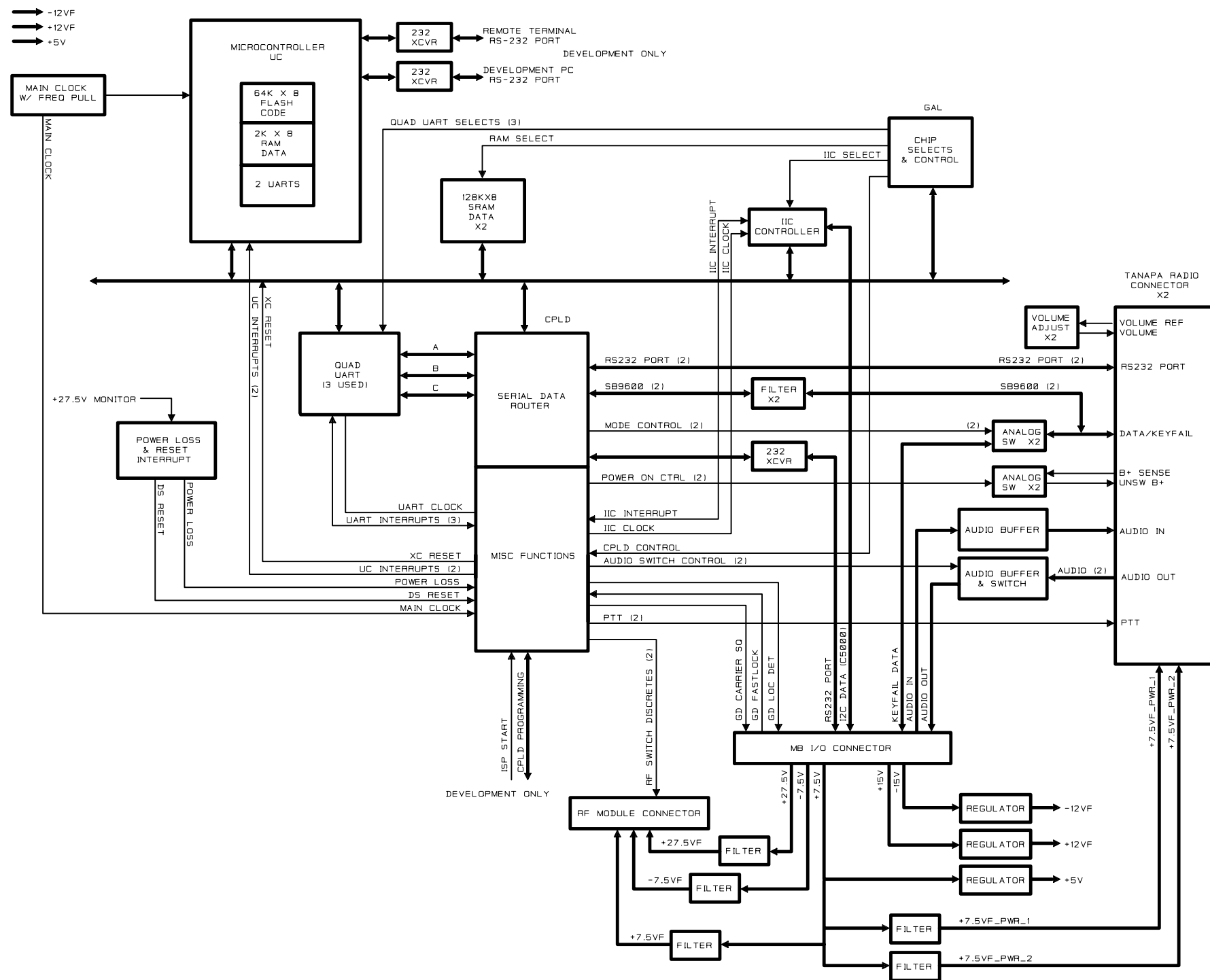


BLOCK DIAGRAM



REVISIONS					
ZONE	REV	DESCRIPTION	DATE	APPROVED	APPROVED
	A	INITIAL RELEASE PER DCN W1299	6-27-01	S WILDE	V WALLACE
	B	REVISED PER DCN W1694	11-5-01	S WILDE	V WALLACE

HARDWARE ADDRESS RANGE (A19 - A1)

CODE SPACE

ADDRESS:	DEVICE:
FFFFFh - 40000h	Expansion
3FFFFh - 30000h	SRAM (Debug Area)
2FFFFh - 20000h	Empty
1FFFFh - 10000h	Empty
0FFFFh - 0C000h	XAG49 Internal Flash, Block 4 (16K)
0BFFFh - 08000h	XAG49 Internal Flash, Block 3 (16K)
07FFFh - 04000h	XAG49 Internal Flash, Block 2 (16K)
03FFFh - 00000h	XAG49 Internal Flash, Block 1 (8K)
01FFFh - 00000h	XAG49 Internal Flash, Block 0 (8K)

DATA SPACE

ADDRESS:	DEVICE:	ADDRESS MODE:
FFFFh - C000h	Expansion	

00000h		CPLD	Indirect
00000h	WR D0	PWR_CTL_1	
00000h	WR D1	PWR_CTL_2	
00002h	WR D0	AUDIO_CTL_1	
00002h	WR D1	AUDIO_CTL_2	
00004h	WR D0	RF5C1	
00004h	WR D1	IOW_HW	
00010h	WR D3-D0	MODE_SEL_SET	
00012h	RD D3-D0	SERIAL_INT_STATUS	
00012h	RD D0	UART_INT_A	
00012h	RD D1	UART_INT_B	
00012h	RD D2	UART_INT_C	
00012h	RD D3	IC_INT	
00014h	WR D0	GD_LOC_DET	
00014h	WR D1	GD_CARRIER SQ	
00014h	RD D0	GD_FASTLOCK	
00018h	WR D0	INT_PTT1	
00018h	WR D1	INT_PTT2	

