

WE SIMPLY SOUND BETTER.

AVR 507-505

SERVICE MANUAL

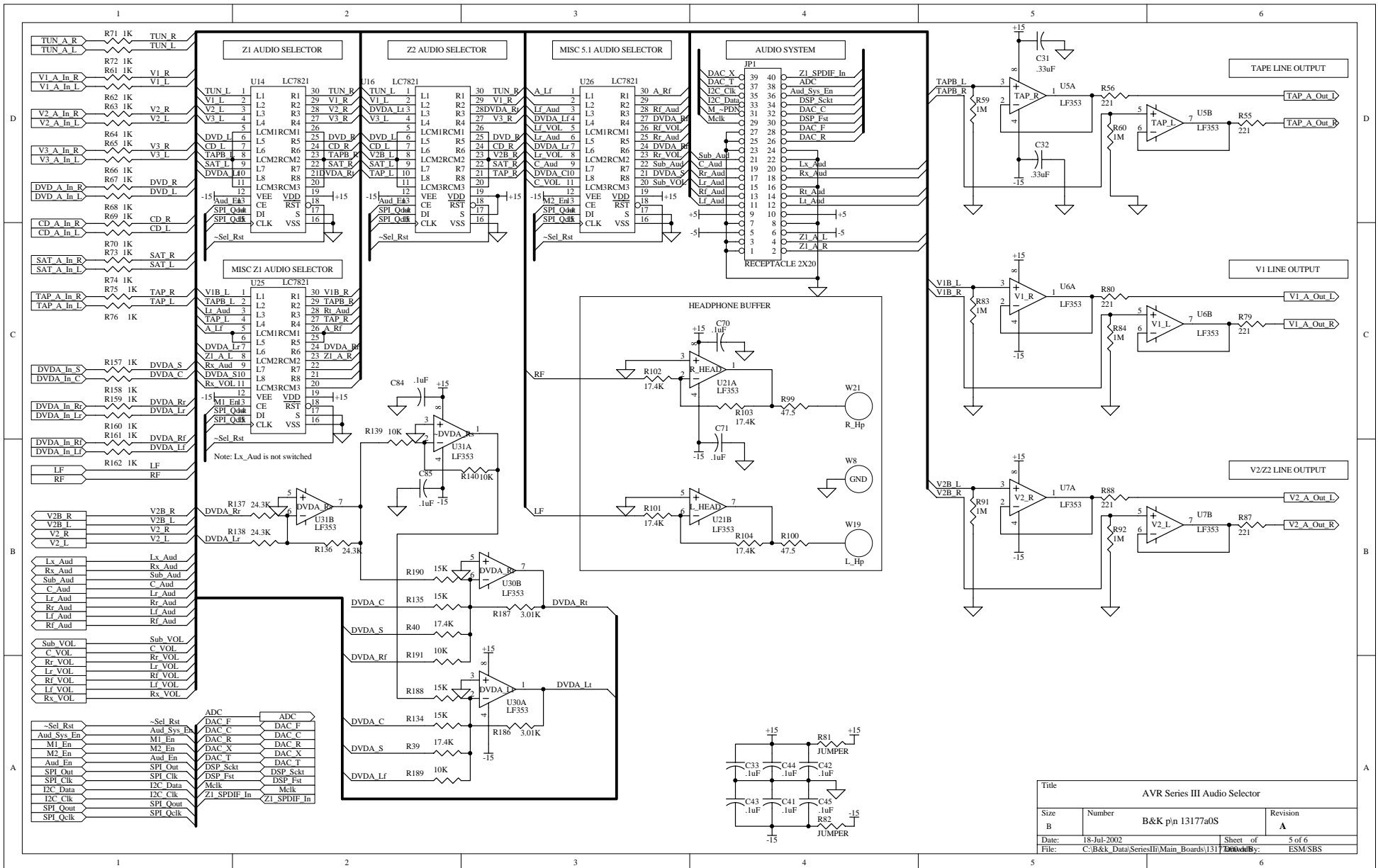
B&K COMPONENTS, LTD.
2100 Old Union Road
Buffalo, New York 14227-2725
U.S.A.

B & K

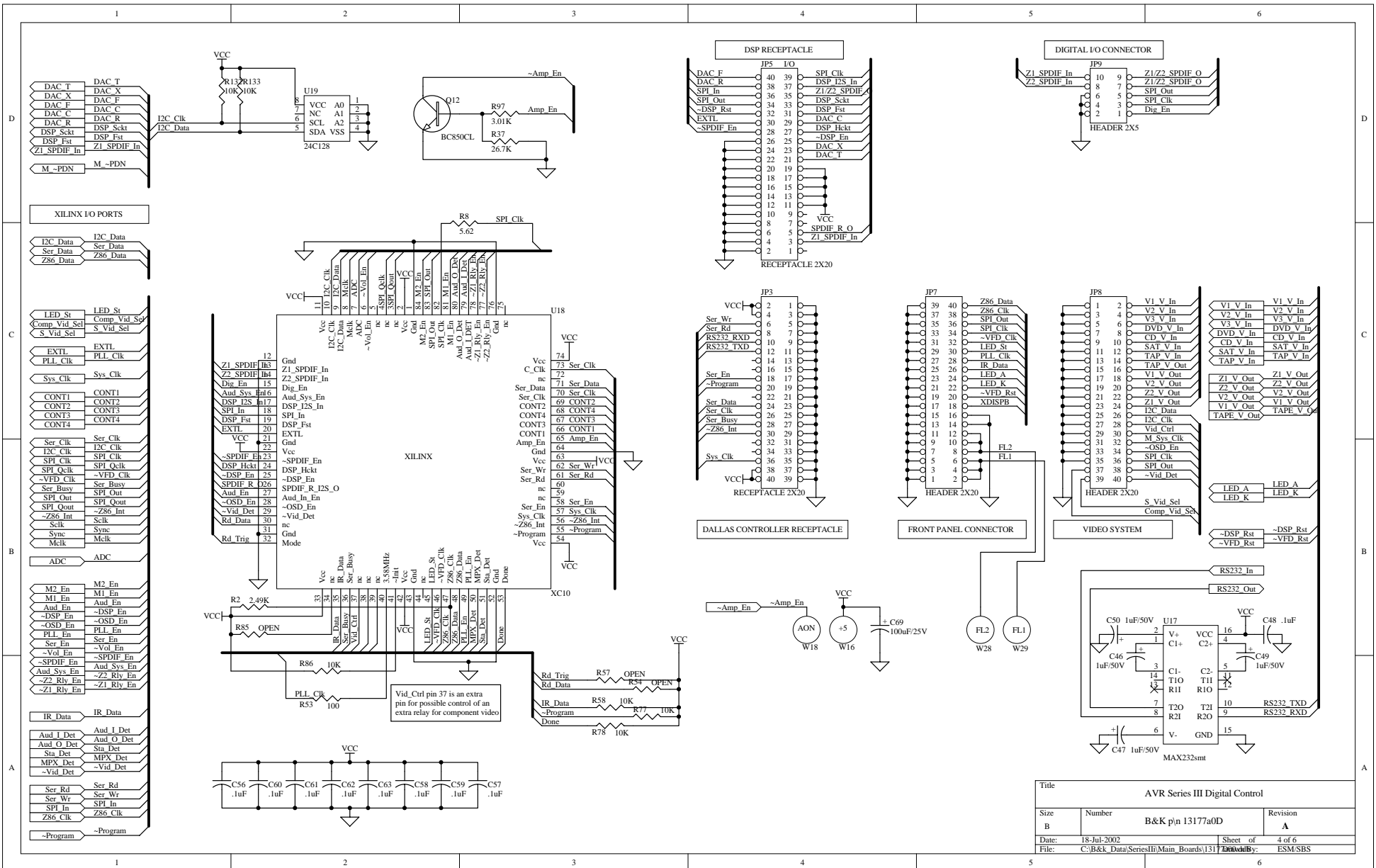
WE SIMPLY SOUND BETTER.

