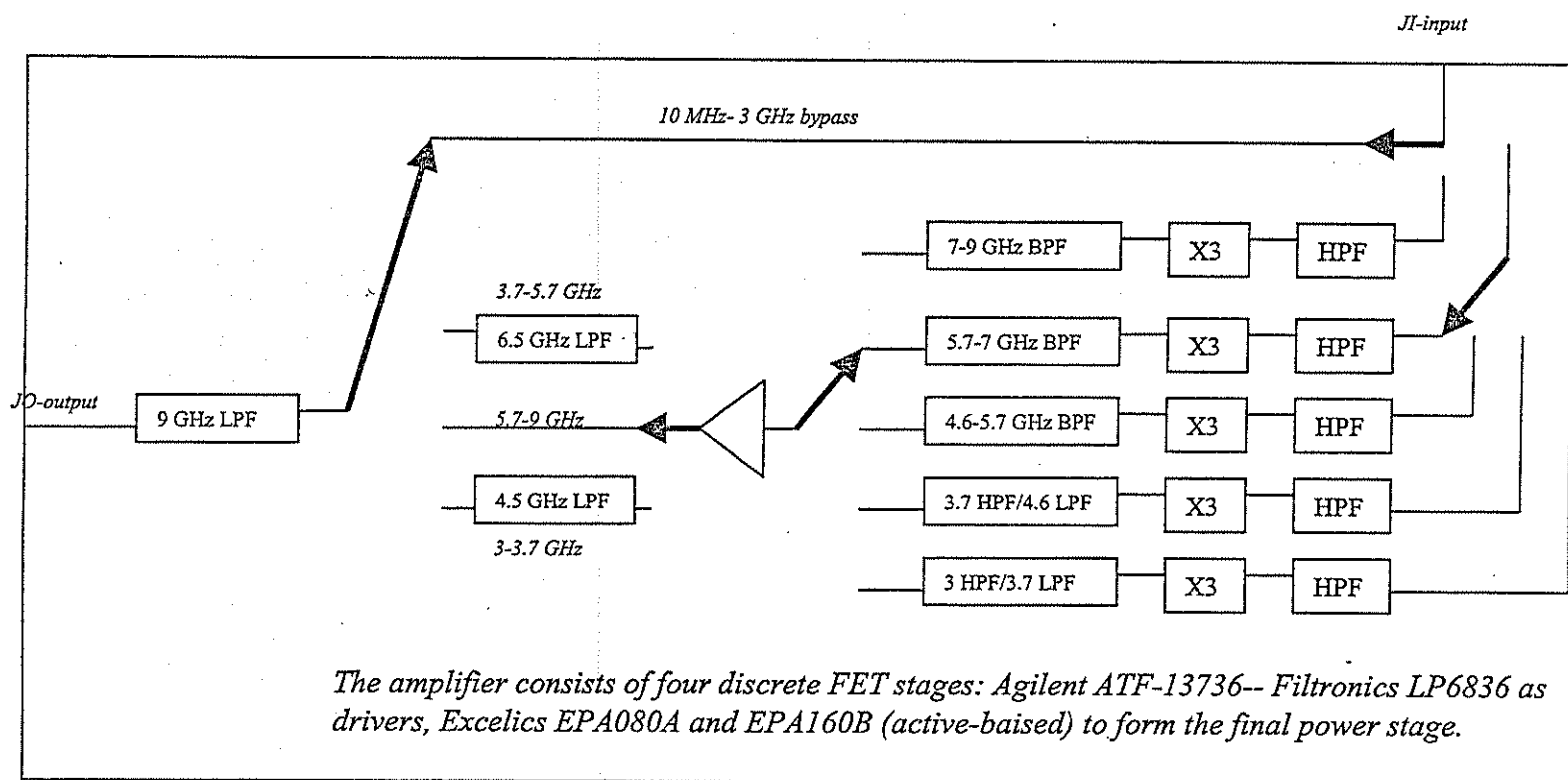


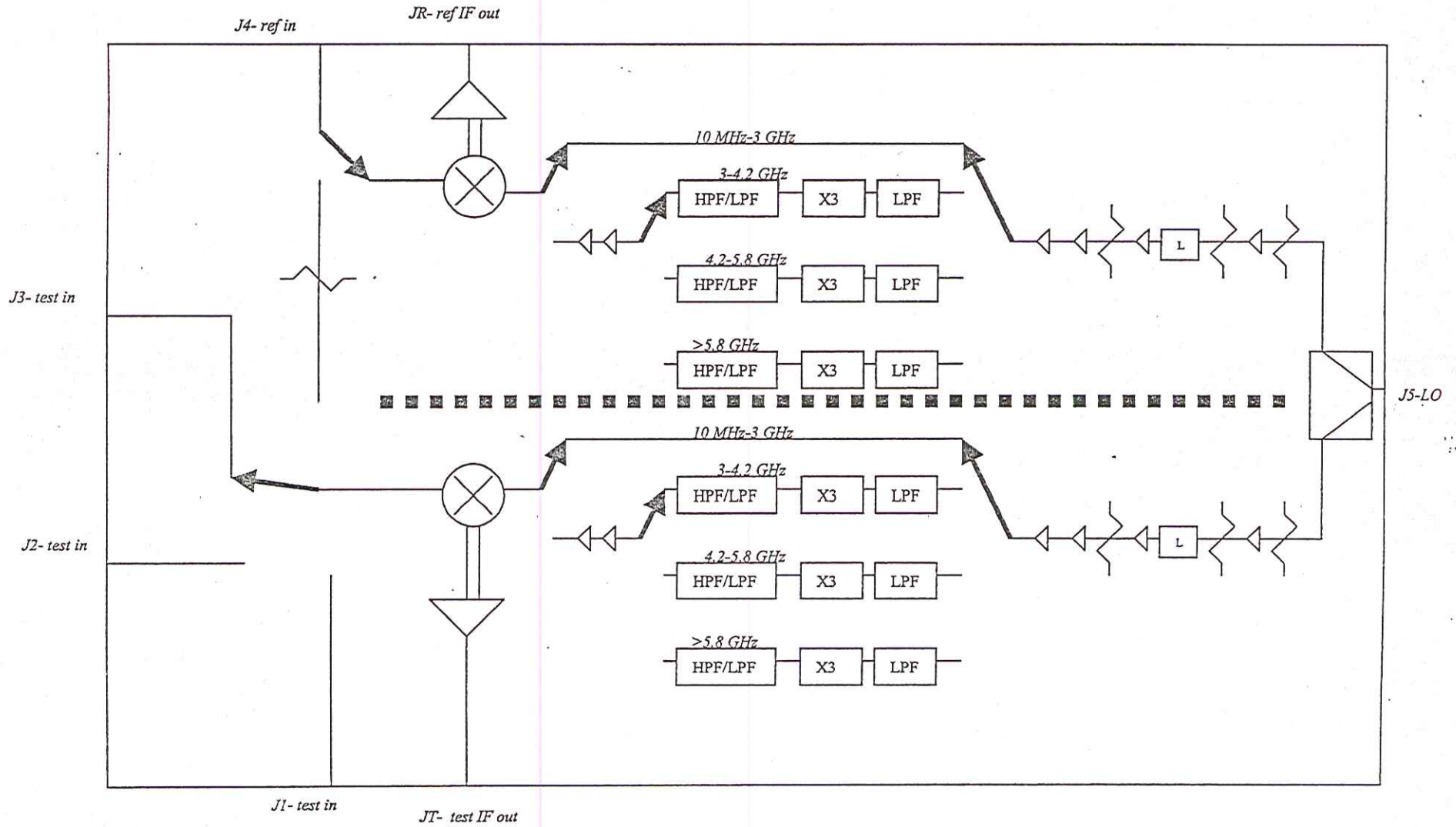
Tripler 56630

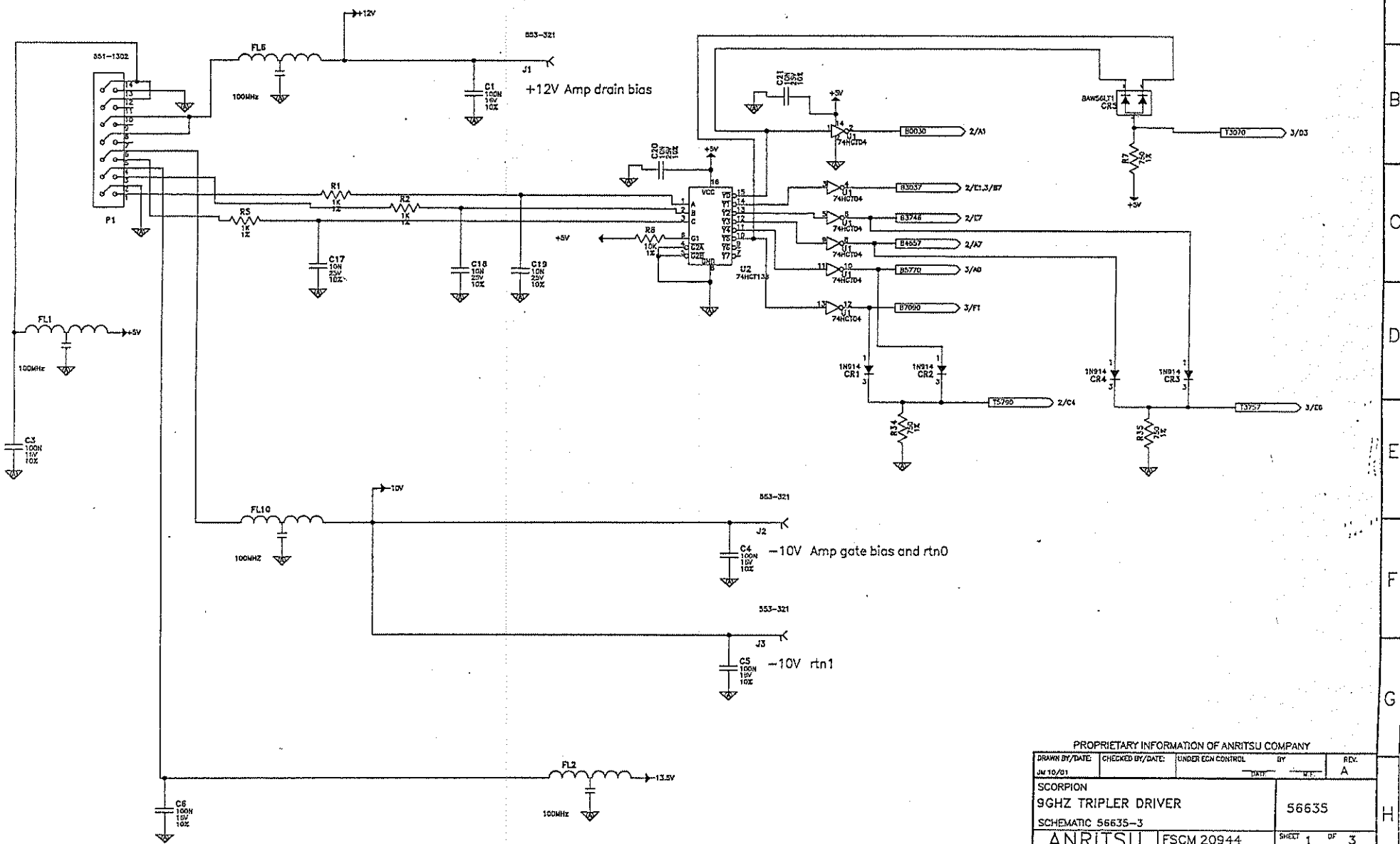
RF board 56634, driver board 56635



Downconverter 53728

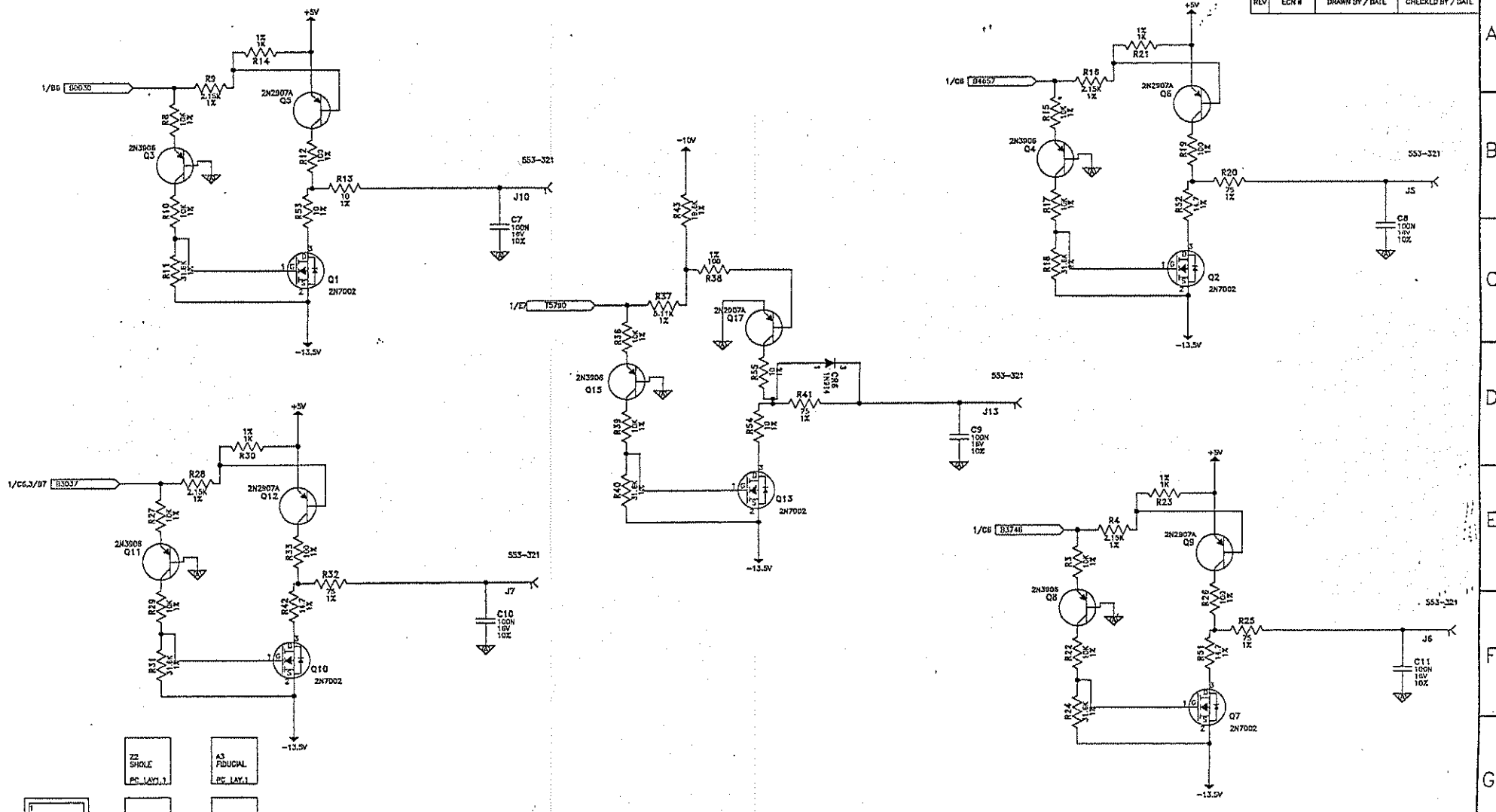
RF board 53344, driver board 53605





PROPRIETARY INFORMATION OF ANRITSU COMPANY

DRAWN BY/DATE JM 10/01	CHECKED BY/DATE	UNDER ECN CONTROL	BY DATE	REV. A
SCORPION		56635		
9GHZ TRIPLER DRIVER		56635		
SCHEMATIC 56635-3		SHEET 1 OF 3		
ANRITSU		FSCM 20944		



- Z2 SHOLE
PC_LAY1.1
- Z1 SHOLE
PC_LAY1.1
- Z3 SHOLE1
PC_LAY2
- A3 FIDUCIAL
PC_LAY.1
- A2 FIDUCIAL
PC_LAY.1
- A1 FIDUCIAL
PC_LAY.1

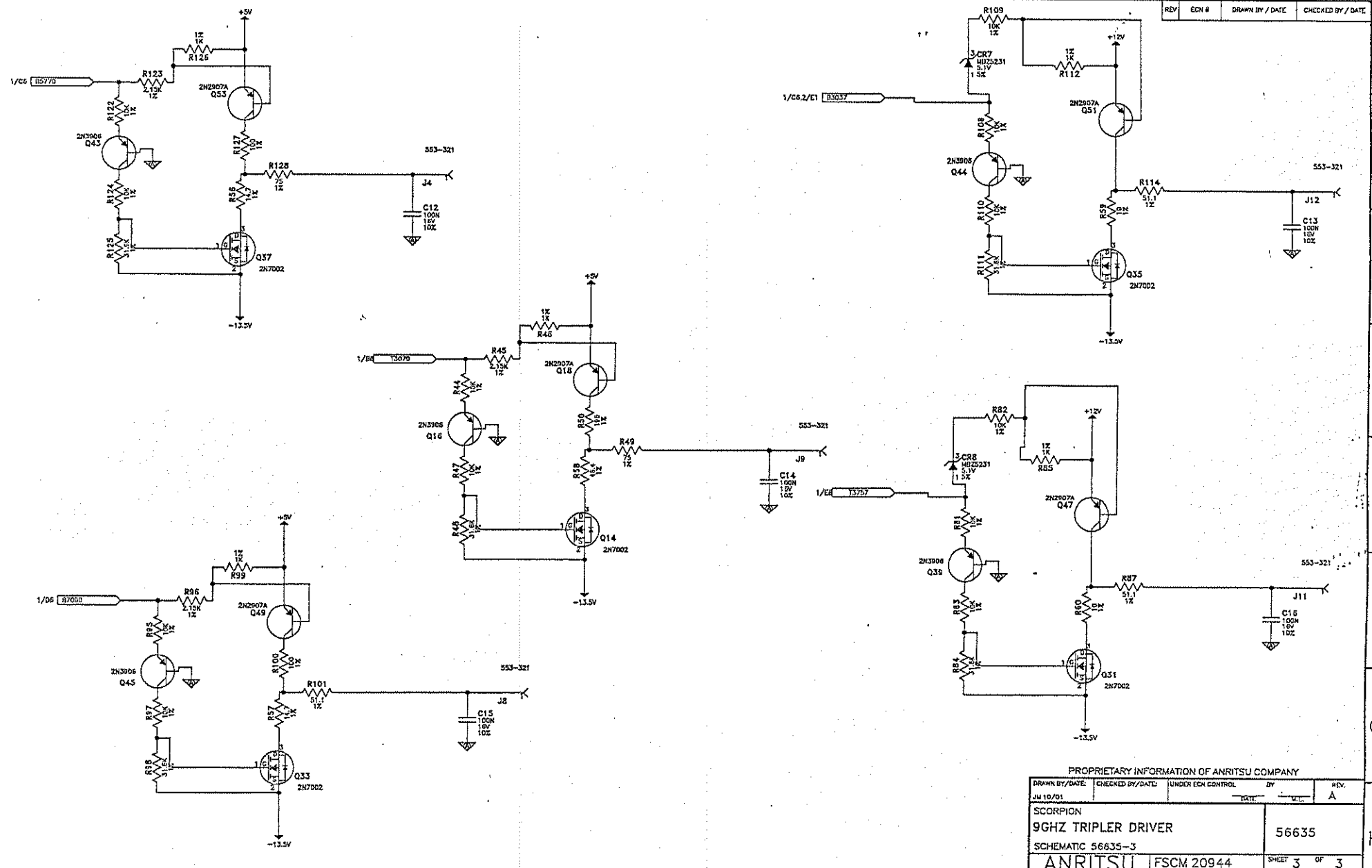
- NOTES:**
- 4 layer board expected, bottom layer must be ground ("noGd").
 - The J locations (spring loaded feedthrough receptacle) fixed by mechanical. They must match the corresponding E numbers from the RF side.
 - All mounting hole must be tied to the ground planes.