A8000h	UART D (UNUSED)
A0000h	UART C
98000h	UART B
90000h	UART A

80000h	IIC Controller	Indirect
80000h	S0, S0*, S2, or S3 register	
80002h	S1 register	

7FFFh - 4000h	Expansion SRAM	Indirect
3FFFFh - 30800h	External SRAM (Debug Area)	Indirect
307FFh - 30600h	External SRAM (Debug Area)	Indirect

	Off-Chip Special Function Registers	Direct
	Replication of 007FFh - 00600h	
305FFh - 30440h	External SRAM (Debug Area)	Indirect
	Special Function Registers (SFR)	Direct

Replication of 005FFh - 00440h		
3043Fh - 30400h	External SRAM (Debug Area)	Indirect
	Flash Memory (Debug Area) (JFFS2)	Direct

	Special Function Registers (SFR)	Bit, Direct
	Replication of 0043Fh - 00400h	
303FFh - 30040h	External SRAM (Debug Area)	Direct, Indirect
3003Fh - 30020h	External SRAM (Debug Area)	Bit, Direct, Indirect
3001Fh - 30000h	External SRAM (Debug Area)	Direct, Indirect

Address	Access	External SRAM (Debug Area)	Direct / Indirect
2FFFFh - 20800h		External SRAM	Indirect
207FFh - 20600h		External SRAM	Indirect
		Off-Chip Special Function Registers	Direct

205FFh - 20440h	Replication of 007FFh - 00600h External SRAM Special Function Registers (SFR) Replication of 005FFh - 00440h	Indirect Direct
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2043Fh - 20400h	External SRAM	Indirect
	Special Function Registers (SFR)	Bit, Direct
	Replication of 0043Fh - 00400h	
203FFh - 20040h	External SRAM	Direct, Indirect
203FFh - 20020h	External SRAM	Bit, Direct, Indirect

2003Fh - 20020h	External SRAM	Bit, Direct, Indirect
2001Fh - 20000h	External SRAM	Direct, Indirect
1FFFFh - 10800h	External SRAM	Indirect
107FFh - 10600h	External SRAM	Indirect

107FFh - 10800h	External SRAM	Indirect
	Off-Chip Special Function Registers	Direct
	Replication of 007FFh - 00600h	Direct
105FFh - 10440h	External SRAM	Indirect
	Special Function Registers (SFR)	Direct

1043Fh - 10400h	Replication of 005FFh - 00440h External SRAM	Indirect
	Special Function Registers (SFR)	Bit, Direct
	Replication of 0043Fh - 00400h	

103FFh - 10040h	External SRAM	Direct, Indirect
1003Fh - 10020h	External SRAM	Bit, Direct, Indirect
1001Fh - 10000h	External SRAM	Direct, Indirect
8555Fh - 80000h	External SRAM	Indirect

0FFFFh - 00800h	External SRAM	Indirect
007FFh - 00600h	Internal XAG49 RAM	Indirect
	Off-Chip Special Function Registers	Direct
	NOT currently defined for XA-G49	
	External SRAM	MOVX

005Fh - 00440h	Internal XAG49 RAM	MOVX
	Special Function Registers (SFR)	Direct
	External SRAM	MOVX
0043Fh - 00400h	Internal XAG49 RAM	Indirect

	Special Function Registers (SFR)	Bit, Direct
003FFh - 0040h	External XAG49 RAM	MOVX
	Internal XAG49 RAM	Direct, Indirect
	External SRAM	MOVX

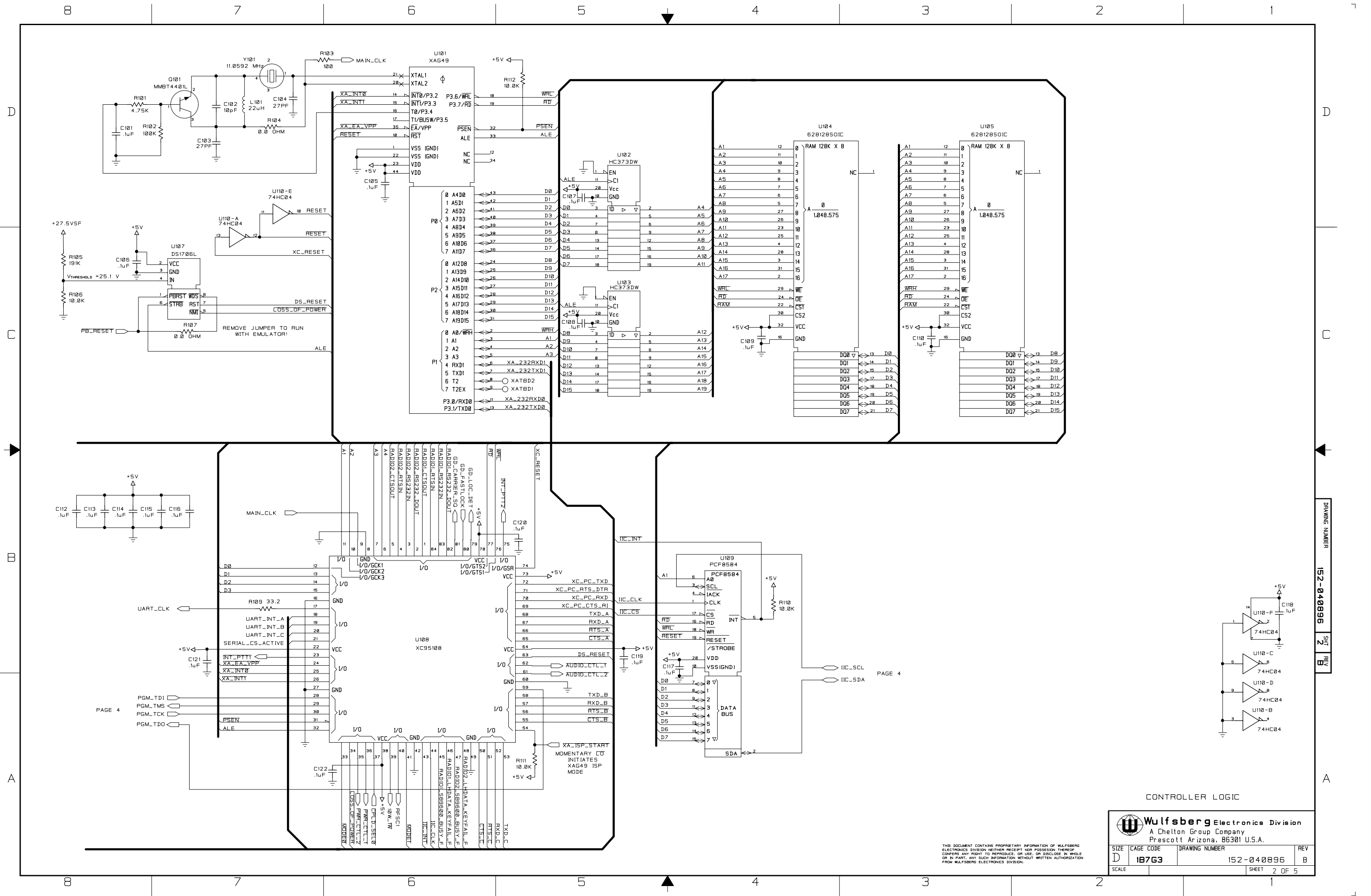
0003Fh - 00020h	Internal XAG49 RAM	Bit, Direct, Indirect
	External SRAM	MOVX
0001Fh - 00000h	Internal XAG49 RAM	Direct, Indirect
	External SRAM	MOVX