Schematics

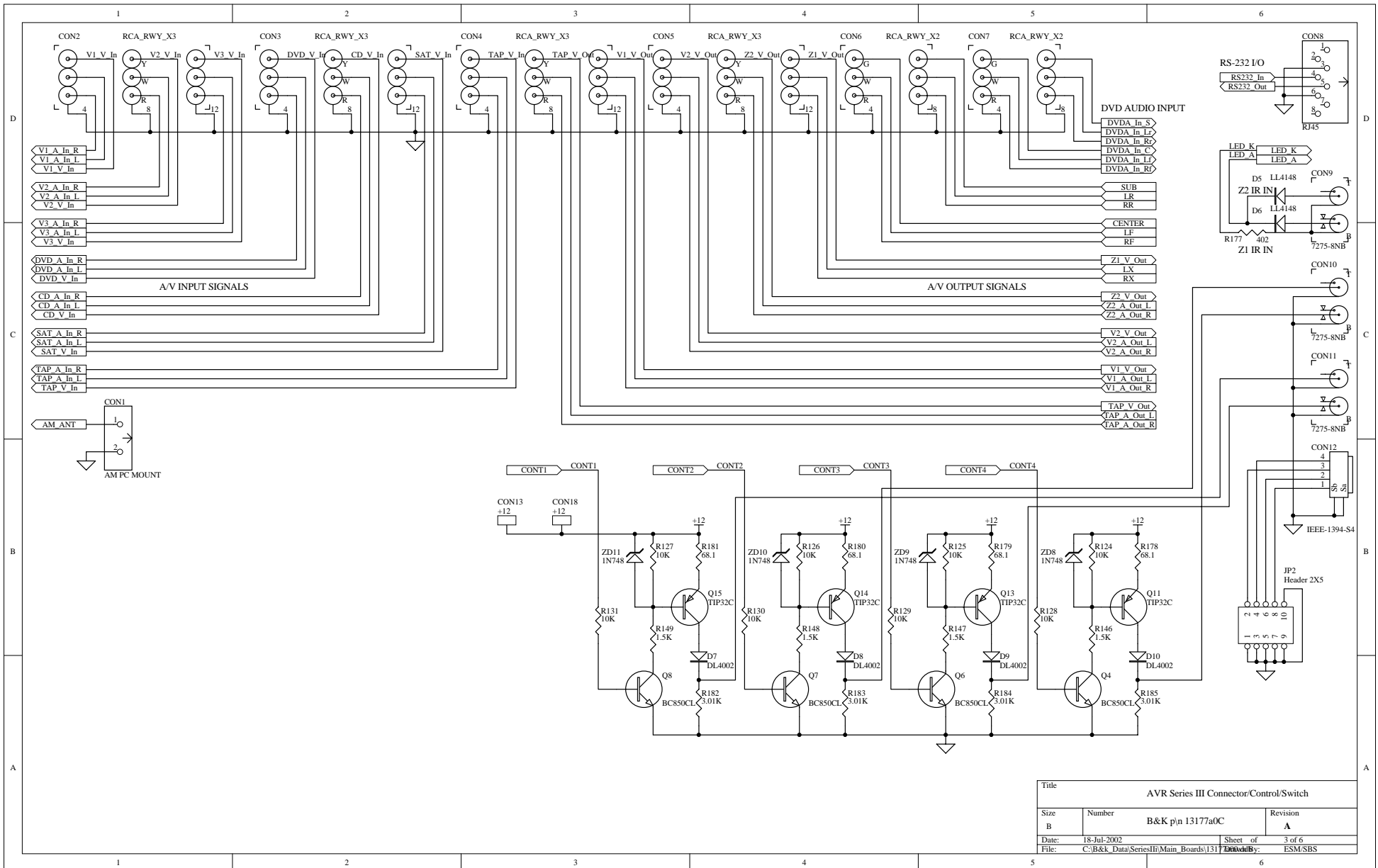
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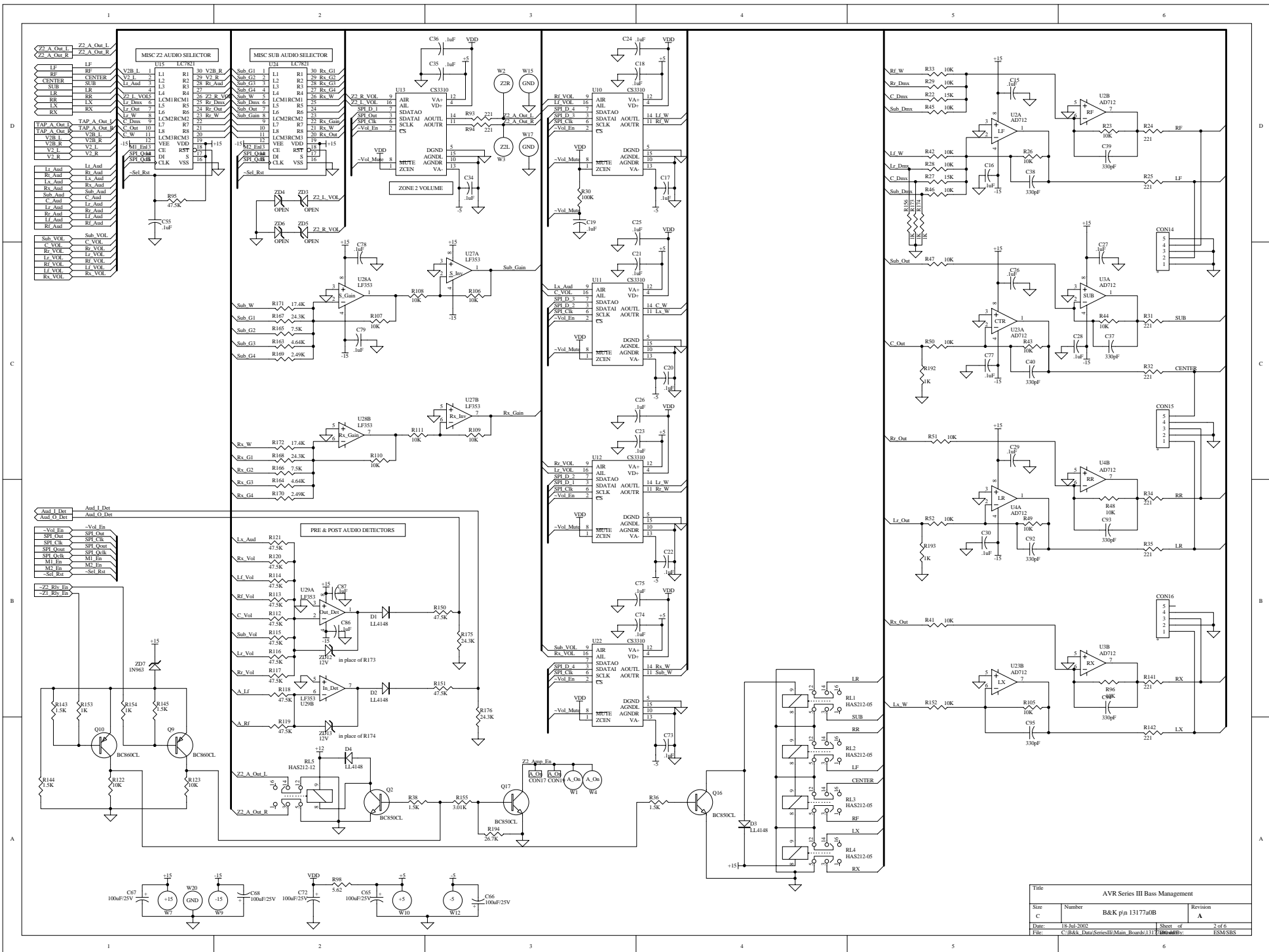
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Size	Number	B&K p/n 13177a0S	
B		Revision	
		A	
Date:	18-Jul-2002	Sheet of	5 of 6
File:	C:\B&k Data\SeriesIII\Main Boards\13177a0S.dwg	Drawn by:	ESM/SBS