 - The 0.1uF cap associated with a feedthrough must be as close as possible to that feedthrough.
 - Very similar to 53723 in size, location of screws and position of 14 pin connector.
 - Inserting signal filters to be near the 14 pin connector.

Ver. 2: Some resistor changes. Add Q10 & Q20 to combat d/over Q leakage at high temp
 Ver. A: Delete C2: both problem less of an issue and response time too slow

PROPRIETARY INFORMATION OF ANRITSU COMPANY					
DRAWN BY/DATE	CHECKED BY/DATE	UNDER EGR CONTROL	BY	REV.	
JM 10/01				A	
SCORPION 9GHZ TRIPLER DRIVER			56635		
SCHEMATIC 56635-3					
ANRITSU		FSCM 20944	SHEET 2 OF 3		

0 1 2 3 4 5 6 7 8 9

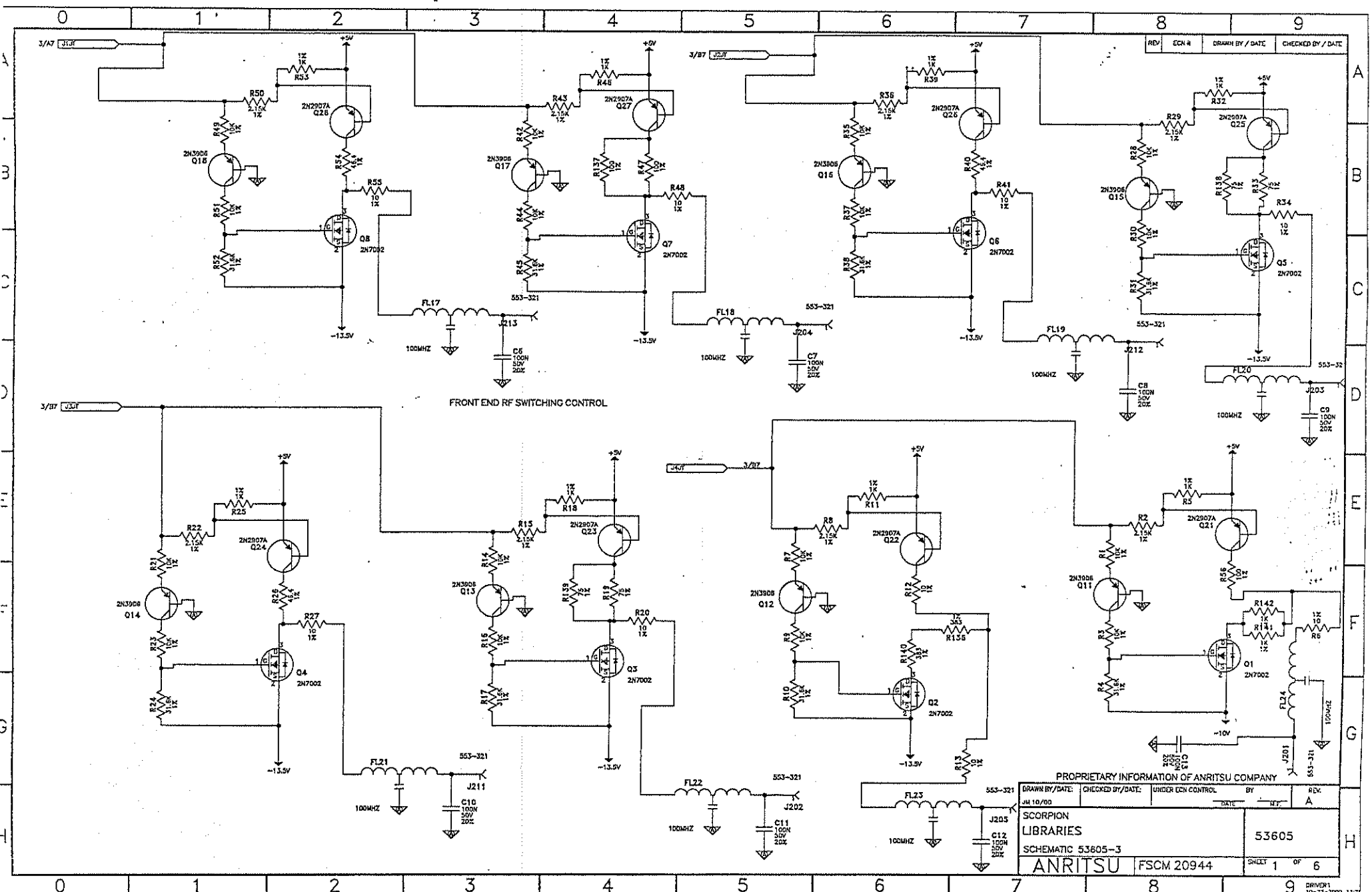
REV EDN # DRAWN BY / DATE CHECKED BY / DATE



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PROPRIETARY INFORMATION OF ANRITSU COMPANY

DRAWN BY/DATE:	CHECKED BY/DATE:	UNDER EDN CONTROL	BY	REV.
JM 10/01				A
SCORPION 9GHZ TRIPLER DRIVER SCHEMATIC 56635-3			56635	
ANRITSU FSCM 20944			SHEET 3 OF 3	