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		
FRACTIONS ±	DECIMALS xx ± xxx ±	ANGLES ±
MATERIAL SEE NOTES		
FINISH		
DO NOT SCALE DRAWING		

APPROVALS		DATE
DRAWN	STAN WILD	6-27-01
ENGINEER	STAN WILD	6-27-01
ISSUED	VERN WALLACE	6-27-01

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	SCHEM. CONTROLLER BOARD, MTM, RT-5000		

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CONTROLLER LOGIC

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SIZE	CAGE CODE	DRAWING NUMBER	REV
D	1B7G63	152-040896	B
SCALE	SHEET 2 OF 5		

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D

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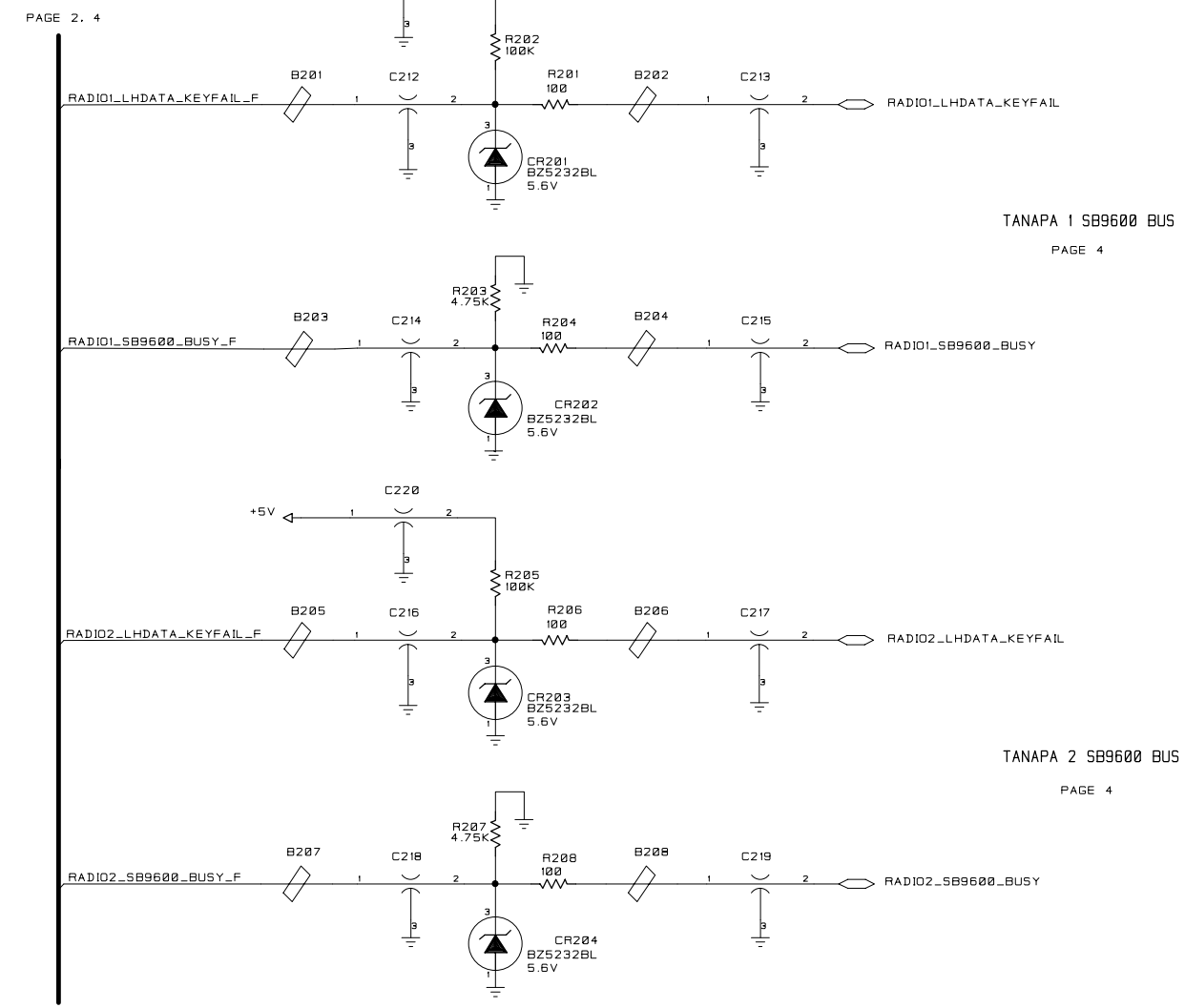
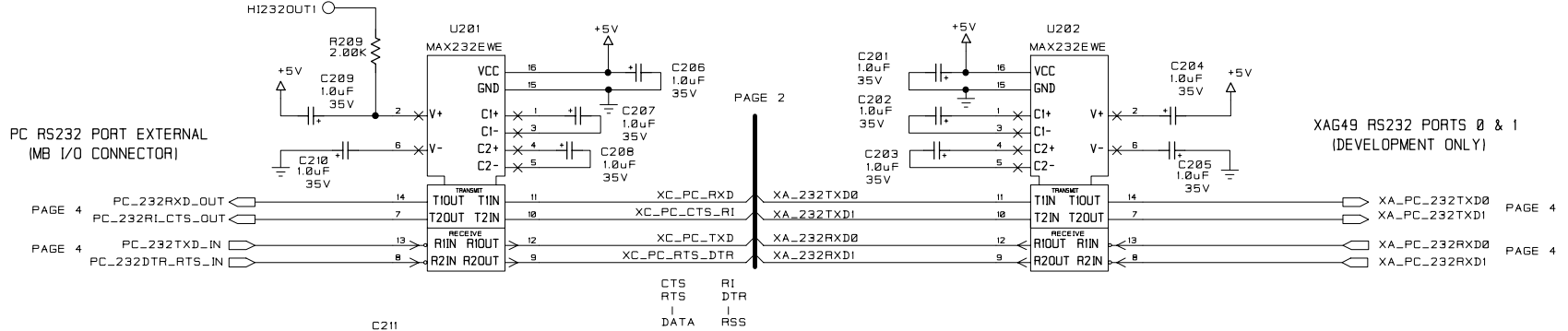
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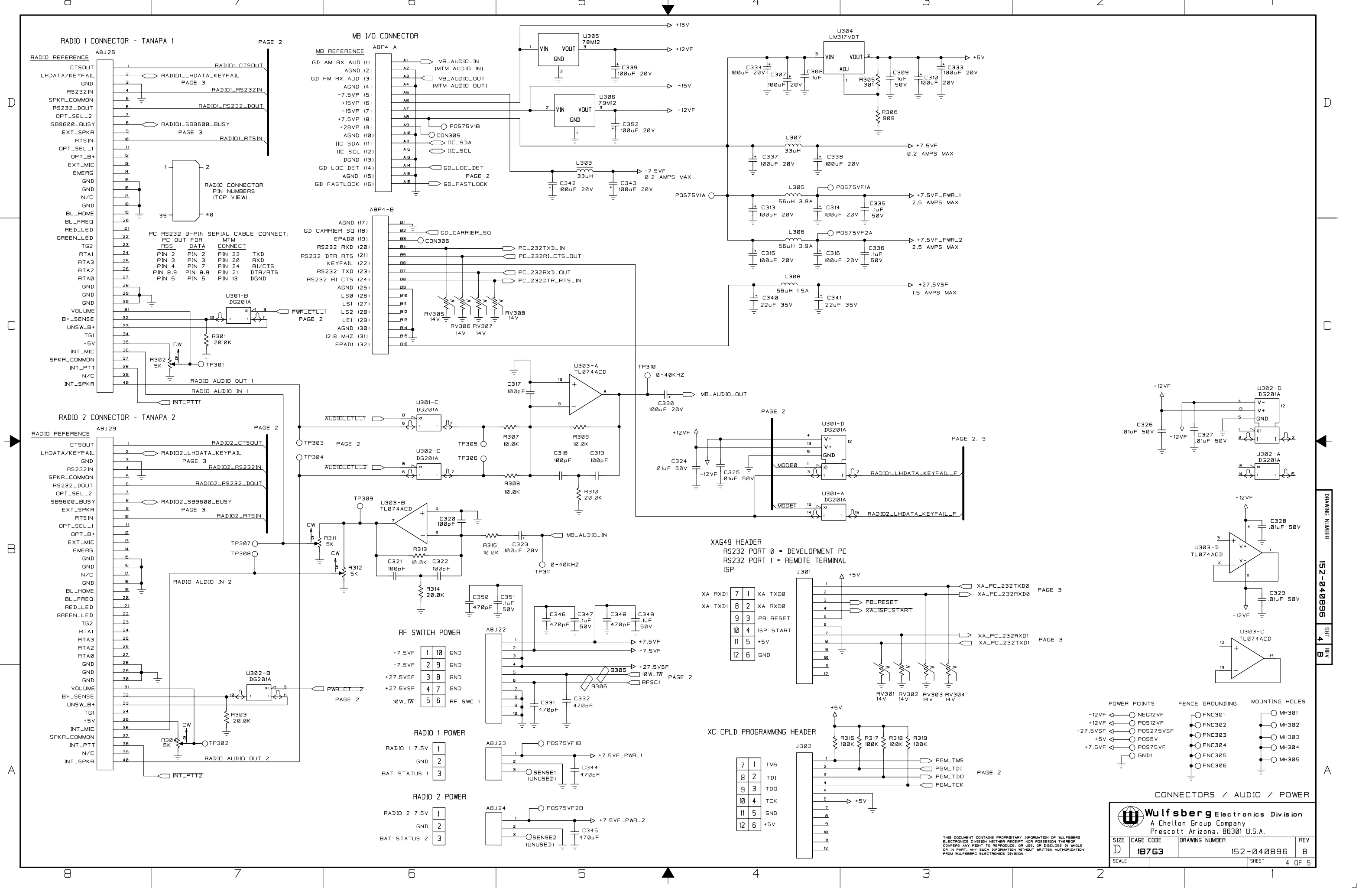