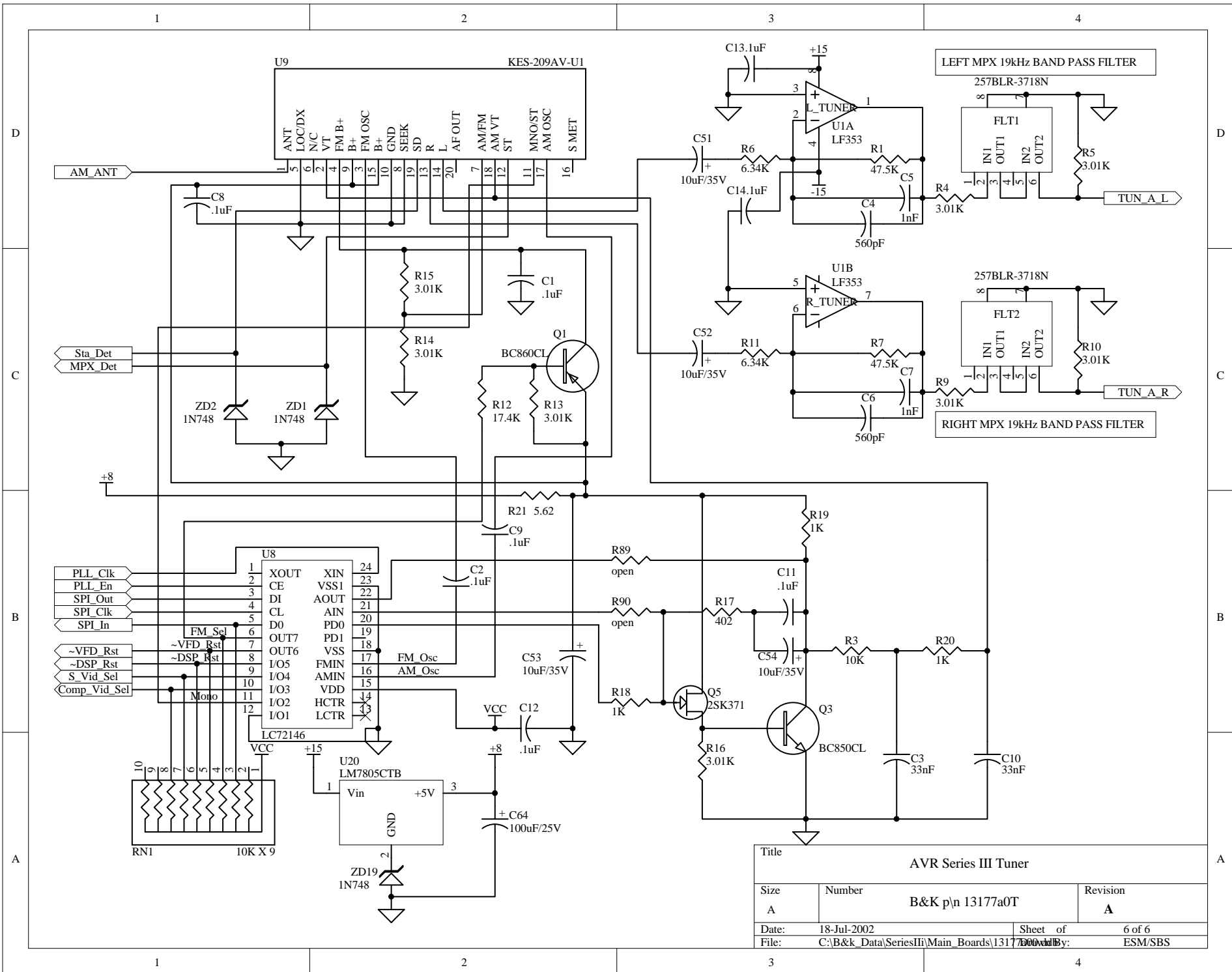
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AVR Series III Digital Control			
Size	Number	Revision	
B	B&K p/n 13177a0D	A	
Date:	18-Jul-2002	Sheet of	4 of 6
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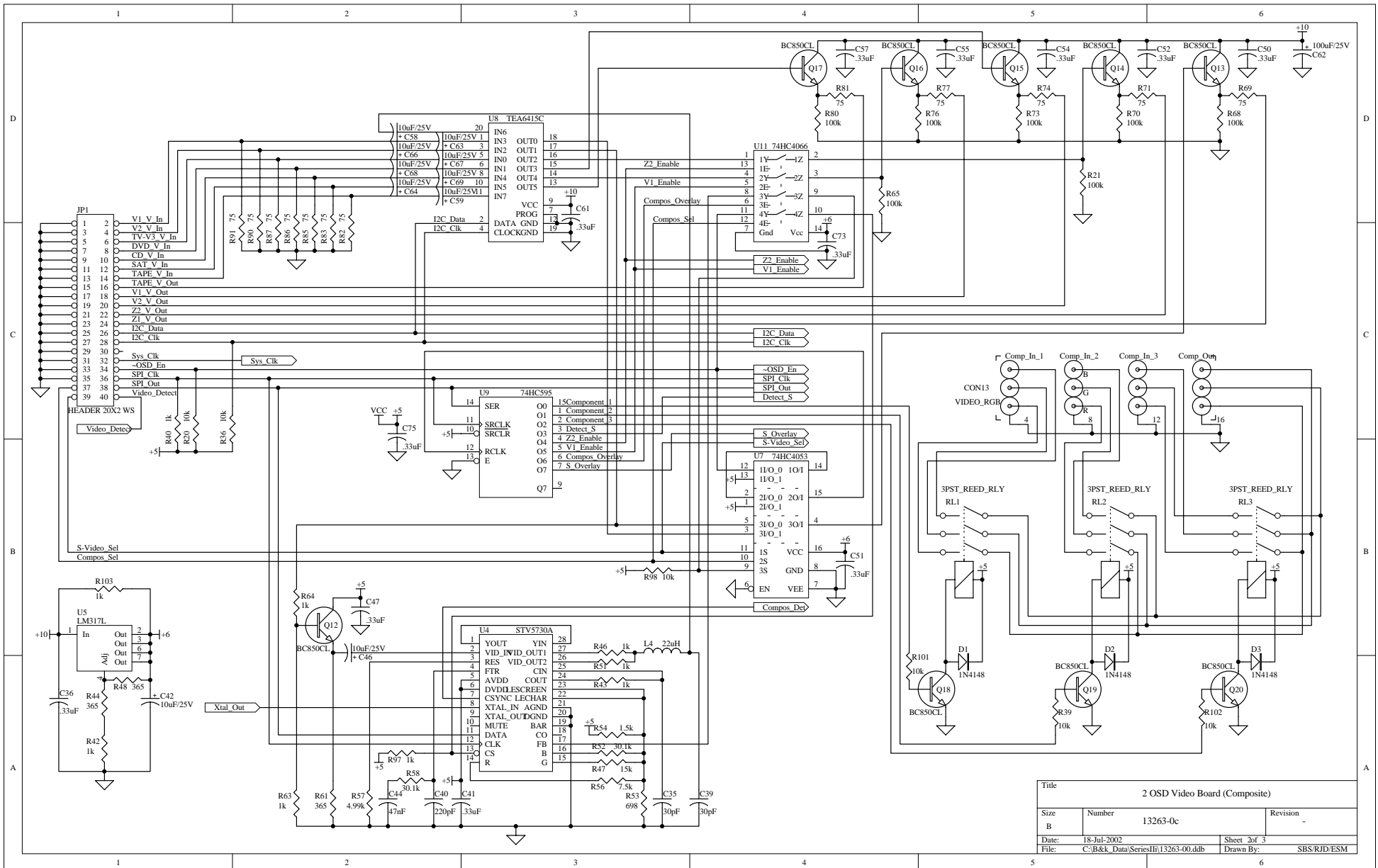
Title			
AVR Series III Connector/Control/Switch			
Size	Number	B&K p/n 13177a0C	Revision
B			A
Date:	18-Jul-2002	Sheet of	3 of 6
File:	C:\B&k_Data\SeriesIII\Main_Boards\13177a0C.dwg	Drawn By:	ESM/SBS



