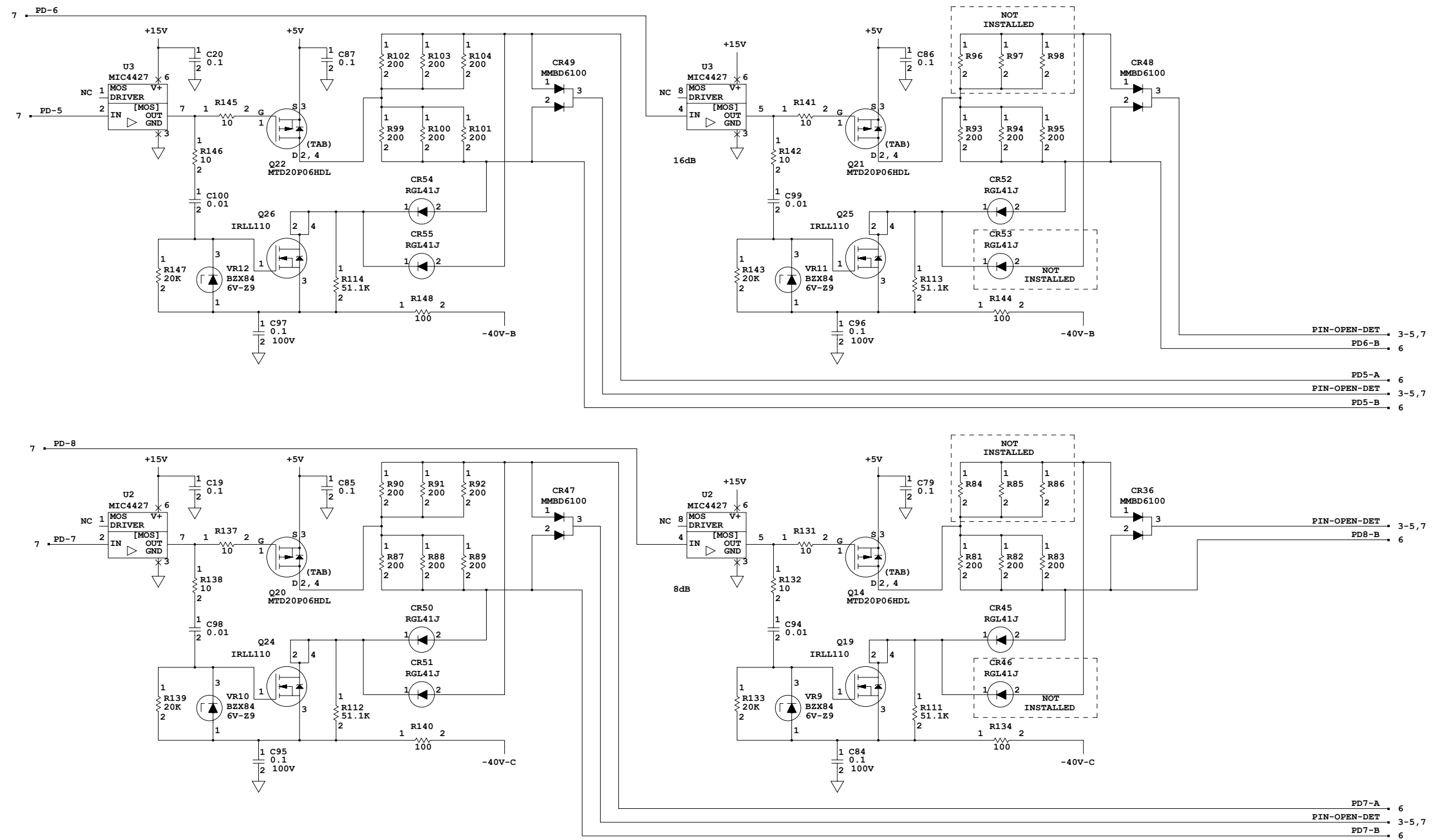
REVISIONS	
CR	DESCRIPTION



ZERO dB BYPASS, 1 dB STEP
PIN DIODE DRIVERS
SCHEMATIC DIAGRAM SHEET NO. 3

COMPUTER GENERATED

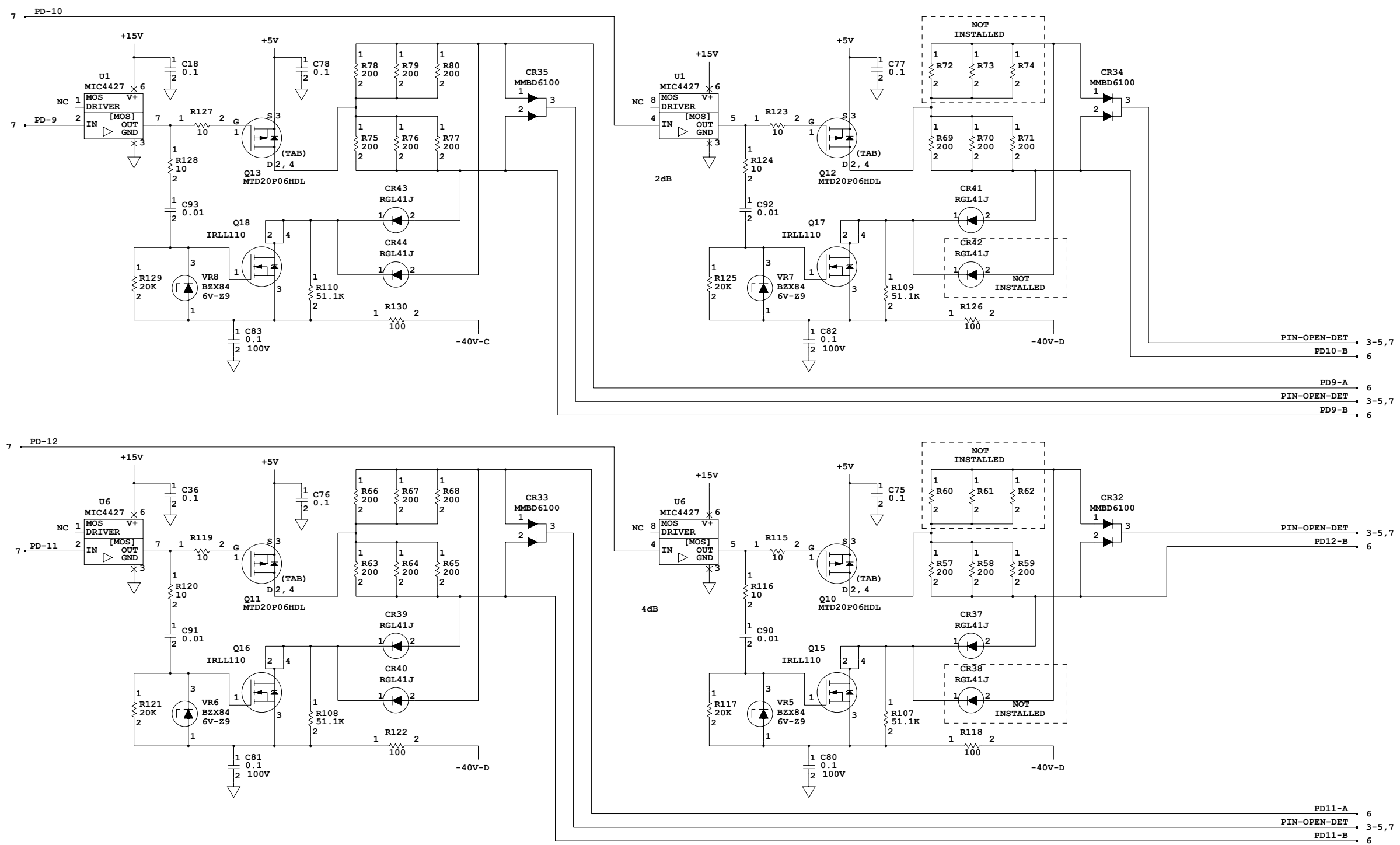
DRAWING NO. 7517935-912 SHEET 6



8 dB, 16 dB STEP
PIN DIODE DRIVERS
SCHEMATIC DIAGRAM SHEET NO. 4

COMPUTER GENERATED

DRAWING NO. 7517935-912 SHEET 7

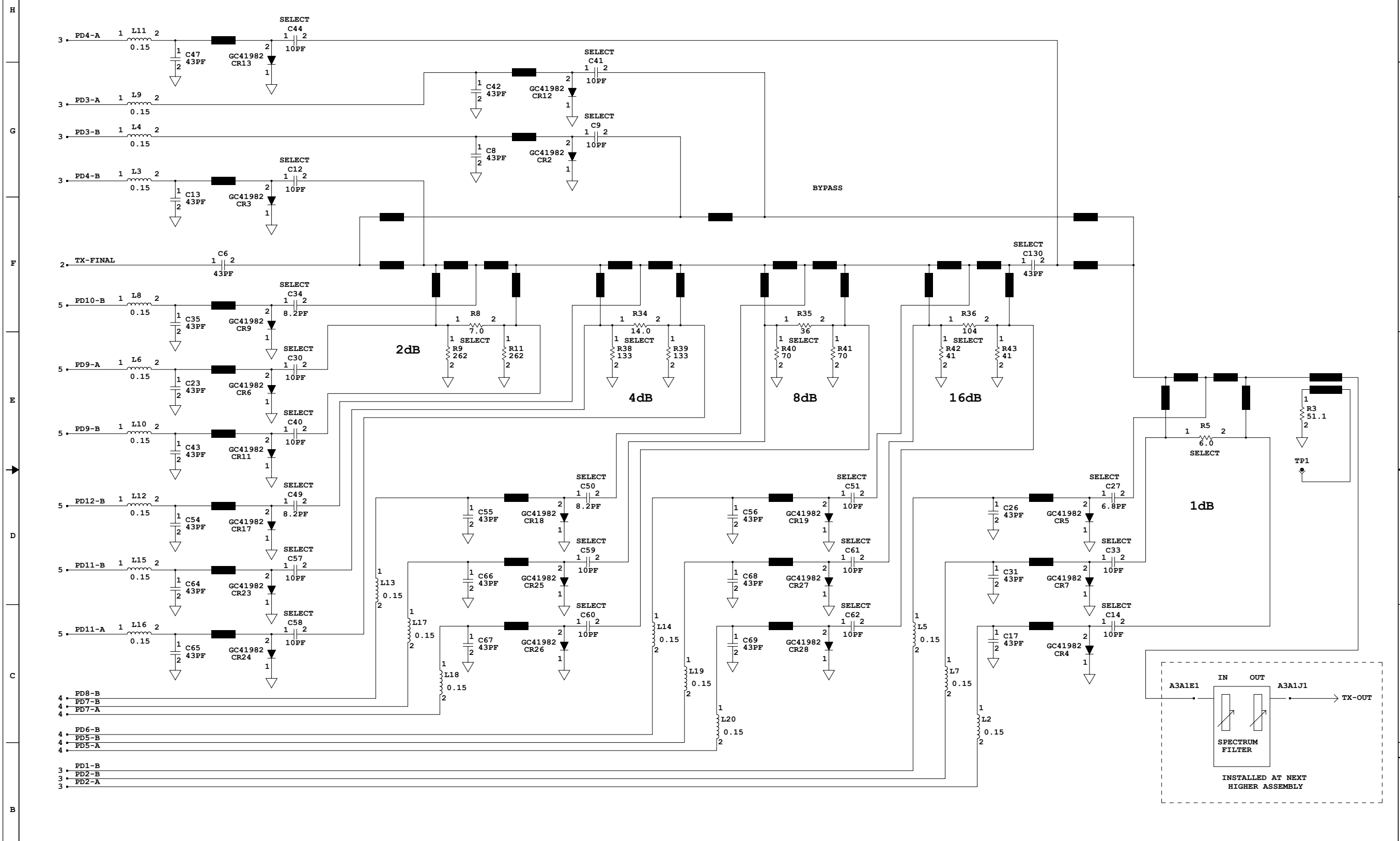