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D	1B7G3	152-040896	B
SCALE	SHEET		3 OF 5



RADIO 1 CONNECTOR - TANAPA 1

MB I/O CONNECTOR

RADIO 2 CONNECTOR - TANAPA 2

XAG49 HEADER
RS232 PORT 0 = DEVELOPMENT PC
RS232 PORT 1 = REMOTE TERMINAL
ISP

XC CPLD PROGRAMMING HEADER

RF SWITCH POWER

RADIO 1 POWER

RADIO 2 POWER

POWER POINTS		FENCE GROUNDING	MOUNTING HOLES
-12VF	NEG12VF	FNC301	MH301
+12VF	POS12VF	FNC302	MH302
+27.5VSF	POS27VSF	FNC303	MH303
+5V	POS5V	FNC304	MH304
+7.5VF	POS7.5VF	FNC305	MH305
	GND1	FNC306	

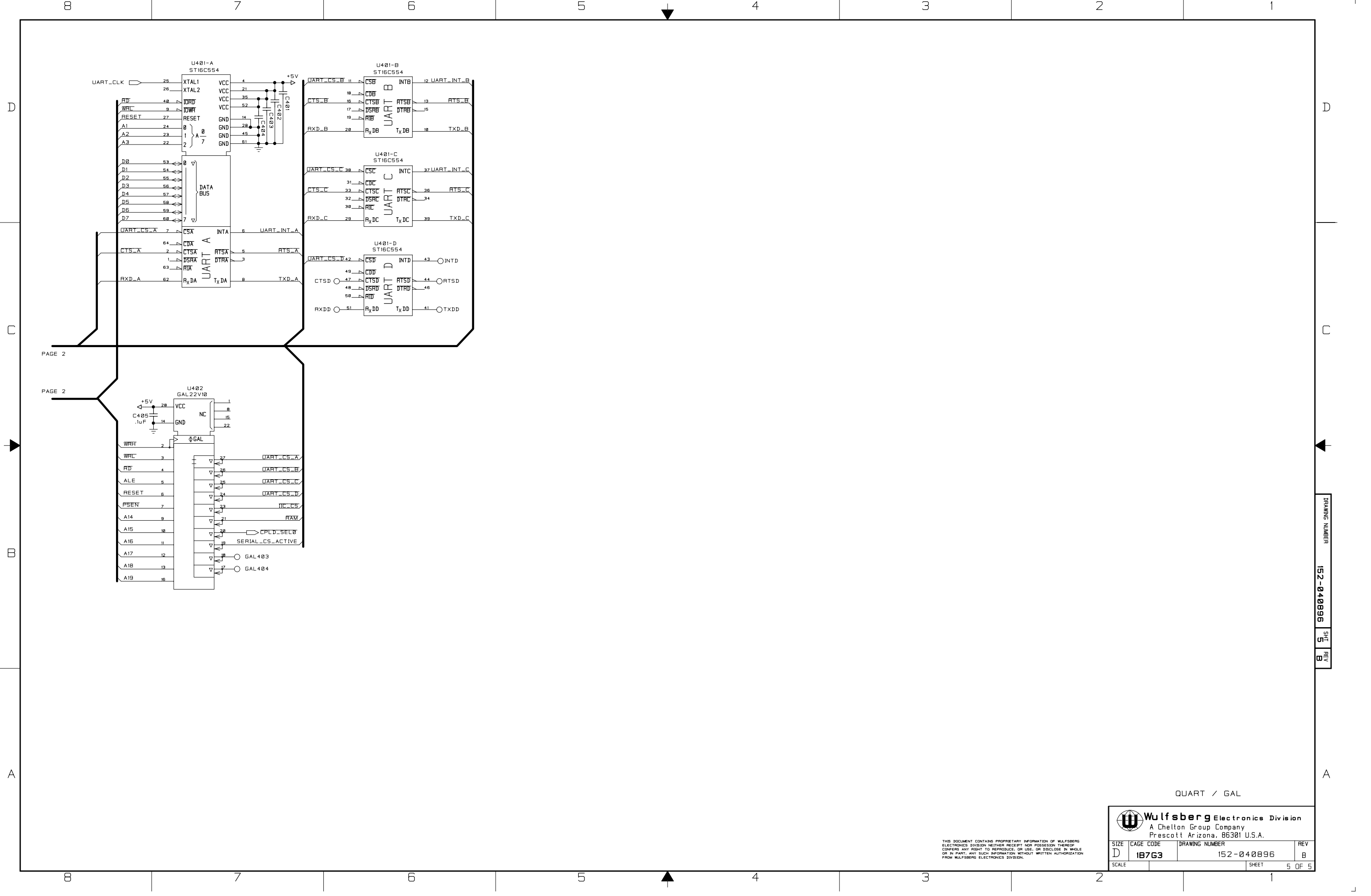
CONNECTORS / AUDIO / POWER

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DRAWING NUMBER 152-040896
SHEET 4 OF 5
REV B



PAGE 2

PAGE 2

QUART / GAL

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SIZE	CAGE CODE	DRAWING NUMBER	REV
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SCALE	SHEET		5 OF 5