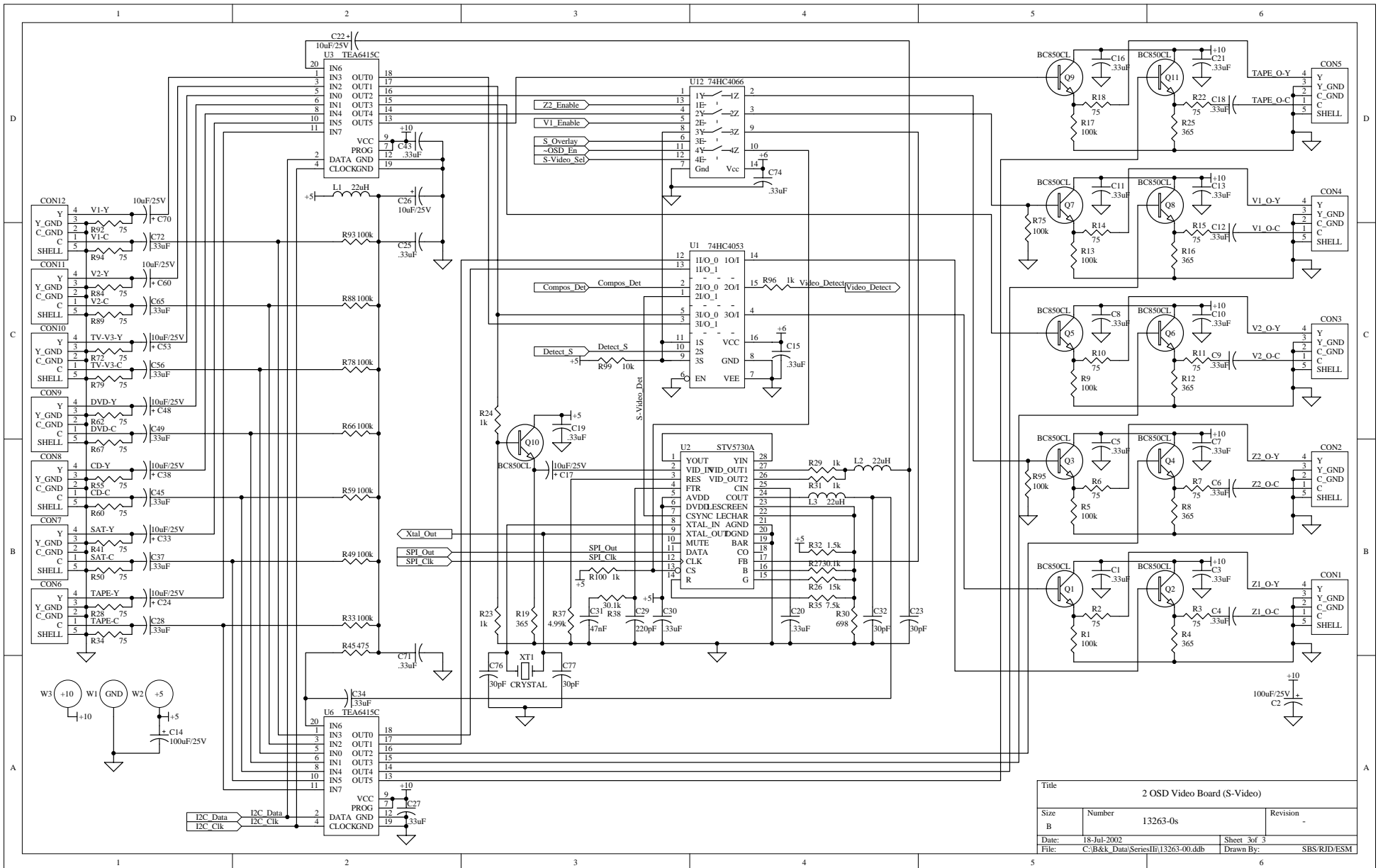
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AVR Series III Bass Management			
Size	Number	B&K p/n	Revision
C		B&K p/n 13177a0B	A
Date:	18 Jul 2002	Sheet of	3 of 6
File:	C:\B&K_Data\SenselIII_Main_Boards\11177a0b.dwg	Author:	ESMS/SBS