2 dB, 4 dB STEP
PIN DIODE DRIVERS
SCHEMATIC DIAGRAM SHEET NO. 5

COMPUTER GENERATED

DRAWING NO. 7517935-912 SHEET 8

REV		DESCRIPTION	DATE
008578	A	ADDED "SELECT" 25X. C130 WAS 24PF.	04/30/2005



WHISPER/SHOUT, ZERO BYPASS

SCHEMATIC DIAGRAM SHEET NO. 6

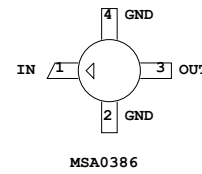
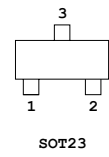
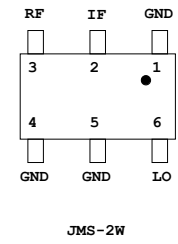
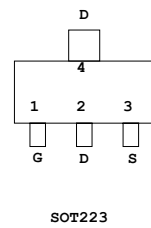
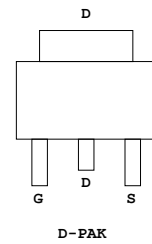
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ACSS	SEE FIRST SHEET FOR CONTRACT NUMBER. USE OR DISCLOSURE OF INFORMATION ON THIS SHEET IS SUBJECT TO THE RESTRICTIONS ON THE FIRST SHEET OF THIS DOCUMENT.	SIZE CASE CODE E 1WYD3	DRAWING NO. 7517935-912	REV A
		SCALE	SHEET 9	