DRAWING NUMBER 152-040896
SHEET 5
REV B

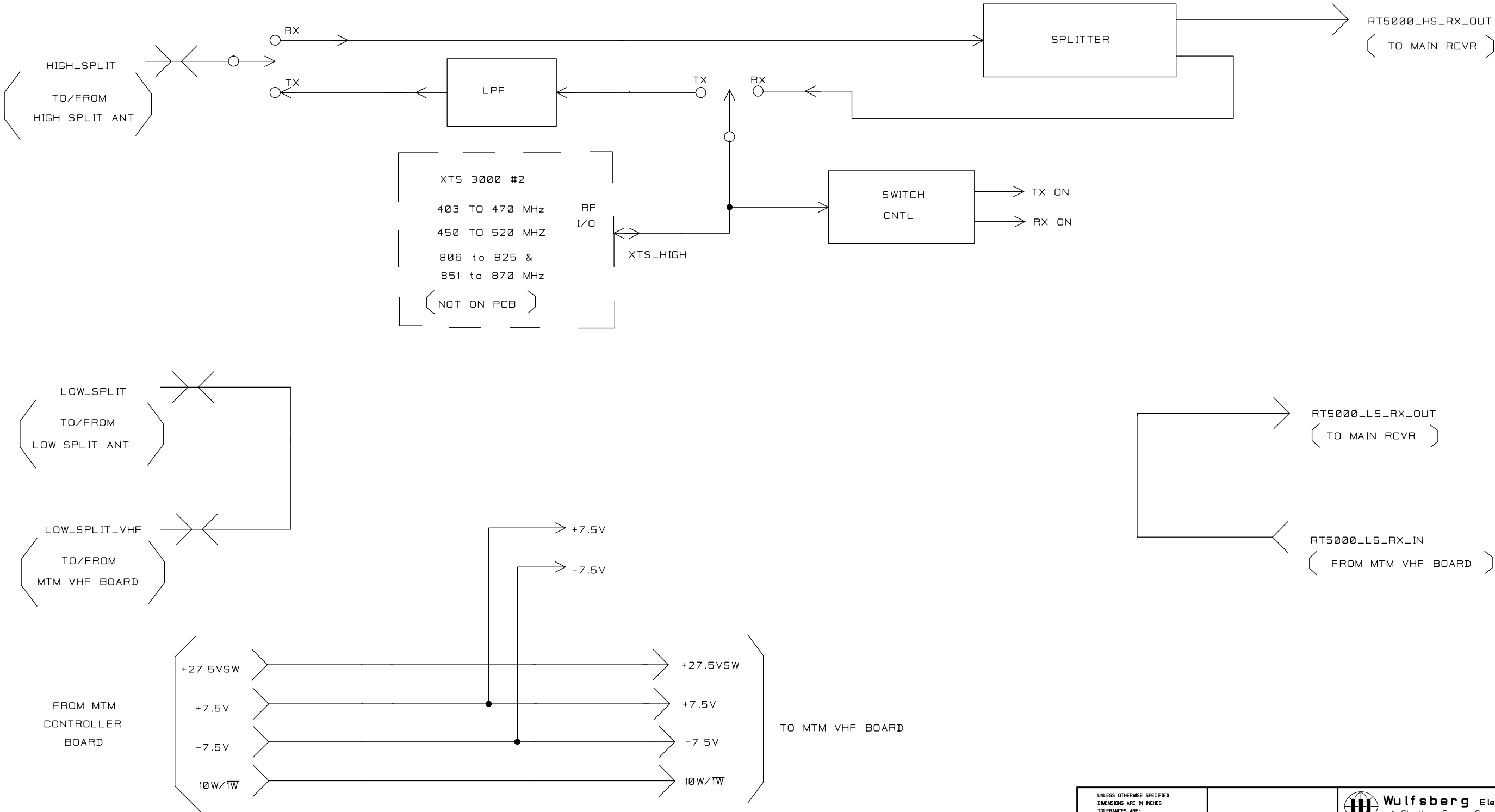
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REVISIONS					
ZONE	REV	DESCRIPTION	DATE	APPROVED	APPROVED
	A	INITIAL RELEASE PER DCN W1418			

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		MATERIAL		APPROVALS		DATE		
		SEE NOTES		DRAWN M. BEAUMONT				
		FINISH		ENGINEER M. BEAUMONT		SCHEMATIC, UHF BOARD, MTM. RT-5000		
300-040957	400-015525			SIZE D		CAGE CODE 1B7G3	DRAWING NUMBER 152-040957	REV A
NEXT ASSEMBLY	FINAL ASSEMBLY			ISSUED				
APPLICATION		DO NOT SCALE DRAWING				SCALE		SHEET 1 OF 2