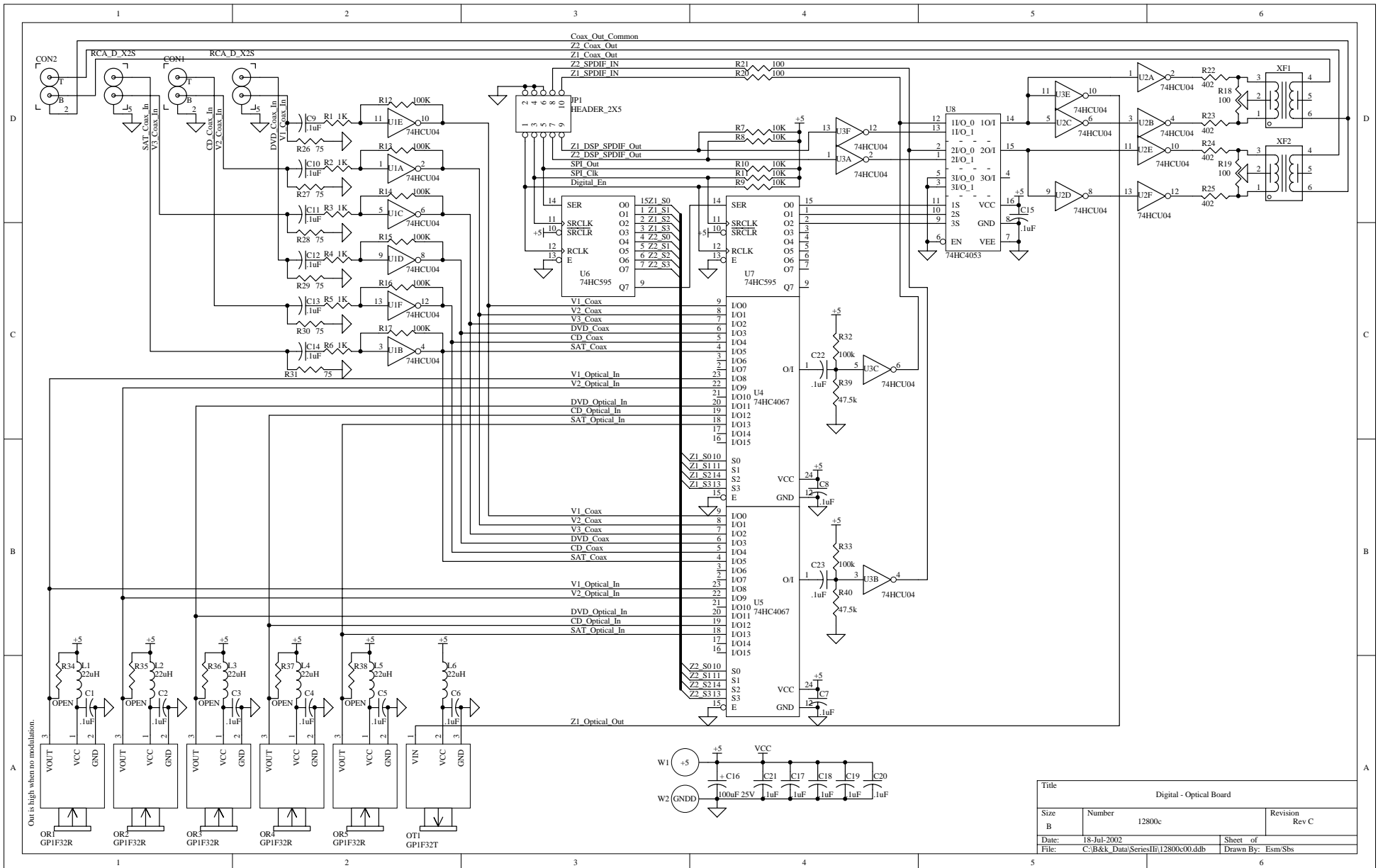
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AVR Series III Tuner		
Size	Number	Revision
A	B&K p/n 13177a0T	A
Date:	18-Jul-2002	Sheet of 6 of 6
File:	C:\B&k_Data\SeriesII\Main_Boards\13177a0T.dwg	Drawn By: ESM/SBS