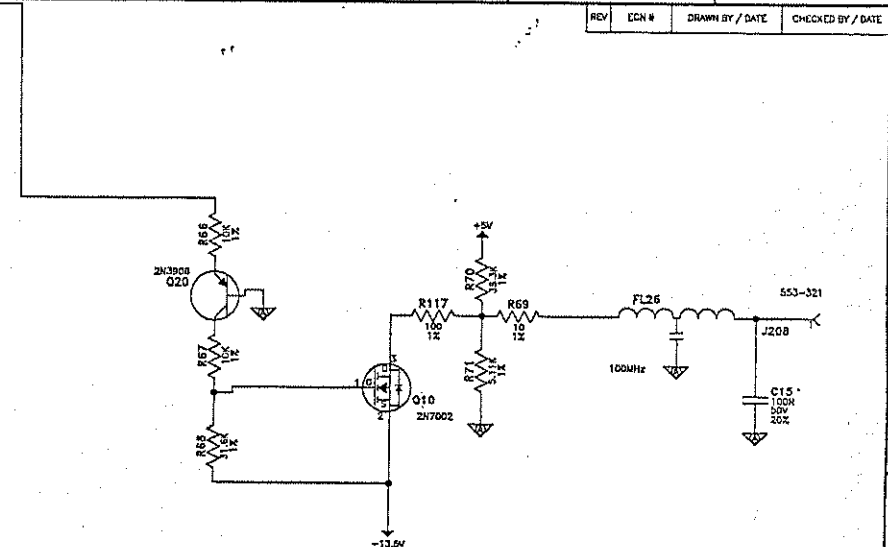
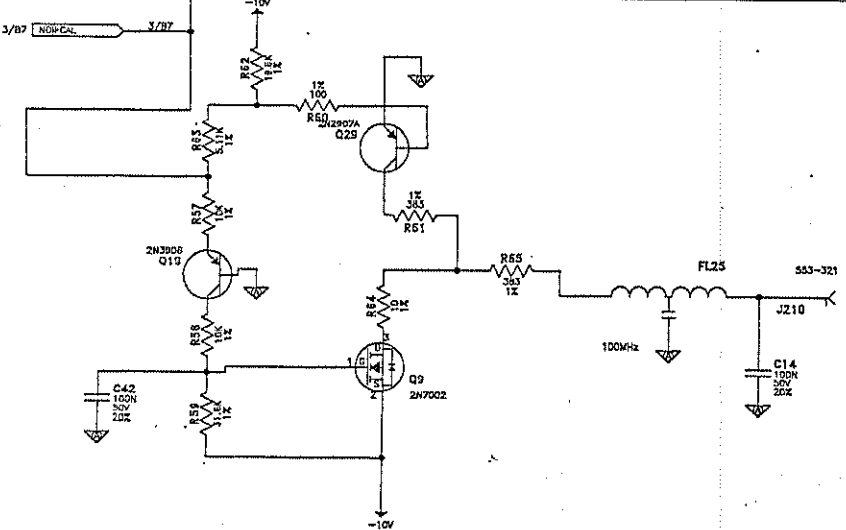


FRONT END RF SWITCHING CONTROL

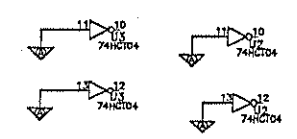
PROPRIETARY INFORMATION OF ANRITSU COMPANY			
DRAWN BY/DATE:	CHECKED BY/DATE:	UNDER ECN CONTROL	BY DATE
JM 10/00			A
SCORPION LIBRARIES		53605	
SCHEMATIC 53605-3		SHEET 1 OF 6	
ANRITSU FSCM 20944			

0 1 2 3 4 5 6 7 8 9

REV	ECN #	DRAWN BY / DATE	CHECKED BY / DATE
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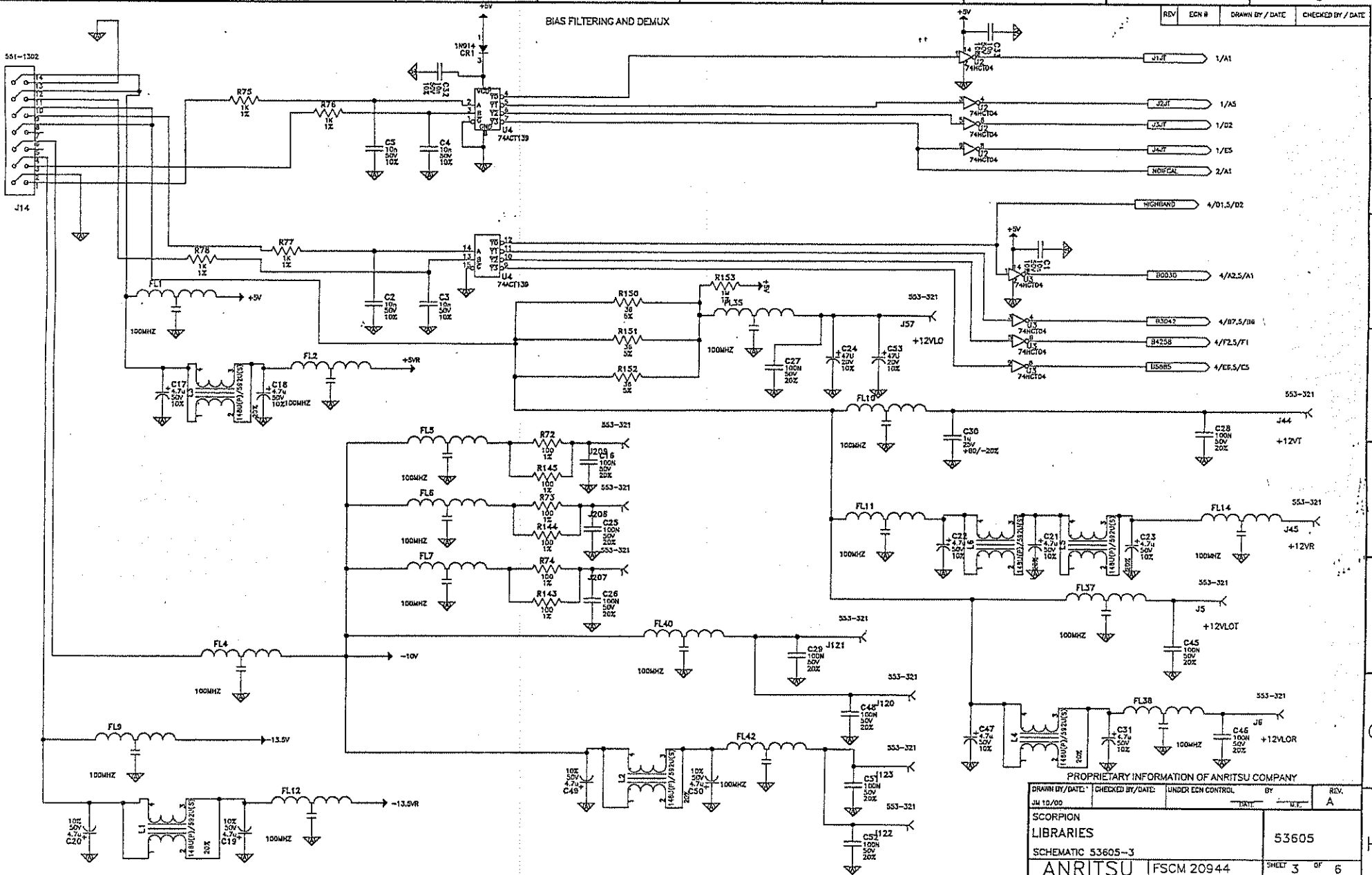
FRONT END RF SWITCHING CONTROL, REF PATH



PROPRIETARY INFORMATION OF ANRITSU COMPANY					
DRAWN BY/DATE	CHECKED BY/DATE	UNDER EGN CONTROL	BY	REV.	
JM 12/00				A	
SCORPION LIBRARIES			53605		
SCHEMATIC 53605-3			ANRITSU FSCM 20944		
			SHEET 2 OF 6		

0 1 2 3 4 5 6 7 8 9

0 1 2 3 4 5 6 7 8 9



BIAS FILTERING AND DEMUX

REV	ECN #	DRAWN BY / DATE	CHECKED BY / DATE
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PROPRIETARY INFORMATION OF ANRITSU COMPANY

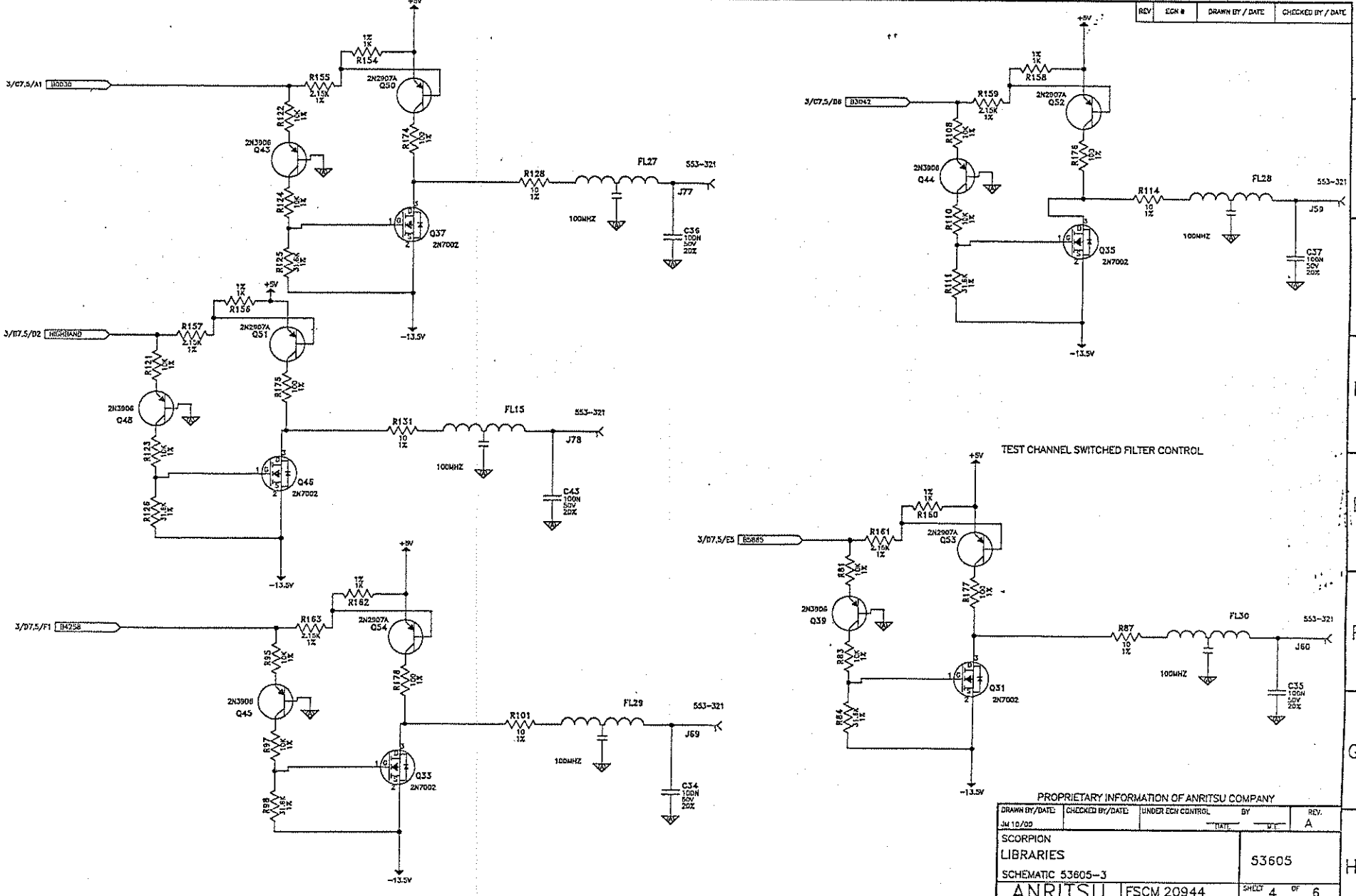
DRAWN BY / DATE	CHECKED BY / DATE	UNDER ECN CONTROL	BY	REV.
JM 10/00				A
SCORPION LIBRARIES			53605	
SCHEMATIC 53605-3			ANRITSU FSCM 20944	
			SHEET 3 OF 6	

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0 1 2 3 4 5 6 7 8 9 DRIVER 10-23-2000_1322