DRAWING NUMBER 152-040957 SHT 1 REV A

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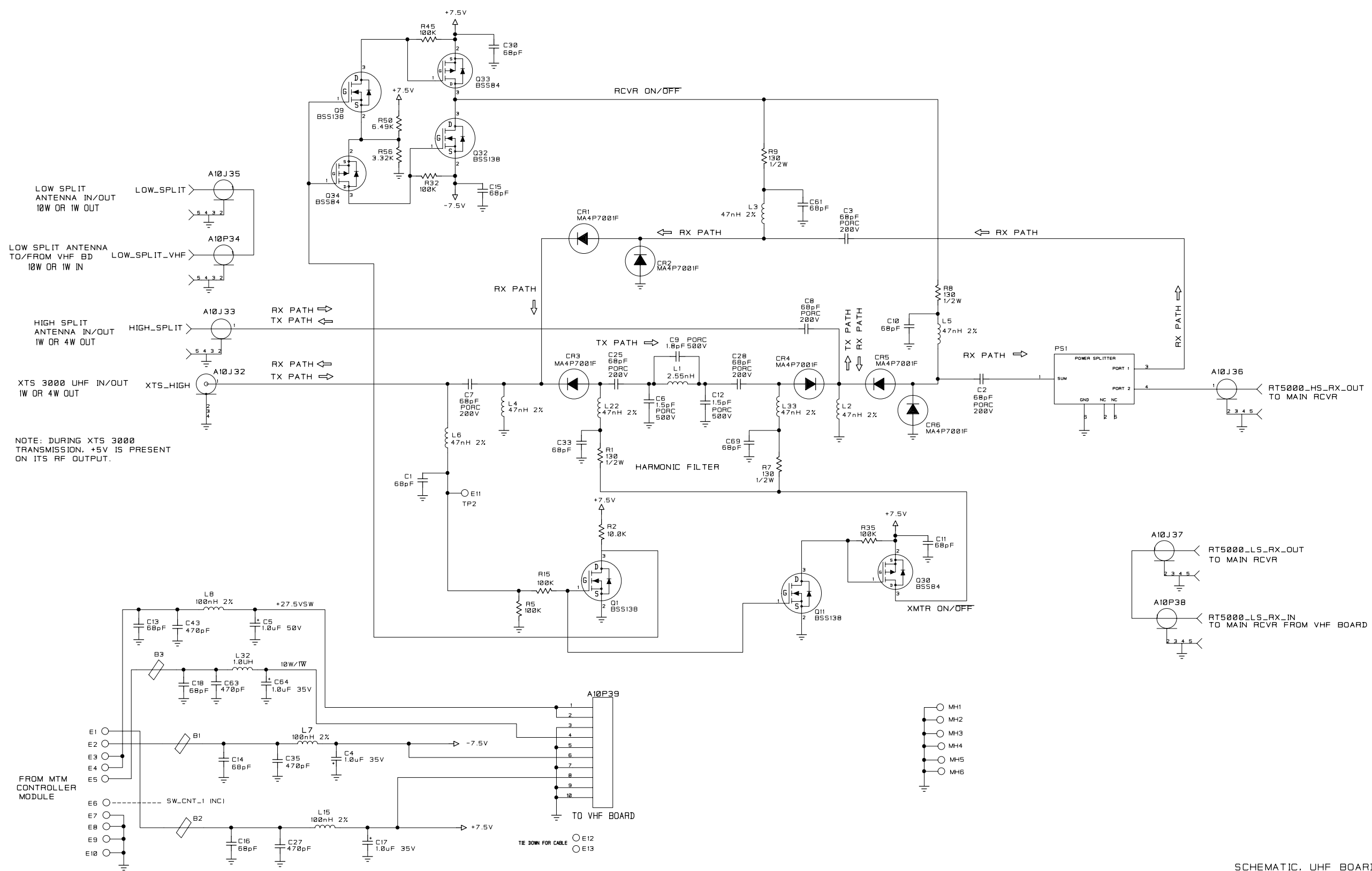
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1. ALL RESISTORS ARE 1/16W UNLESS OTHERWISE MARKED
2. ALL CERAMIC CHIP CAPS ARE 50V

SCHEMATIC, UHF BOARD, MTM,
RT-5000

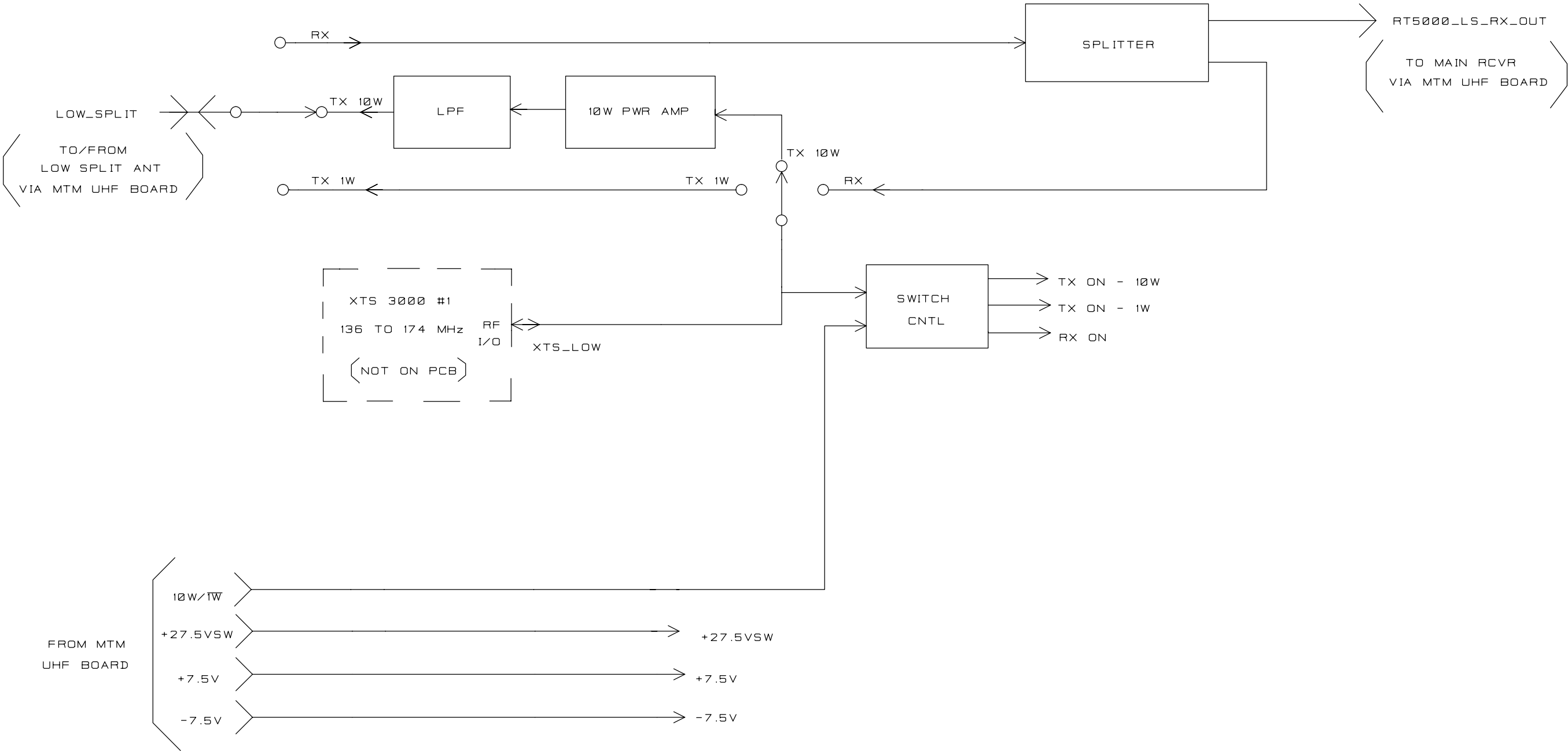
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SIZE D	CAGE CODE 1B7G3	DRAWING NUMBER 152-40957	REV A
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DRAWING NUMBER 152-040957
SHEET 2 OF 2
REV A