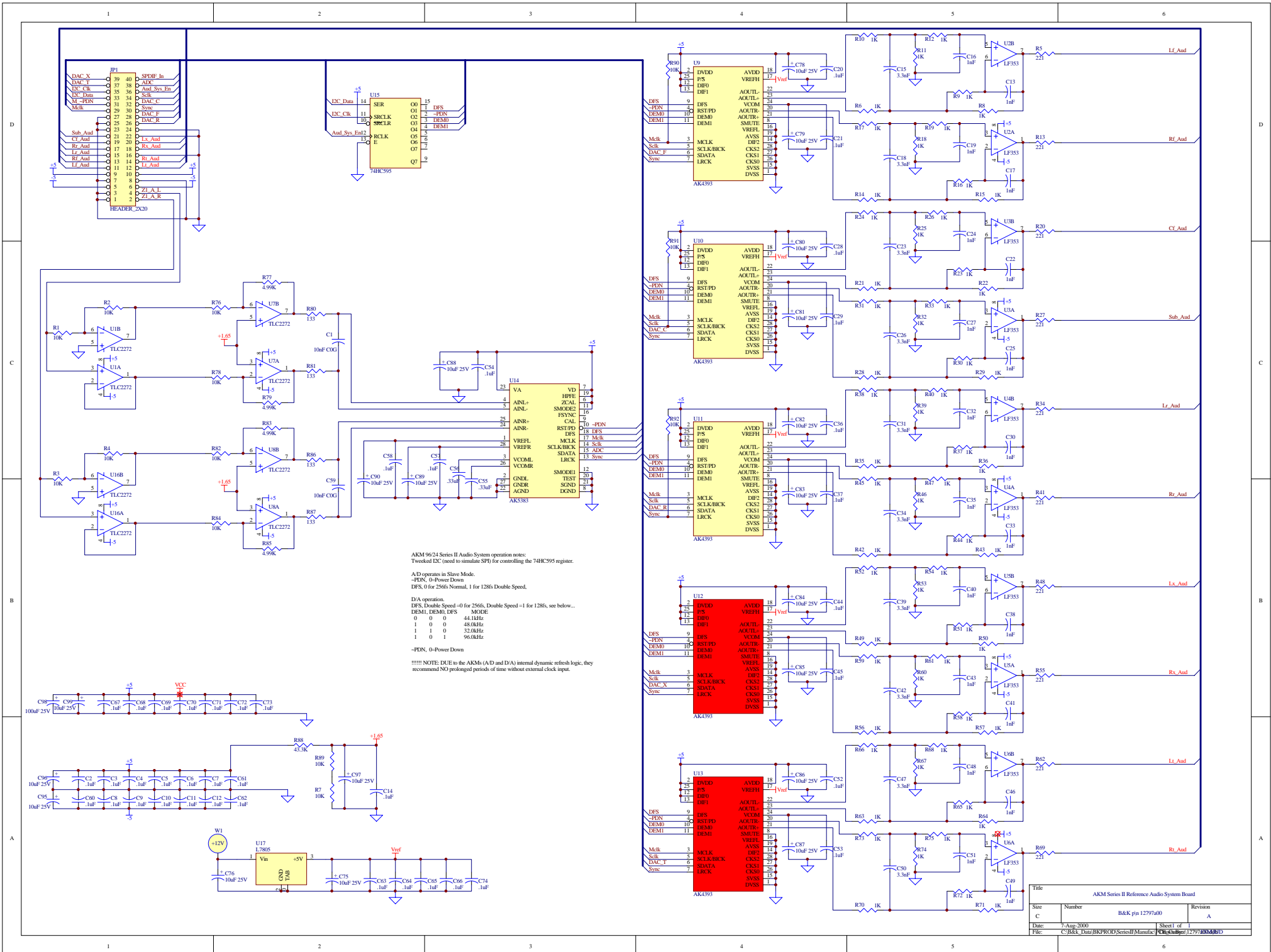
Title			
2 OSD Video Board (Composite)			
Size	Number	13263-0c	Revision
B			-
Date:	18-Jul-2002	Sheet	3 of 3
File:	C:\B&k Data\SeriesIn\13263-00.ddb	Drawn By:	SBS/RJD/ESM



Title			
2 OSD Video Board (S-Video)			
Size	Number	Revision	
B	13263-0s	-	
Date:	18-Jul-2002	Sheet 3 of 3	
File:	C:\B&K_Data\Series\In\13263-00.ddb	Drawn By:	SBS/RJD/ESM



Title			
Digital - Optical Board			
Size	Number	Revision	
B	12800c	Rev C	
Date:	18-Jul-2002	Sheet of	
File:	C:\B&k_Data\Series\In\12800c00.ddb	Drawn By:	Esm/Sbs



AKM 9624 Series II Audio System operation notes:
 Tweaked I2C, need to simulate SPI for controlling the 74HC595 register.