0 1 2 3 4 5 6 7 8 9

REV EGN # DRAWN BY / DATE CHECKED BY / DATE



TEST CHANNEL SWITCHED FILTER CONTROL

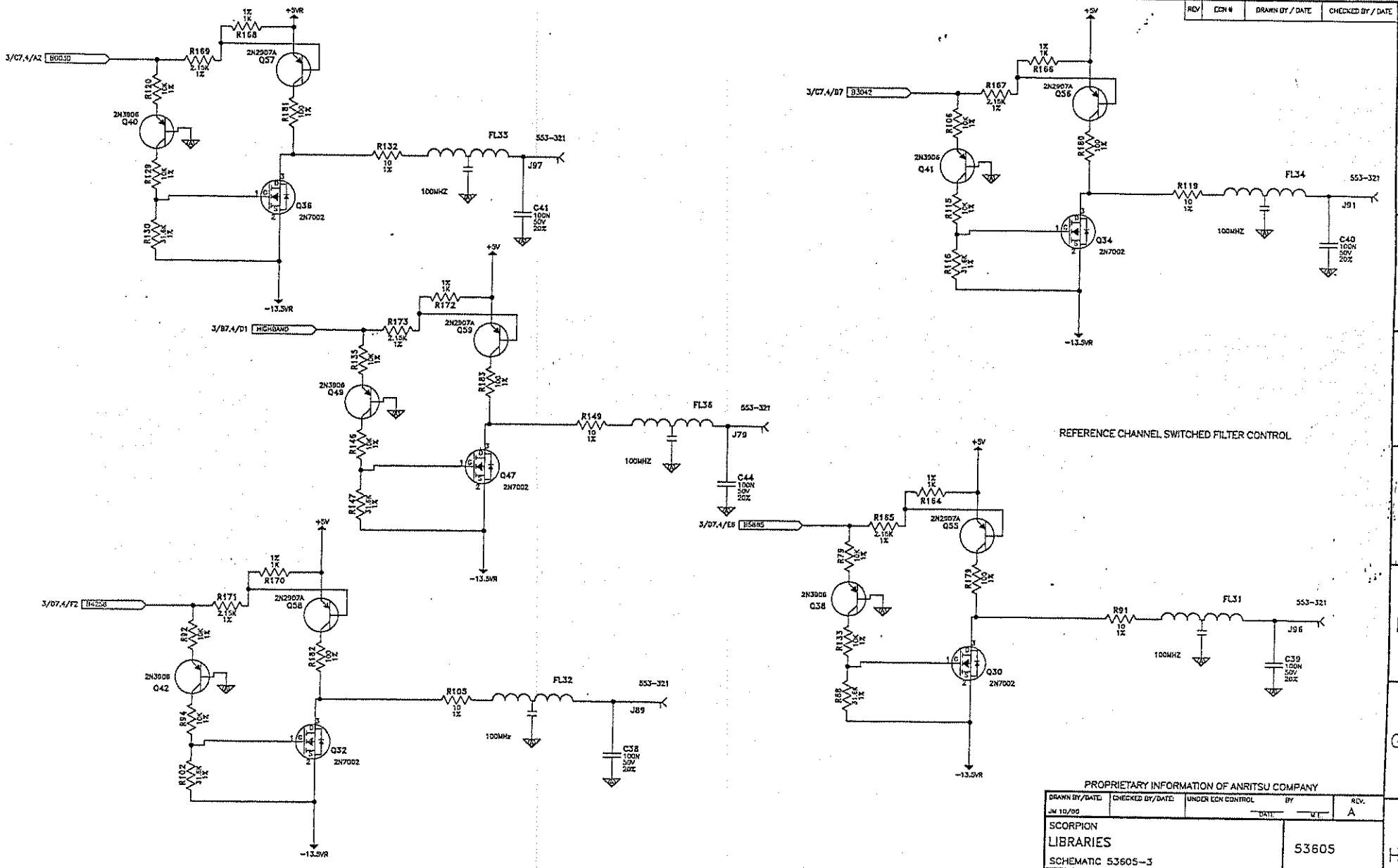
PROPRIETARY INFORMATION OF ANRITSU COMPANY

DRAWN BY/DATE	CHECKED BY/DATE	UNDER EGN CONTROL	BY	REV.
JM 10/92				A
SCORPION LIBRARIES				53605
SCHEMATIC 53605-3				
ANRITSU		FSCM 20944	SHEET 4 OF 6	

0 1 2 3 4 5 6 7 8 9

0 1 2 3 4 5 6 7 8 9

REV: ECH #: DRAWN BY / DATE: CHECKED BY / DATE:



REFERENCE CHANNEL SWITCHED FILTER CONTROL

PROPRIETARY INFORMATION OF ANRITSU COMPANY

DRAWN BY/DATE: JM 10/99	CHECKED BY/DATE:	UNDER ECH CONTROL	BY DATE: M E	REV. A
SCORPION LIBRARIES			53605	
SCHEMATIC 53605-3			SHEET 5 OF 6	
ANRITSU		FSCM 20944		

0 1 2 3 4 5 6 7 8 9

0 1 2 3 4 5 6 7 8 9

REV ECN # DRAWN BY / DATE CHECKED BY / DATE

PCB.1
53605-1-2

Z2
SHOLE
PC_LAY1.1

A1
RDUCIAL
PC_LAY1.1

Z1
SHOLE
PC_LAY1.1

A2
RDUCIAL
PC_LAY1.1

Z3
SHOLE1
PC_LAY2

A3
RDUCIAL
PC_LAY1.1

Notes:

1. Power supply and incoming signal filters to be near 16 pin connector.
2. Board is screwed to housing with no spacing on the back. The back groundplane is to be free of soldermask near mounting holes in order to contact ground.
3. Supplies running to opposite sides of the main divider should be isolated as much as possible.
4. A 0.1u cap associated with a feedthrough should be as close as possible to that feedthrough.
5. Very similar to the old downconverter driver 28837 in physical size, location of screws and J14 placement.
6. Feedthrough placement will be different from 28837 and the center cutout will not be needed.
7. The center cutout can be replaced by a double-wide ground wall, 0.1" offset spacing.
8. The feedthroughs (receptor 253-321) mate to RF board 53344, J2D1-J2I3 mate with EP1-EP13 respectively in the RF board, J numbers 2200 mate with their corresponding E numbers (not E7 numbers) on the RF board.

Rev 3 stuff:

- All band switching to -13.5 from -10 on, source will be -10 instead of gnd
- 4 new feedthroughs for this -10 source
- Add dropping resistors to this board for +12VDD
- Increase power trace widths
- Change power inductors to smaller toroidal design

Rev 4 stuff:

- Change all freq. drivers (pp.4-5) to totan pole from single ended (tot. new 1D5072X, 1D0805)
- Remove 3 pi filters (16,41,43) and 1 cap (24) from p. 3
- Some changes in ref designators of feedthroughs, J1T-J121, J2T-J120, J1R-J123, J2R-J122
- Due to changes on RF side, all J numbers on this board now mate with their corresponding E numbers on the RF side.

Rev 5 stuff:

- Add two 47uF tant caps (C24 and C53) @ J57 (+12VDD)
- Change R150-152 from 110 to 36 ohm (1W)

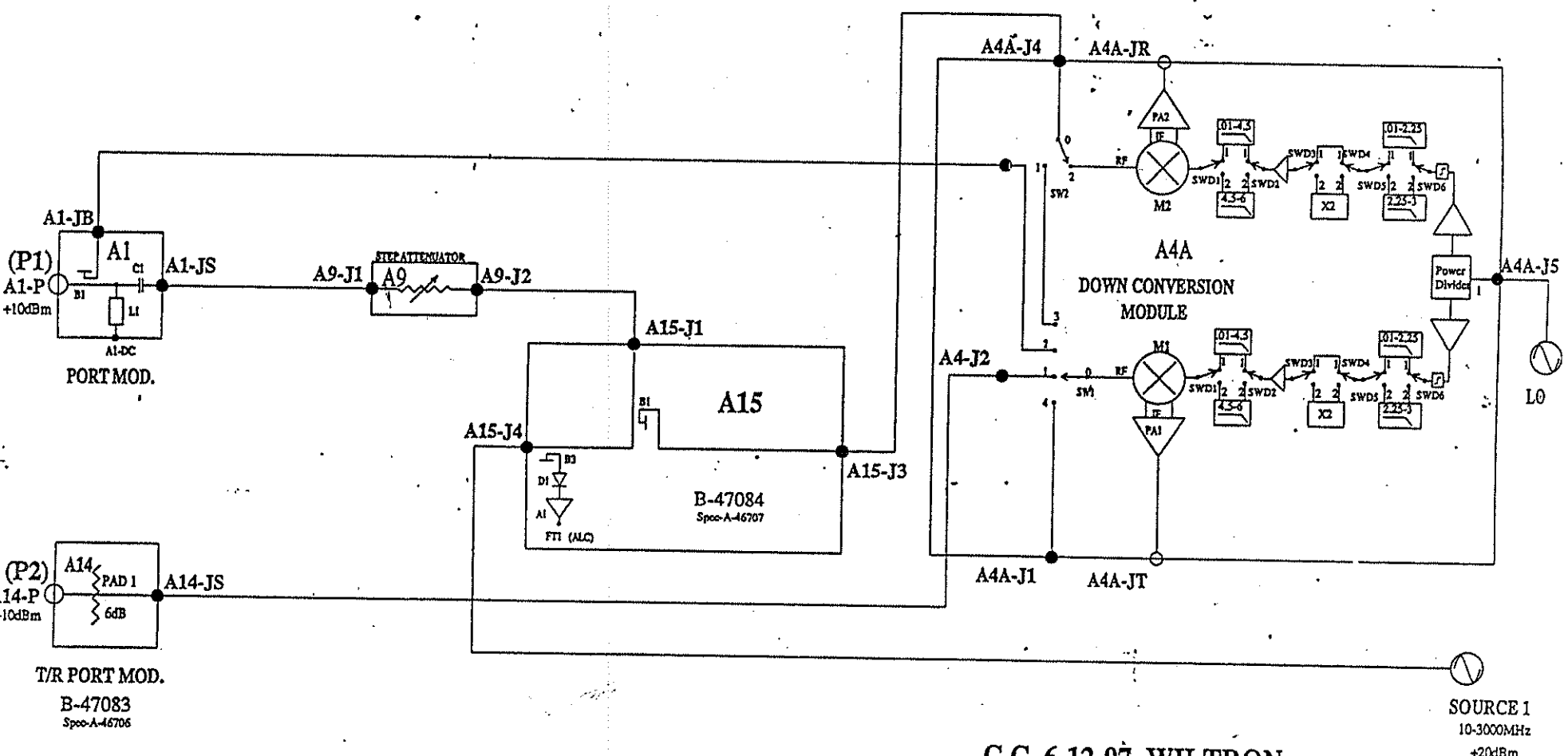
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PROPRIETARY INFORMATION OF ANRITSU COMPANY

DRAWN BY/DATE	CHECKED BY/DATE	UNDER ECN CONTROL	BY	REV.
JM 10/00			DATE	A
SCORPION LIBRARIES			53605	
SCHEMATIC 53605-3			SHEET 6 OF 6	
ANRITSU		FSCM 20944		

0 1 2 3 4 5 6 7 8 9

MODULE MS4622A (T/R TEST SET 10-3000MHz) OPTION 7 (T/R STEP ATTENUATOR)