REVISIONS					
ZONE	REV	DESCRIPTION	DATE	APPROVED	APPROVED
	A	INITIAL RELEASE PER DCN W1301			

BLOCK DIAGRAM



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MATERIAL		DRAWN			
SEE NOTES		M. BEAUMONT			
FINISH		ENGINEER			
DO NOT		M. BEAUMONT			
SCALE		ISSUED			
300-040898		400-015525			
NEXT ASSEMBLY		FINAL ASSEMBLY			
APPLICATION		SCALE		DRAWING NUMBER	
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				REV	
				A	
				SHEET 1 OF 2	

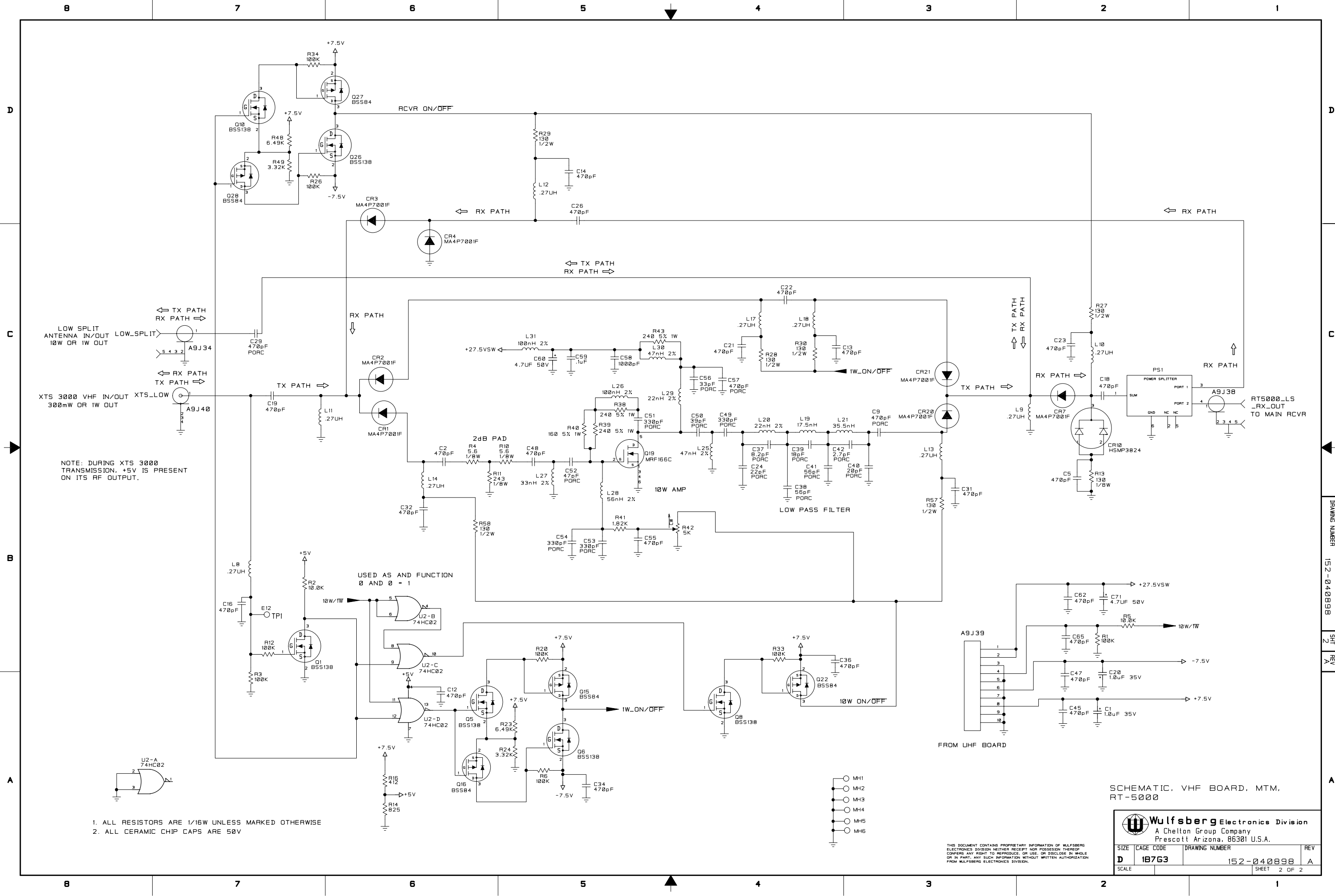


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SCHEMATIC, VHF BOARD, MTM,
RT-5000

SIZE D CAGE CODE 1B7G3 DRAWING NUMBER 152-040898 REV A

SCALE SHEET 1 OF 2



1. ALL RESISTORS ARE 1/16W UNLESS MARKED OTHERWISE
2. ALL CERAMIC CHIP CAPS ARE 50V

SCHEMATIC, VHF BOARD, MTM, RT-5000

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SIZE	CAGE CODE	DRAWING NUMBER	REV
D	187G3	152-040898	A
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