DRAWING NO. 7517935-912 SHEET 9

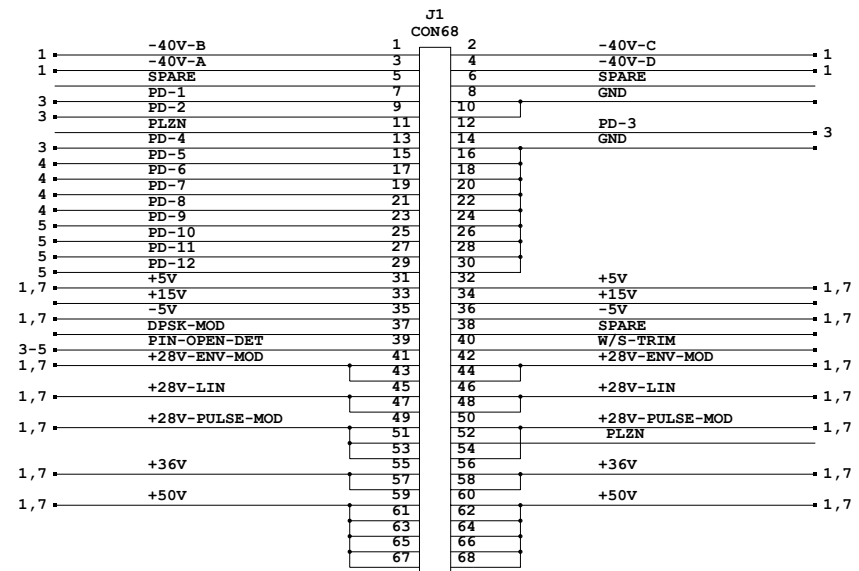
REV		DESCRIPTION

PINOUTS OF SMT DEVICES



COMMON LABELS ON TOP OF SMT DEVICES ON TRANSMITTER CCA

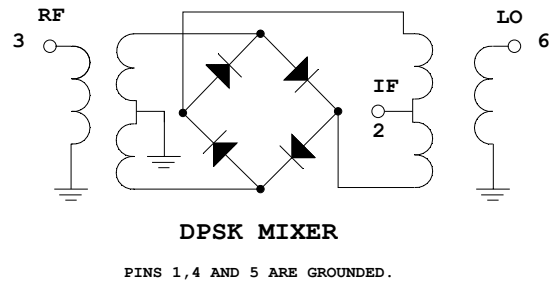
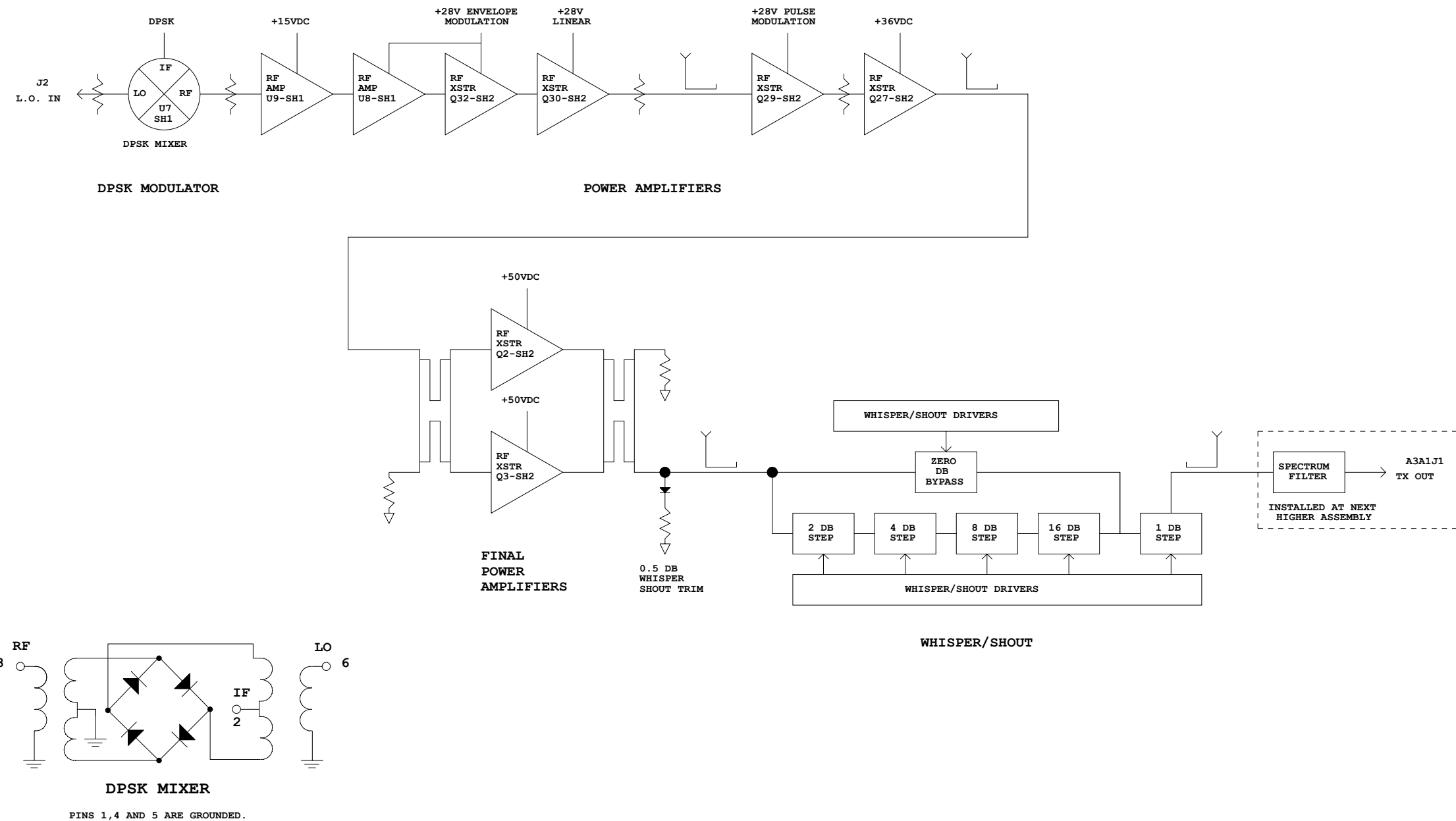
PART NAME	LABEL
BAS16	A6
BAR18	5F,D76
BSR14	U8
BSR16	T8
MSA0386	AO3
MMBD6100	5BM



CONNECTOR PIN SUMMARY
 CAD REQUIREMENT/REFERENCE
 SCHEMATIC DIAGRAM SHEET NO. 7

COMPUTER GENERATED

DRAWING NO: 7517935-912 REV: 1



BLOCK DIAGRAM
SCHEMATIC DIAGRAM SHEET NO. 8

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