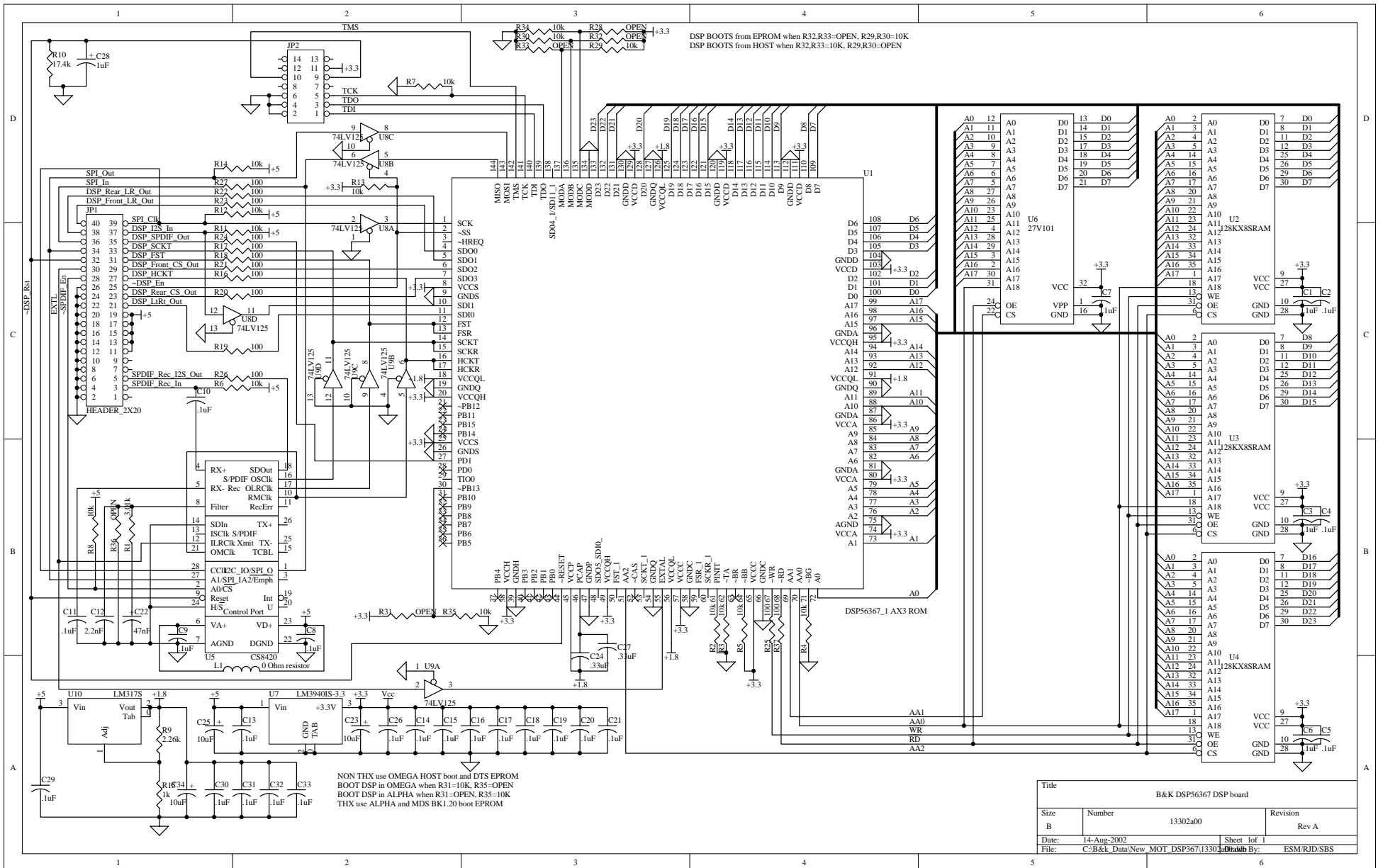
A/D operates in Slave Mode:
 -PDN, 0=Power Down
 DFS, 0 for 256fs Normal, 1 for 128fs Double Speed.

D/A operation:
 DFS, Double Speed=0 for 256fs, Double Speed=1 for 128fs, see below.
 DEM1, DEM0, DFS MODE:
 0 0 0 44.1kHz
 1 0 0 48.0kHz
 1 1 0 32.0kHz
 1 0 1 96.0kHz

-PDN, 0=Power Down

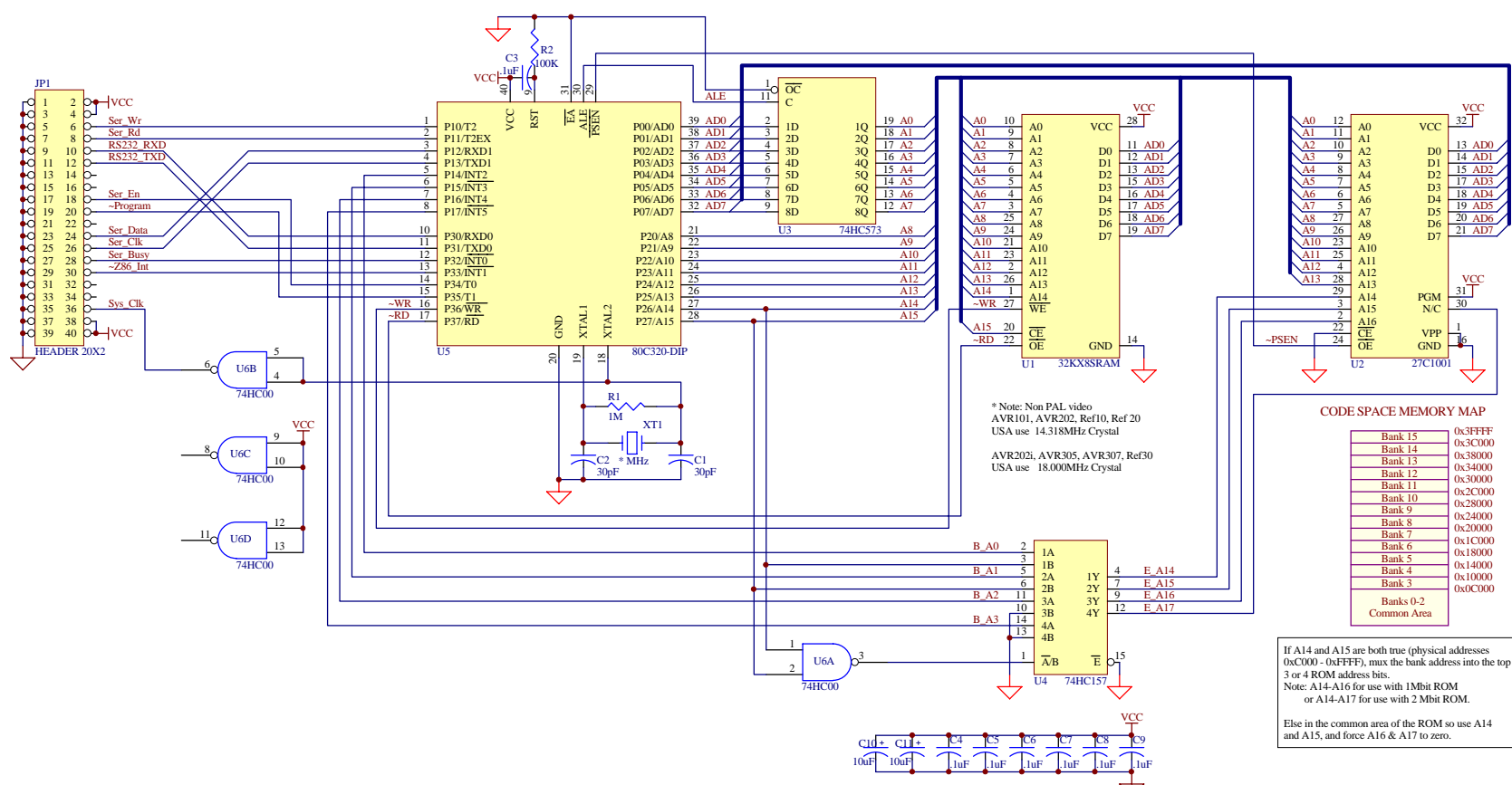
!!!! NOTE: D/A in the AKMs (A/D and D/A) internal dynamic refresh logic, they recommend NO prolonged periods of time without external clock input.