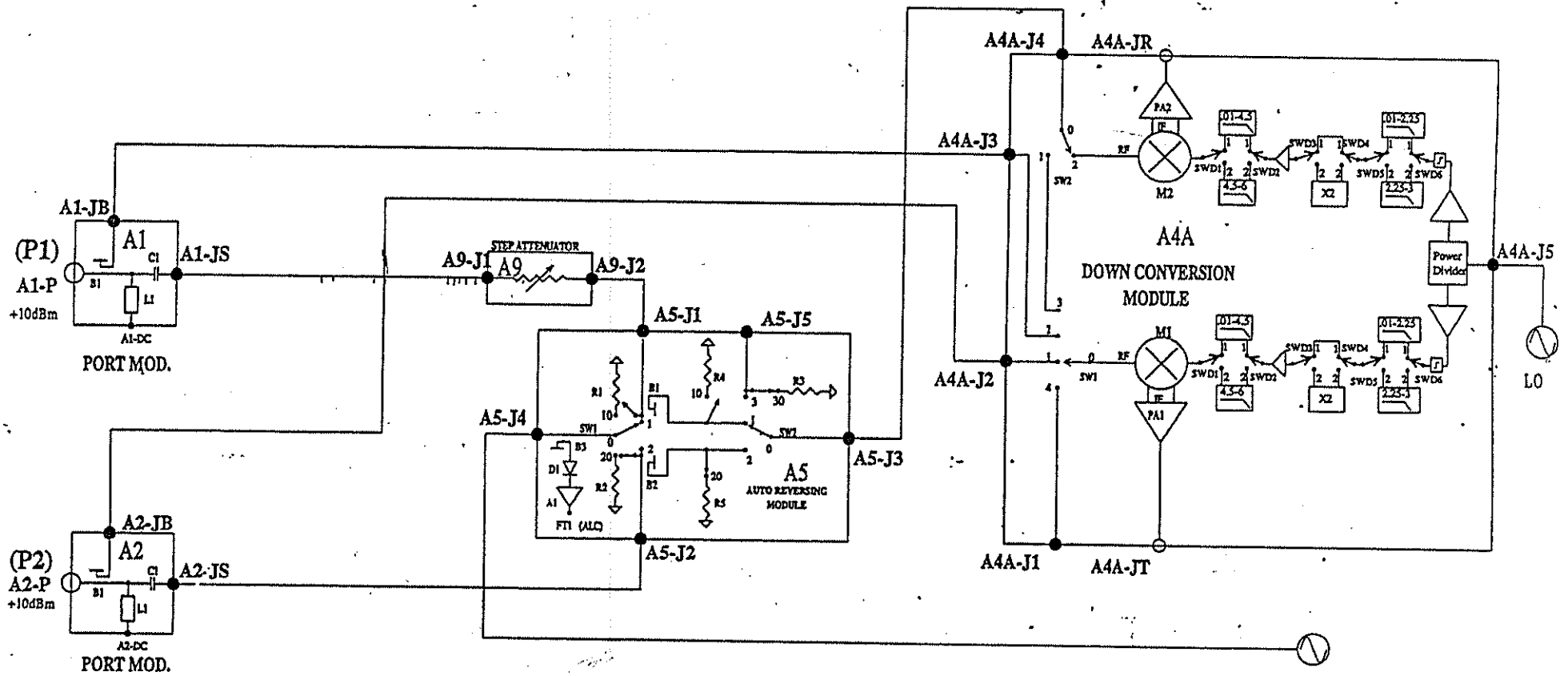


FILE:MS4622A.DEV

CC 6-12-97 WILTRON
1 of 14

SOURCE 1
10-3000MHz
+20dBm

MS4622B (ACTIVE REVERSING TEST SET 10-3000MHz)

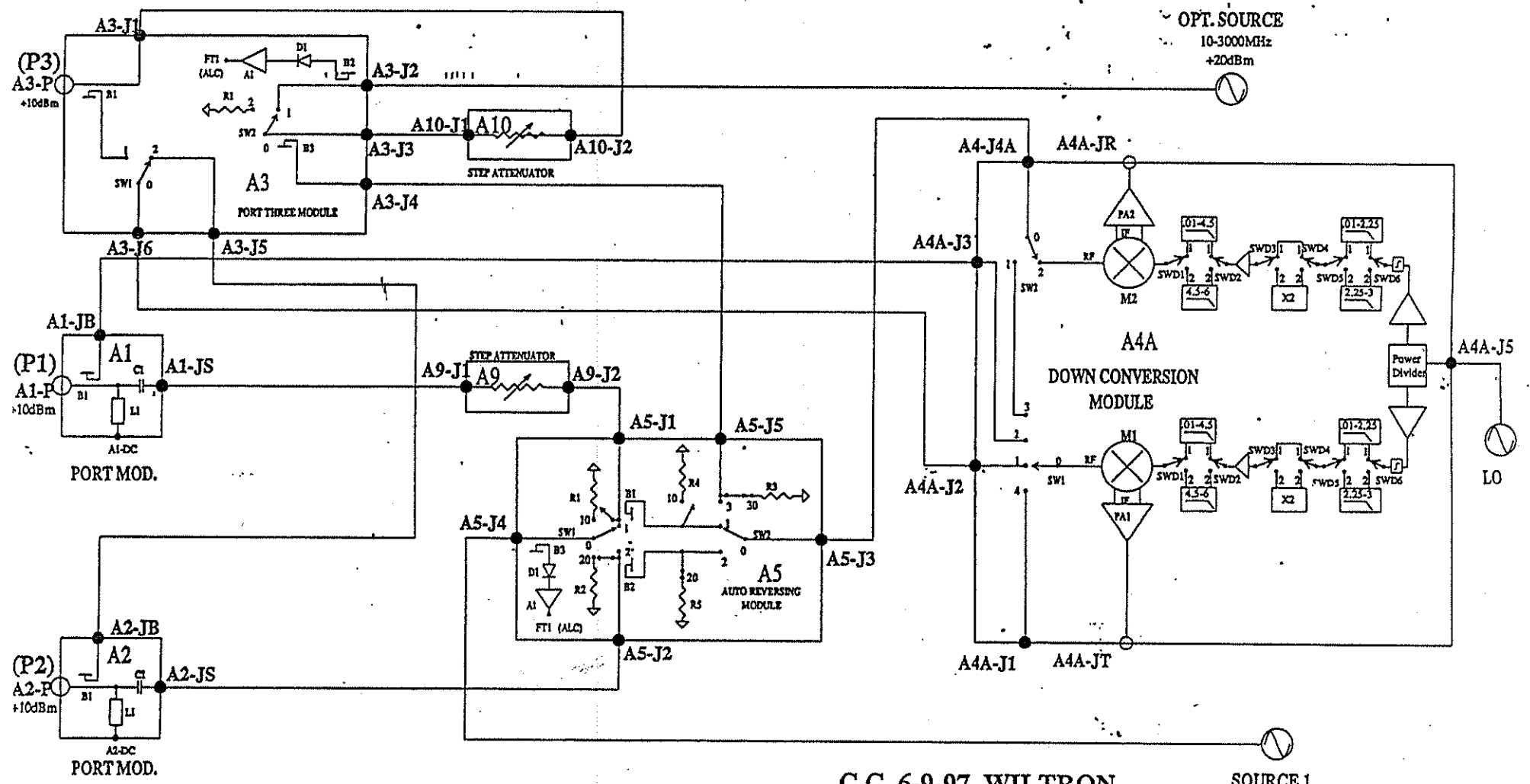


SOURCE 1
10-3000MHz
+20dBm

FILE:MS4622.DRW

C C 6-9-97 WILTRON
3 of 14

MS4622B OPTION 3 (WITH SECOND SOURCE & 3RD TEST PORT 10-3000MHz)

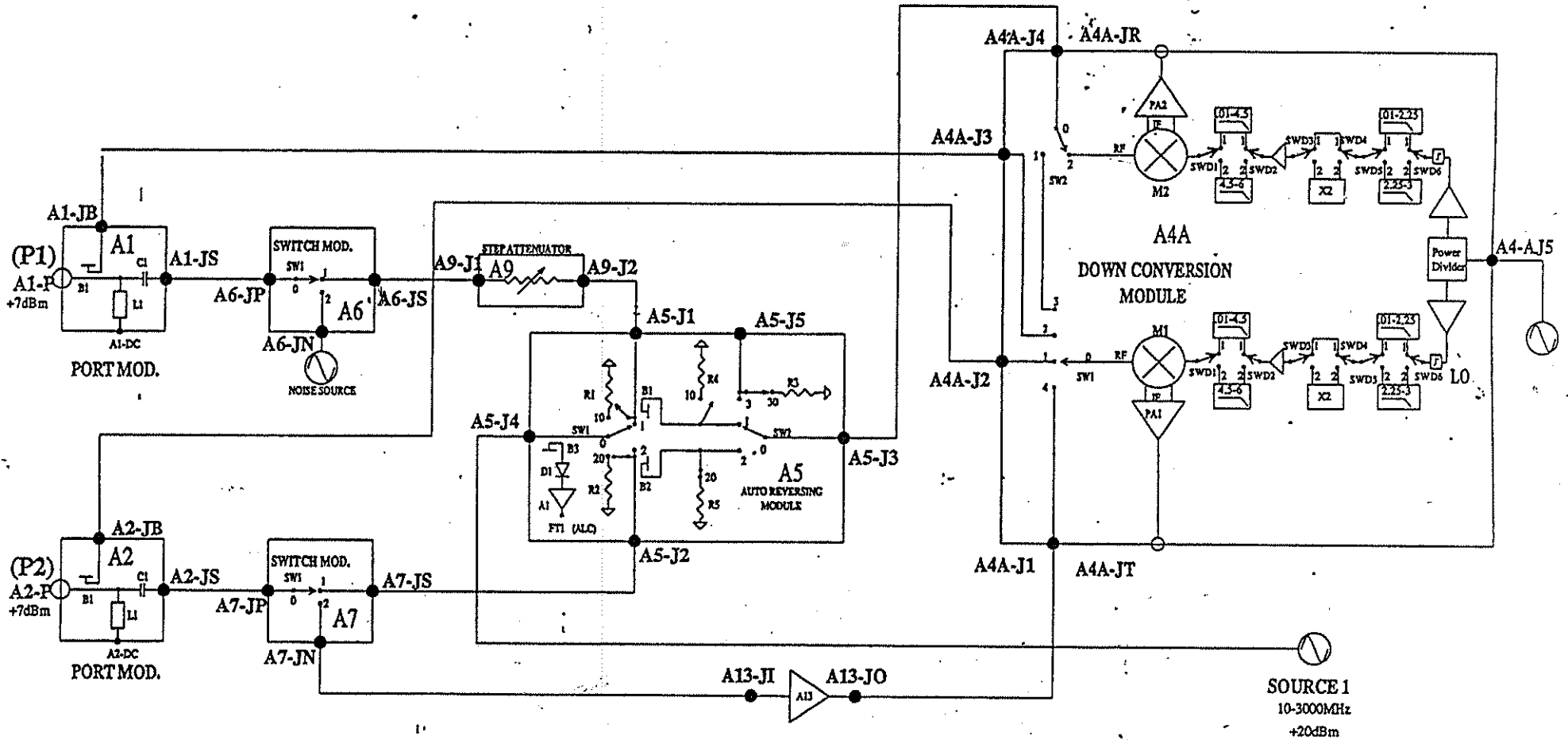


FILE NAME: 612101W

CC 6-9-97 WILTRON
4 of 14

SOURCE 1
10-3000MHz
+20dBm

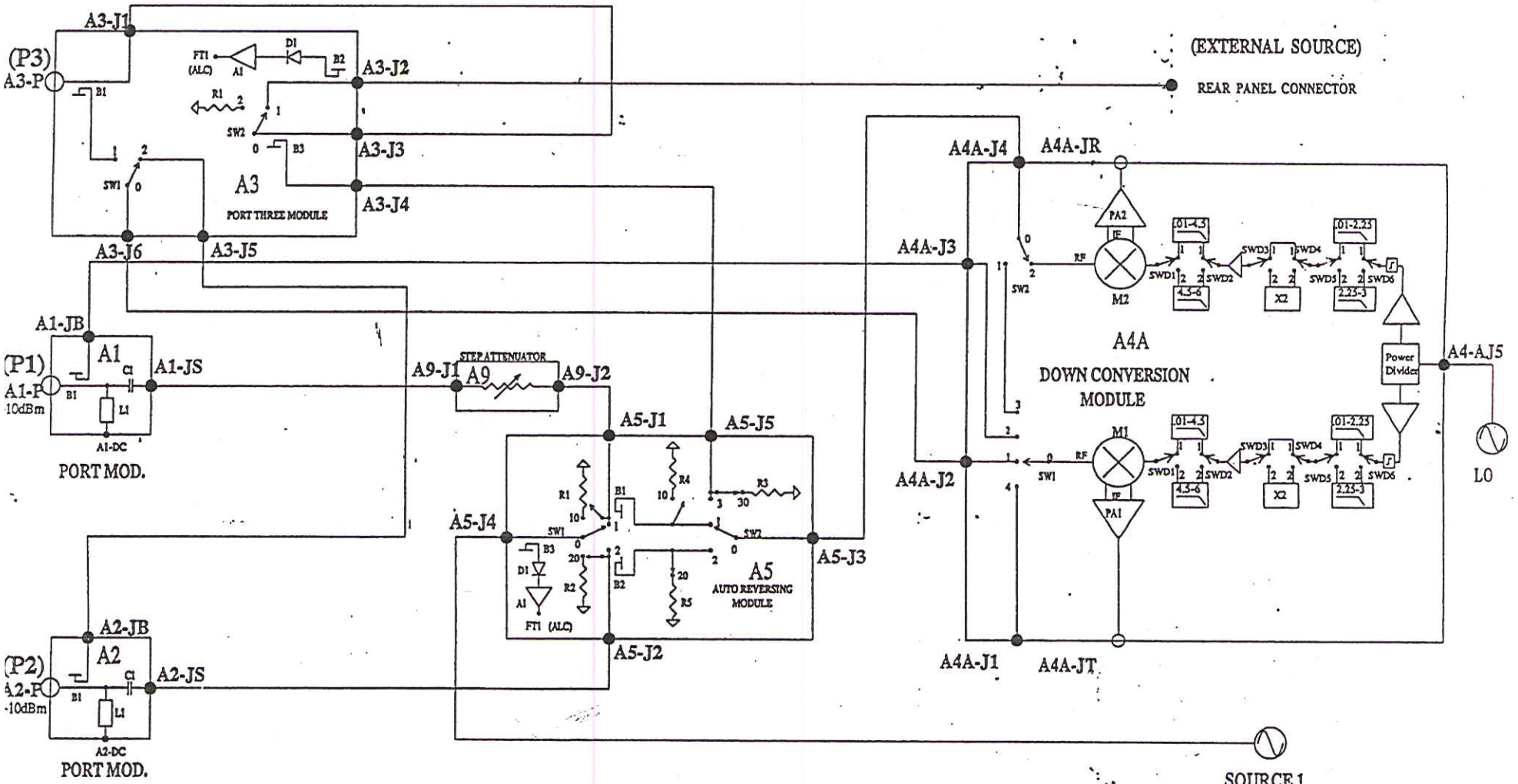
MS4622B OPTION 4 (WITH NOISE FIGURE 10-3000MHz)



FILE: MS4622B.DWG

CC 6-9-97 WILTRON
5 of 14

MS4622B OPTION 6 (WITH 3RD PORT 10-3000MHz)

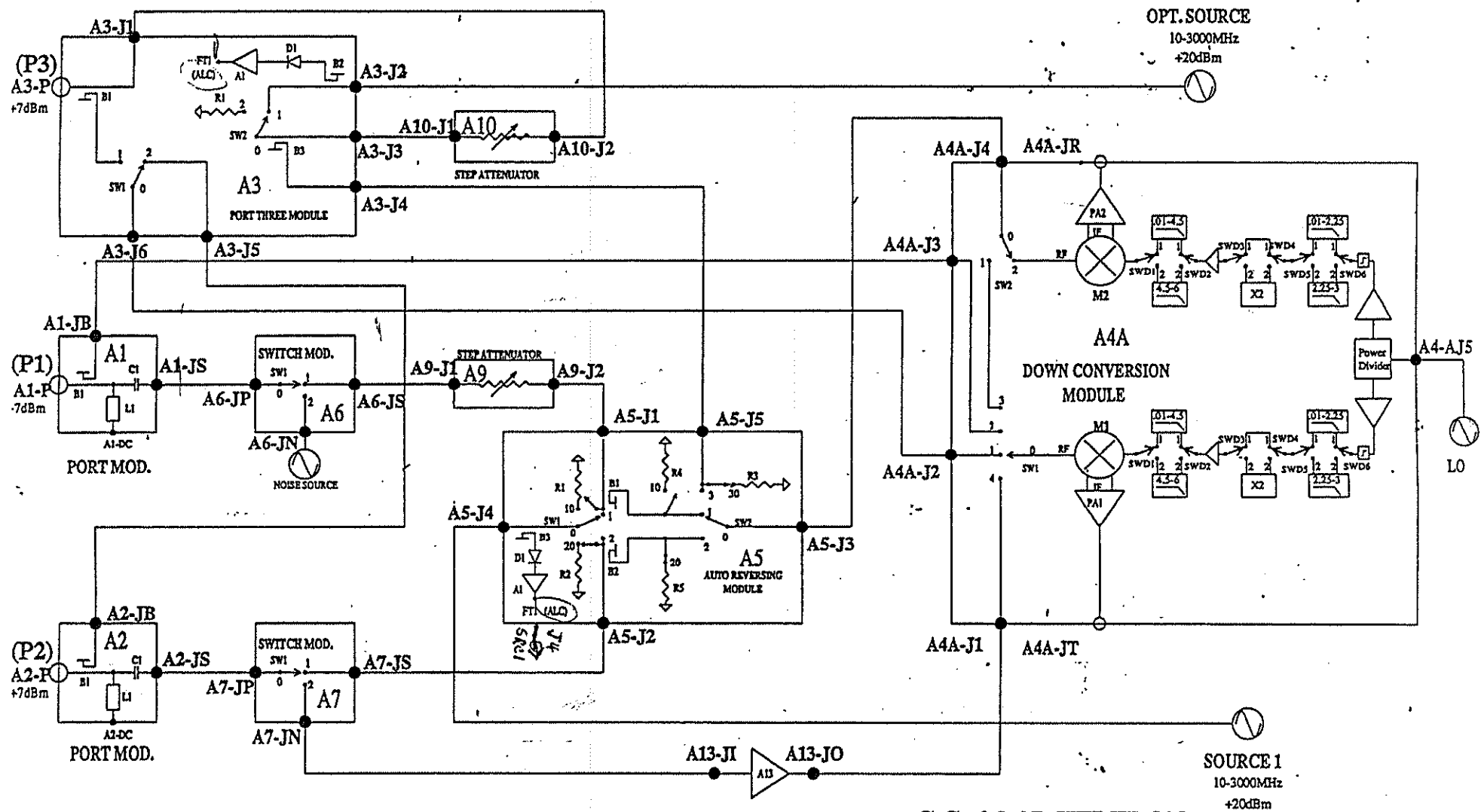


FILE: MM422B.DRW

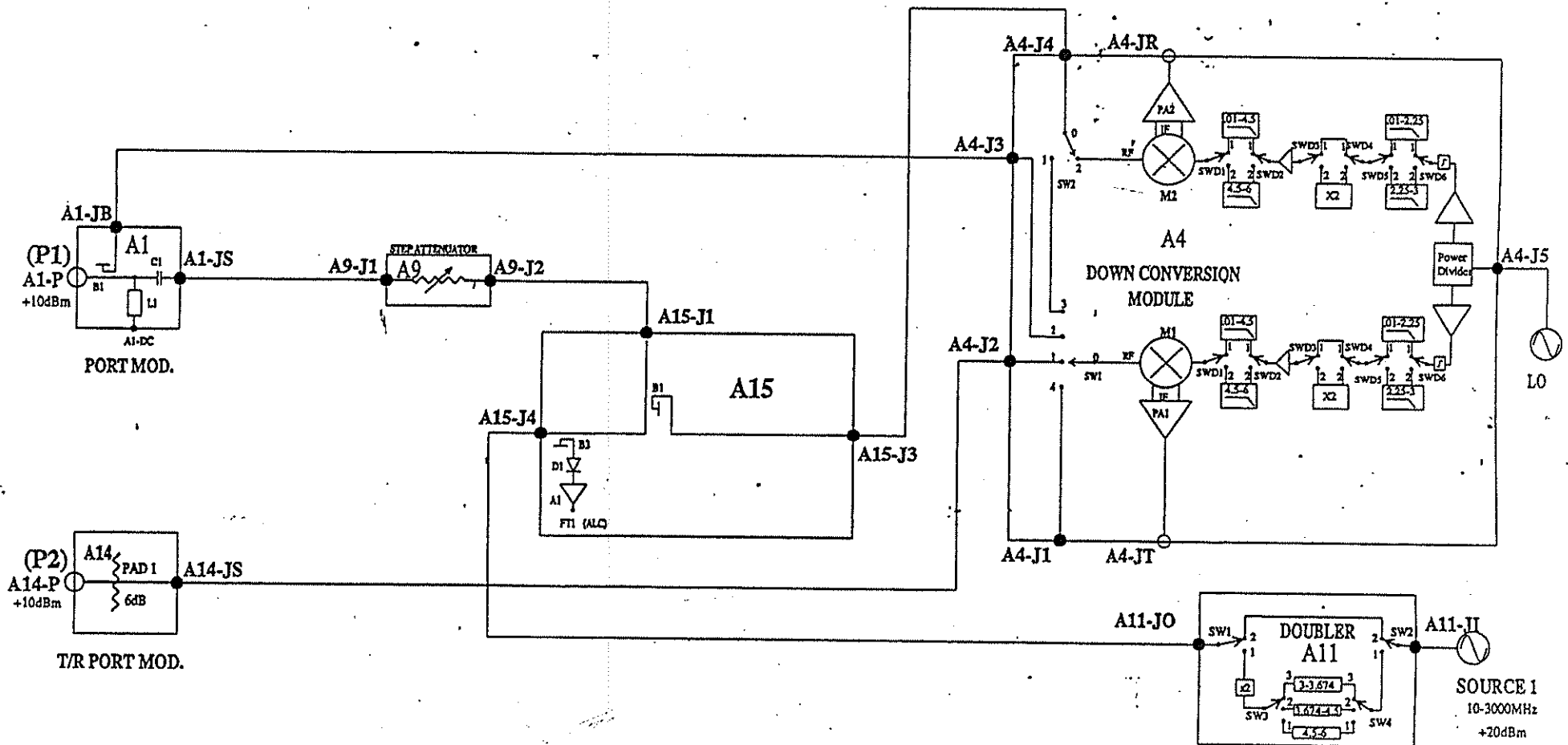
CC 6-9-97 WILTRON
6 of 14

SOURCE 1
10-3000MHz
+20dBm

MS4622B WITH OPTIONS 3 & 4 (MOST COMPLEX TEST SET 10-3000MHz)



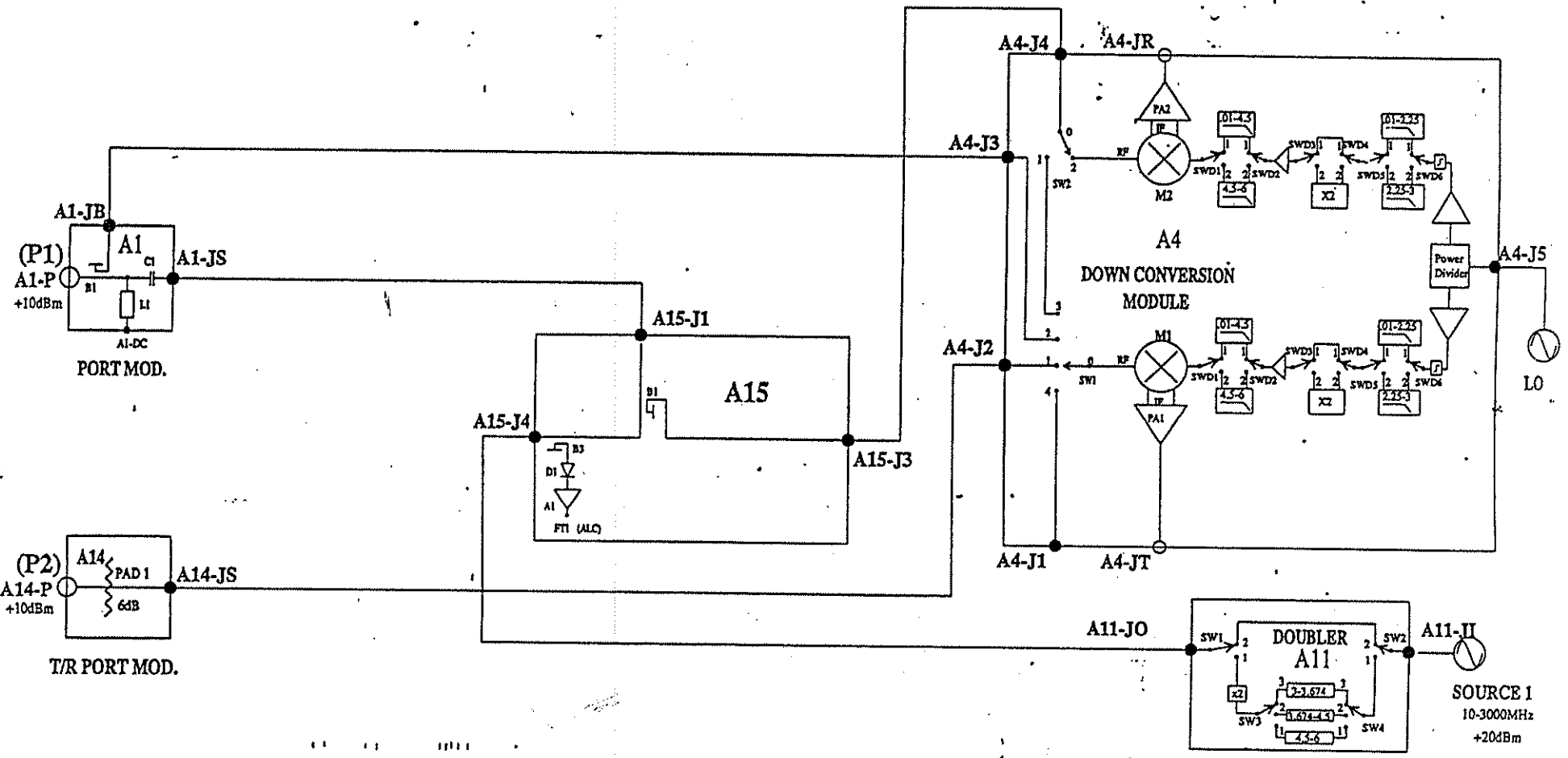
MODULE MS4623A (T/R TEST SET 10-6000MHz) OPTION 7 (T/R STEP ATTENUATOR)



FILE:MS4623A.DWG

CC 6-9-97 WILTRON
8 of 14

MODULE MS4623A (T/R TEST SET 10-6000MHz)

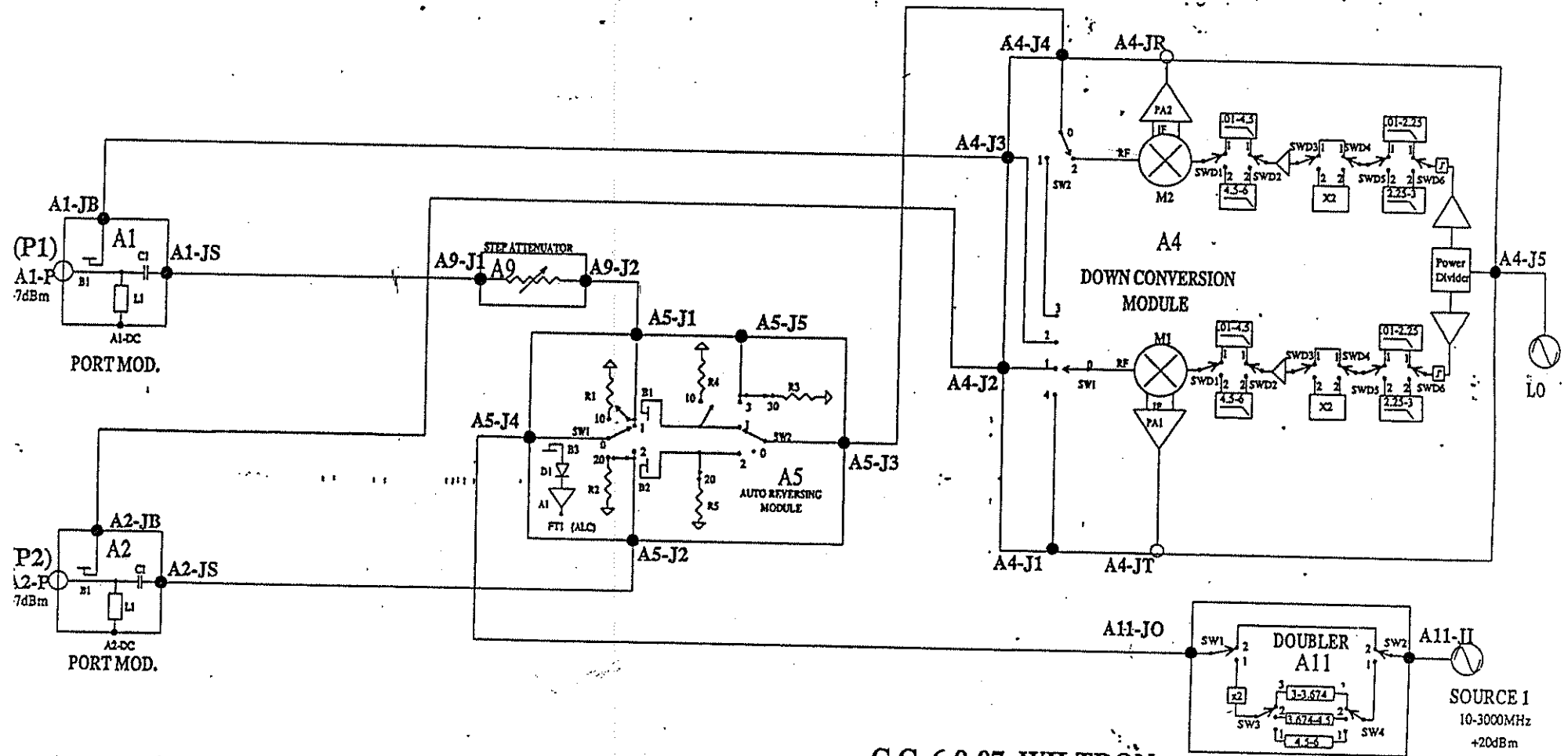


CC 6-9-97 WILTRON
9 of 14

PLR 0000000000

MODULE MS4623B (ACTIVE REVERSING TEST SET

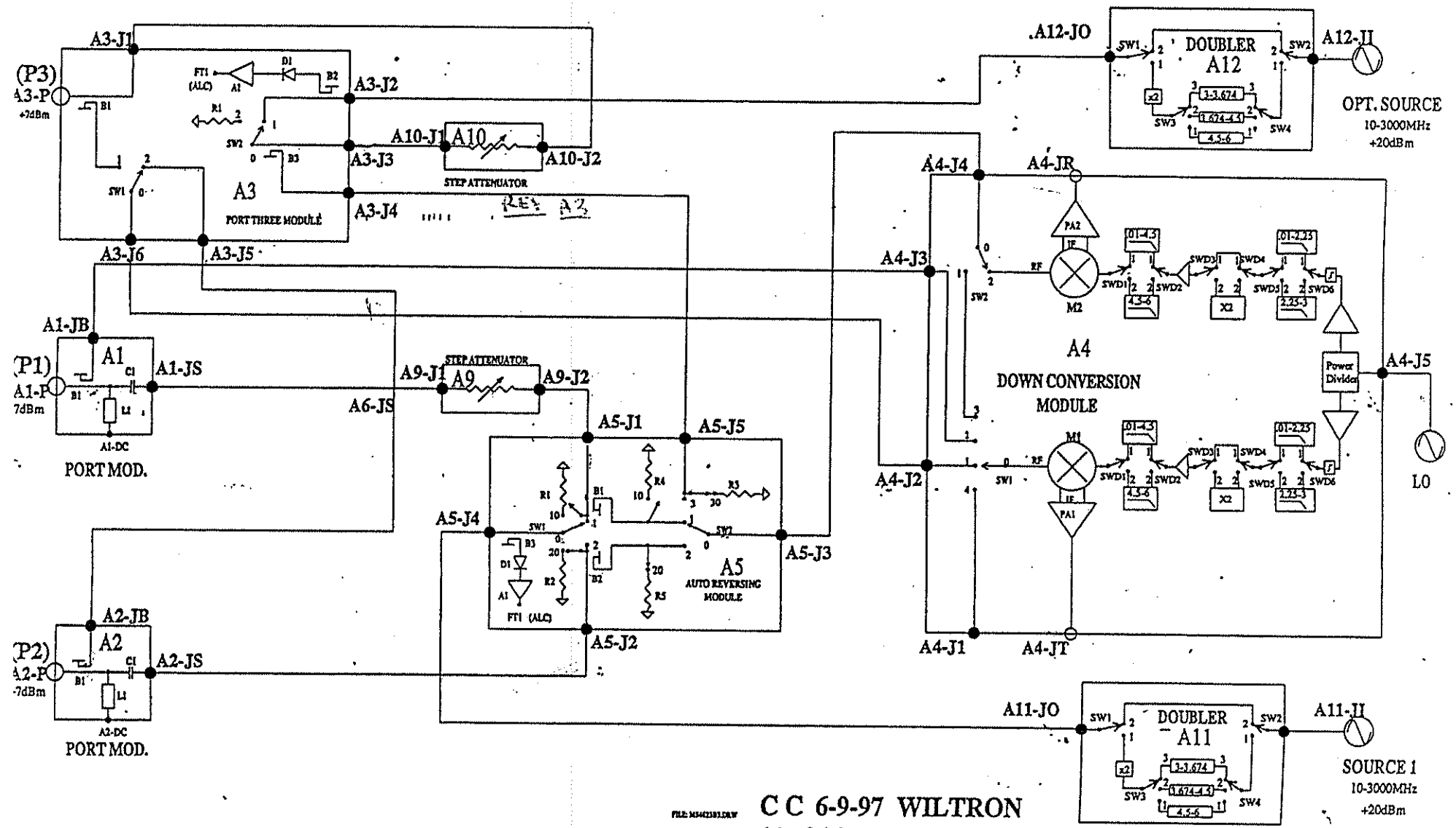
10-6000MHz)



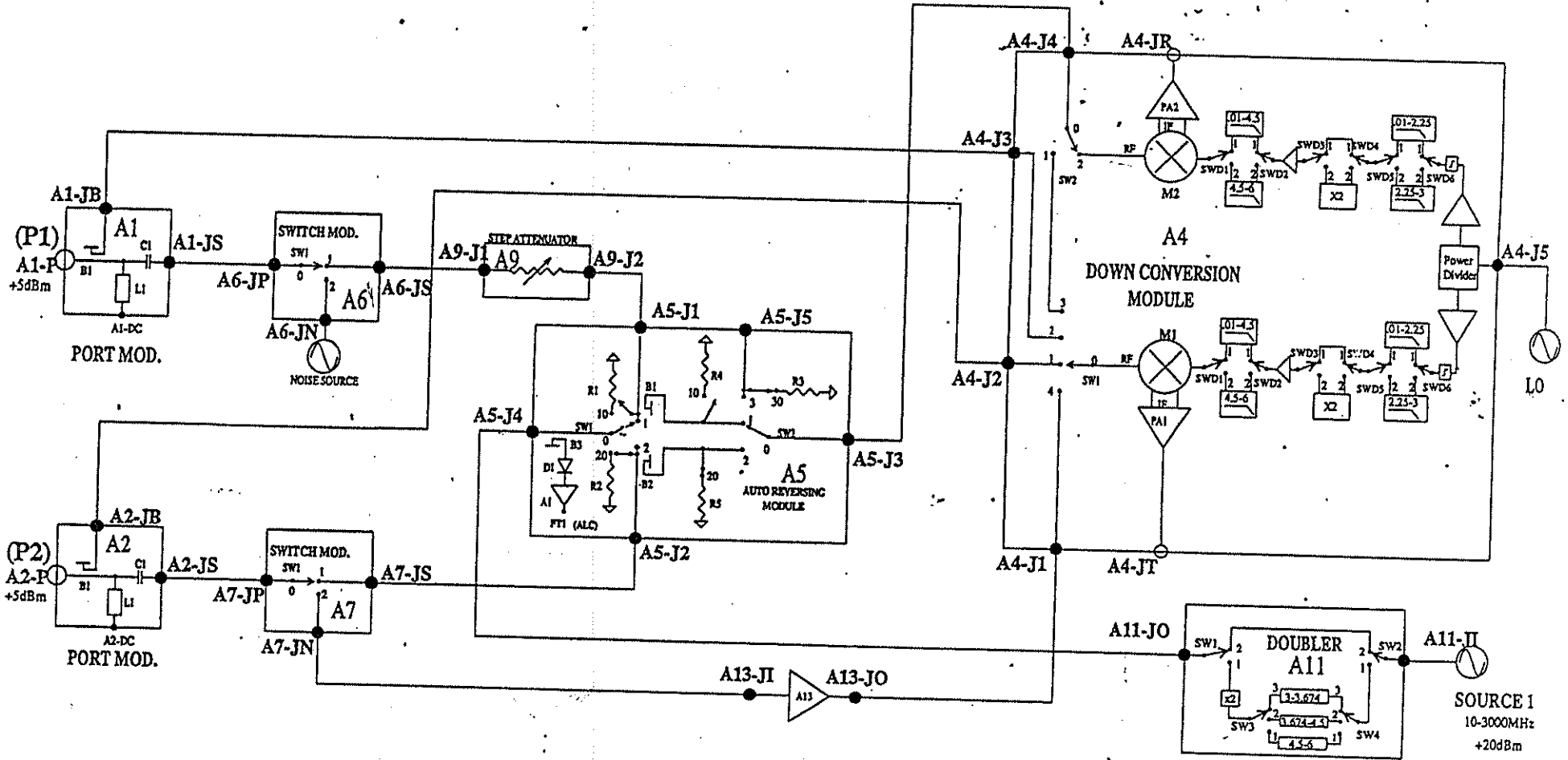
FILE:MS4623B.DWG

CC 6-9-97 WILTRON
10 of 14

MODULE MS4623B OPT. 3 (WITH SECOND SOURCE & 3RD TEST PORT 10-6000MHz)



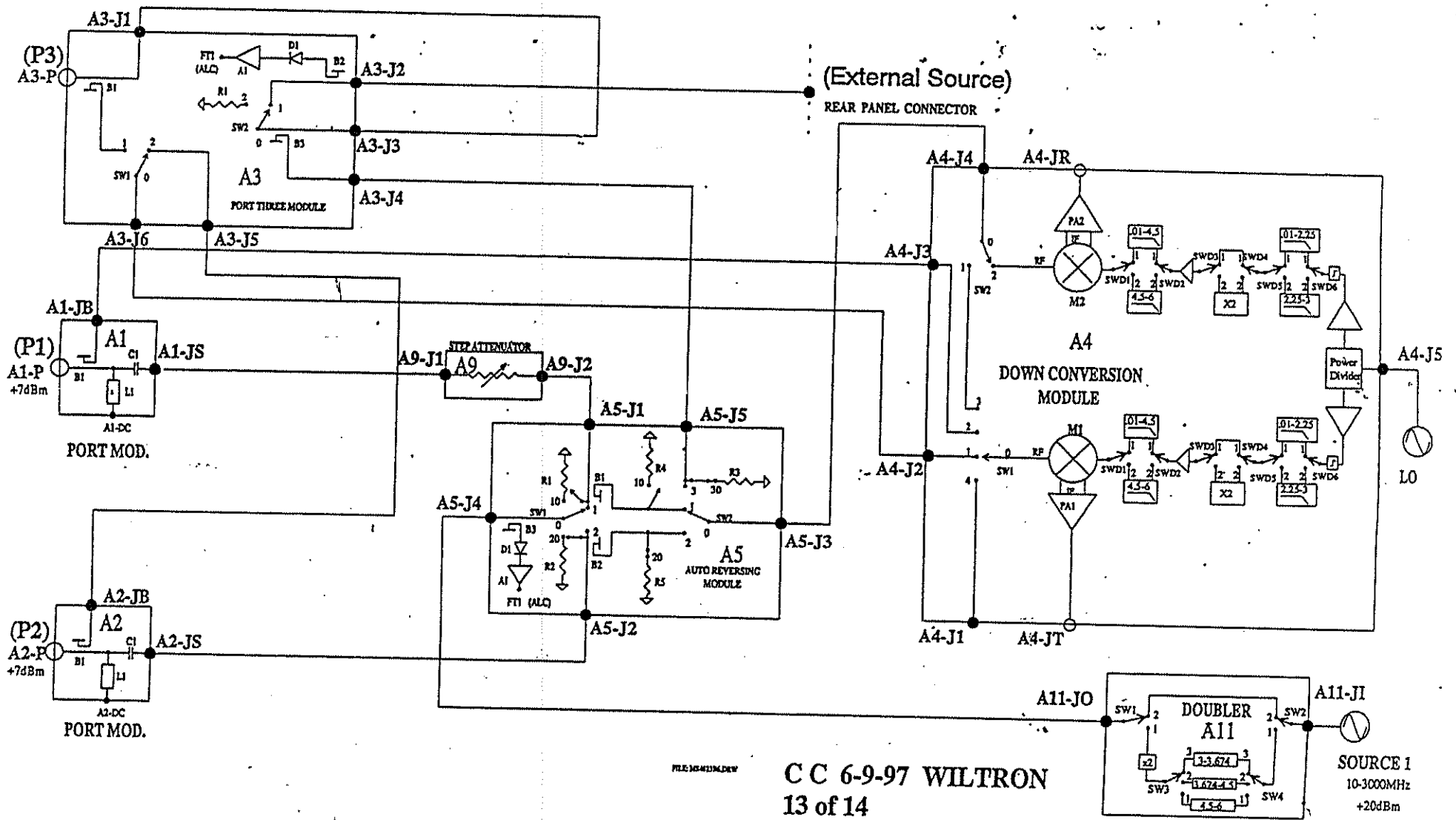
MODULE MS4623B OPTION 4 (WITH NOISE FIGURE 10-6000MHz)



FILE MS4623B.DRW

CC 6-9-97 WILTRON
12 of 14

MODULE MS4623B OPTION 6 (WITH THIRD TEST PORT 10-6000MHz)



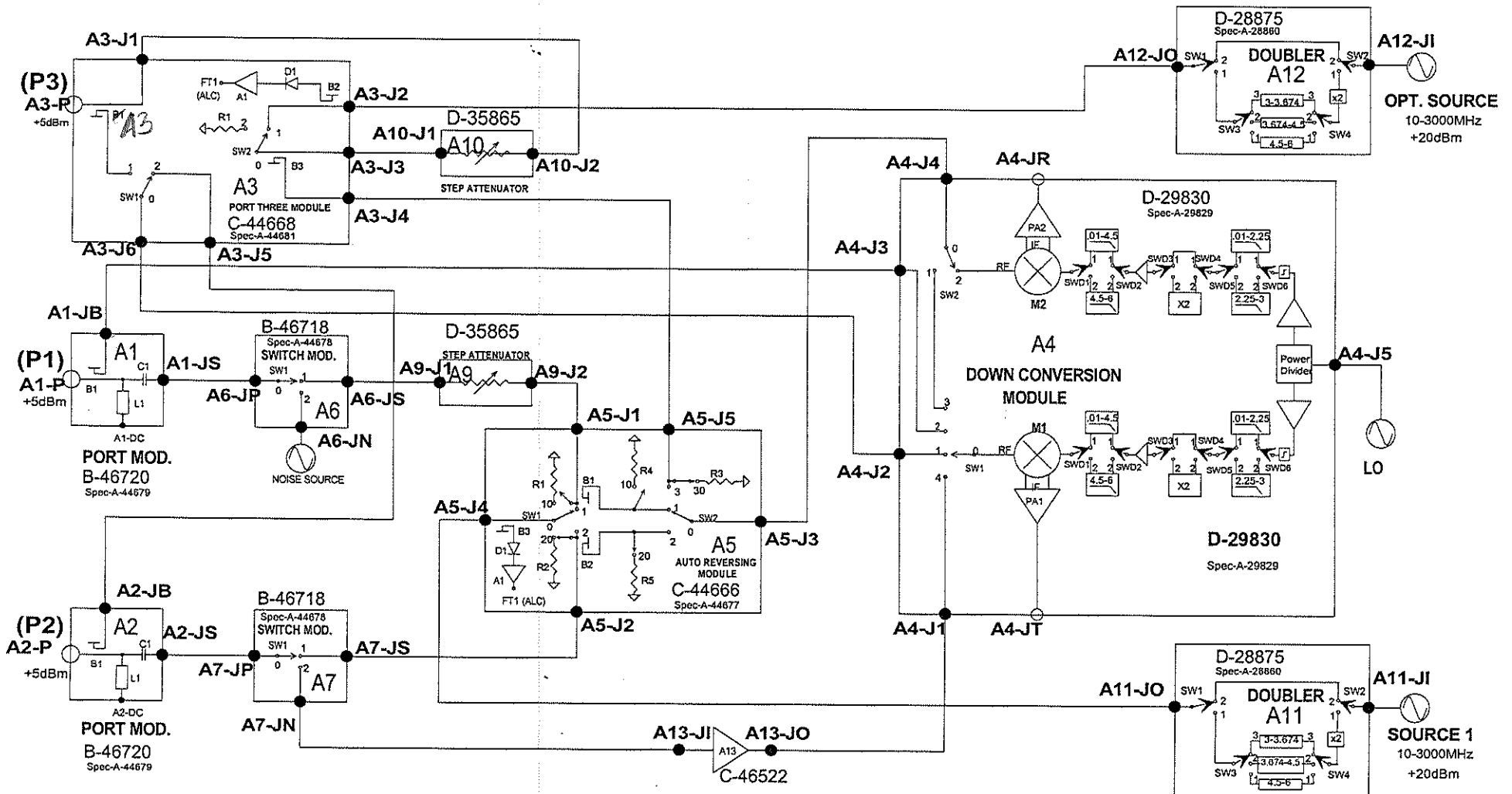
FILE:MS4623M.DRW

CC 6-9-97 WILTRON
13 of 14

SOURCE 1
10-3000MHz
+20dBm

MODULE MS4623B (AUTO REVERSING 10-6000 MHZ)

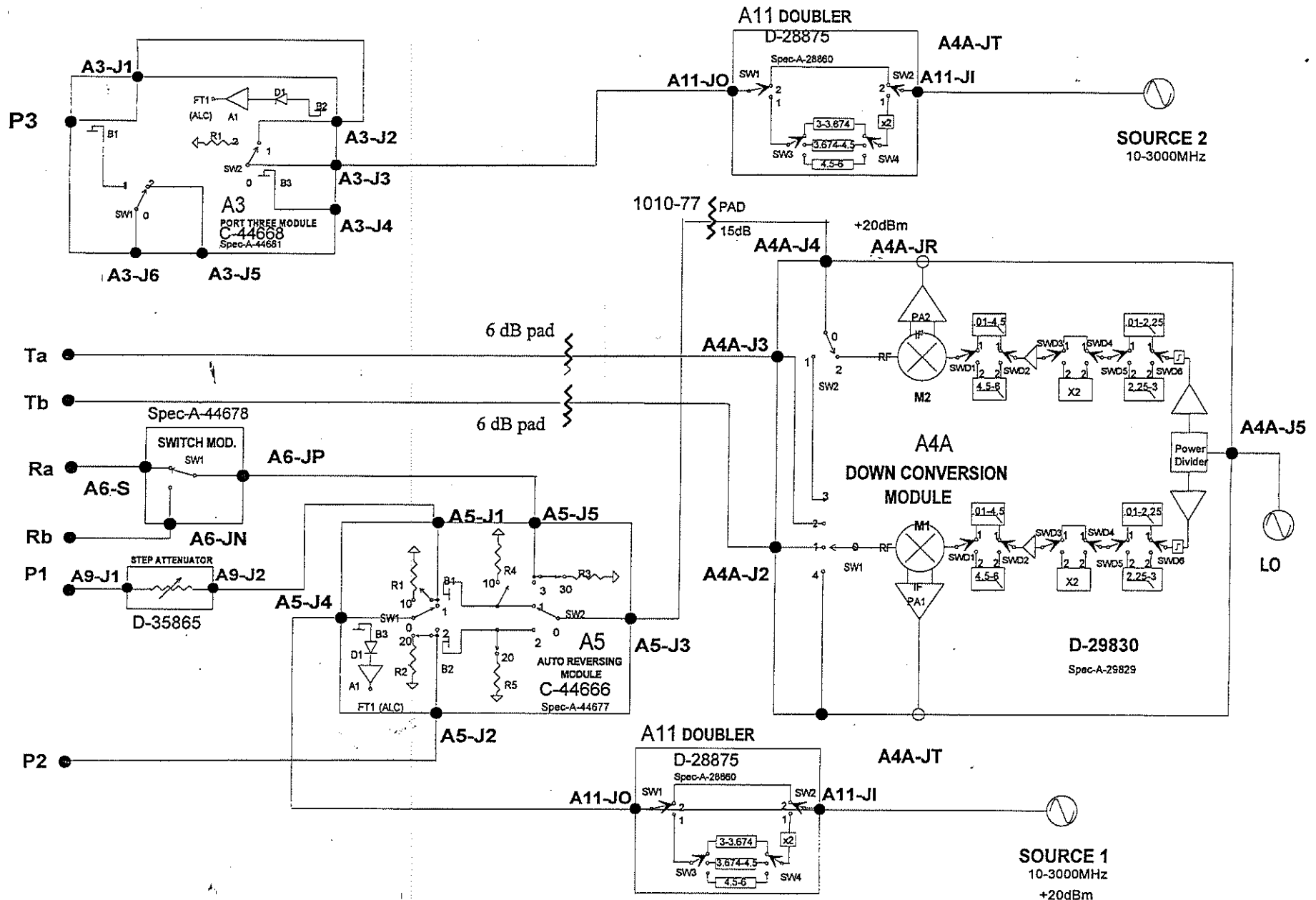
Option 3B, 4



Port Connectors: K-NF...B-45259 K-KF...B-47087 K-APC7...B-47086
 K-NM...B-45261 K-KM...B-47088

Configuration 14 of 14

MODULE MS4623C (Receiver Configuration 10-6000 MHz) w/ opt. 3D(2nd Source)



Port Connectors: K-NF...B-45259 K-KF...B-47087 K-APC7...B-47086
 K-NM...B-45261 K-KM...B-47088

Configuration 17 of 14