Title			
AKM Series II Reference Audio System Board			
Size	Number	B&K pin	Revision
C		12797a00	A
Date:	7/Aug/2000		Sheet 1 of
File:	C:\B&K_Dsm\BKRPROJ\SeriesII\Main\Ref\AKMRef12797A00A0.D		



NON THX use OMEGA HOST boot and DTS EPROM
 BOOT DSP in OMEGA HOST when R31=10K, R35=OPEN
 BOOT DSP in ALPHA when R31=OPEN, R35=10K
 THX use ALPHA and MDS BK1.20 boot EPROM

Title			
B&K DSP56367 DSP board			
Size	Number	13302400	Revision
B			Rev A
Date:	14-Aug-2002	Sheet	1 of 1
File:	C:\B&K Data\New MOT DSP367\13302400.dtb	Drawn By:	ESM/RJD/SBS

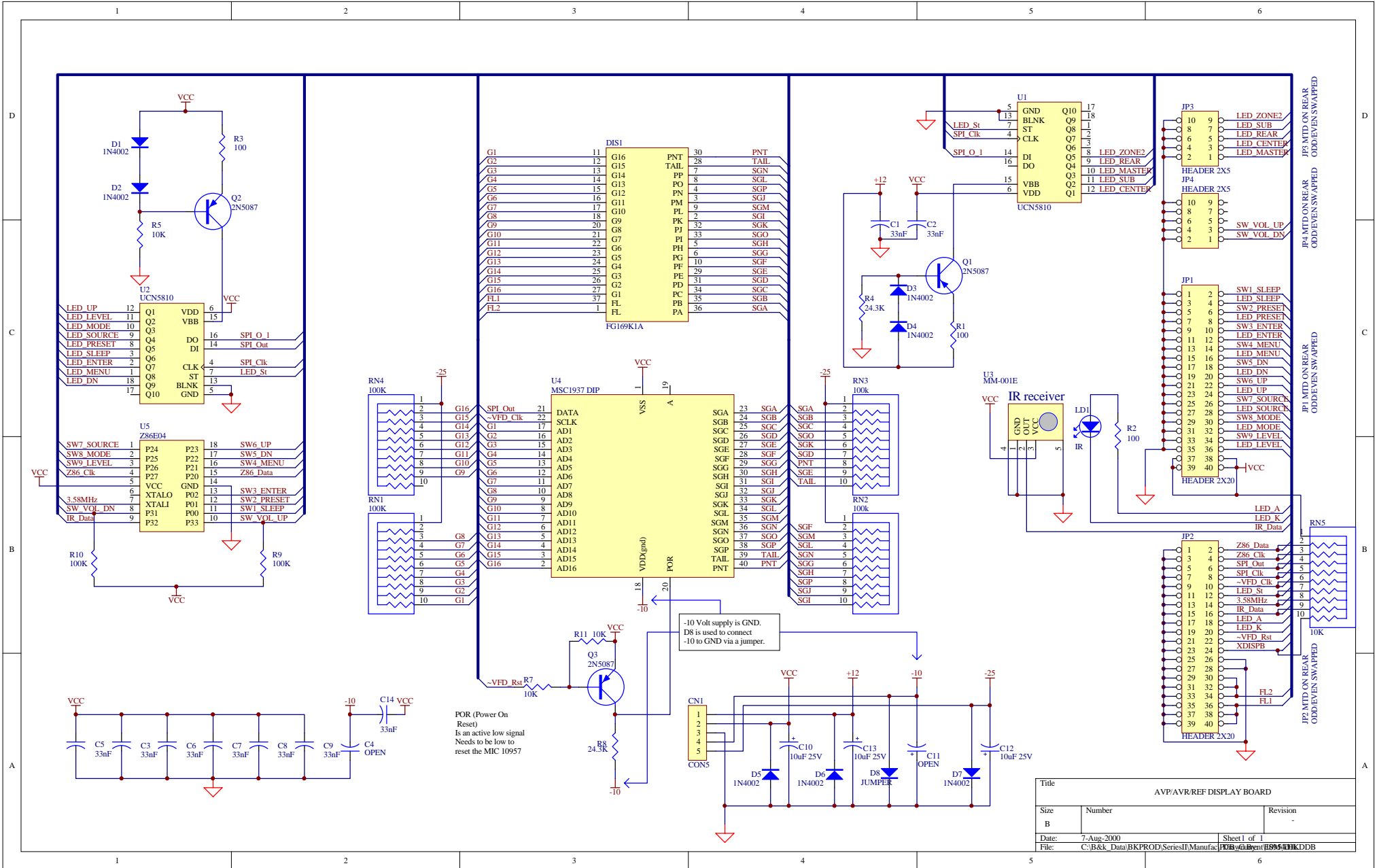


* Note: Non PAL video
 AVR101, AVR202, Ref10, Ref20
 USA use 14.318MHz Crystal
 AVR202i, AVR305, AVR307, Ref30
 USA use 18.000MHz Crystal

CODE SPACE MEMORY MAP

Bank 15	0x3FFFF
Bank 14	0x3C000
Bank 13	0x38000
Bank 12	0x34000
Bank 11	0x30000
Bank 10	0x2C000
Bank 9	0x28000
Bank 8	0x24000
Bank 7	0x20000
Bank 6	0x1C000
Bank 5	0x18000
Bank 4	0x14000
Bank 3	0x10000
Bank 2	0x0C000
Common Area	

If A14 and A15 are both true (physical addresses 0xC000 - 0xFFFF), mux the bank address into the top 3 or 4 ROM address bits.
 Note: A14-A16 for use with 1Mbit ROM or A14-A17 for use with 2 Mbit ROM.
 Else in the common area of the ROM so use A14 and A15, and force A16 & A17 to zero.



Title		
AVP/AVR/REF DISPLAY BOARD		
Size	Number	Revision
B		
Date:	7-Aug-2000	Sheet 1 of 1
File:	C:\B&K_Data\BKPROD\SeriesI\Manufac\PCB\6161\B55611K.DDB	

1

2

3

4

D

D

C

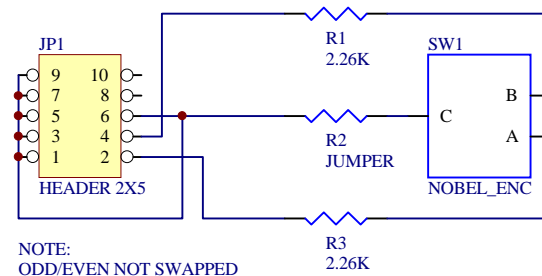
C

B

B

A

A



NOTE:
 ODD/EVEN NOT SWAPPED
 JP1 MTD ON TOP

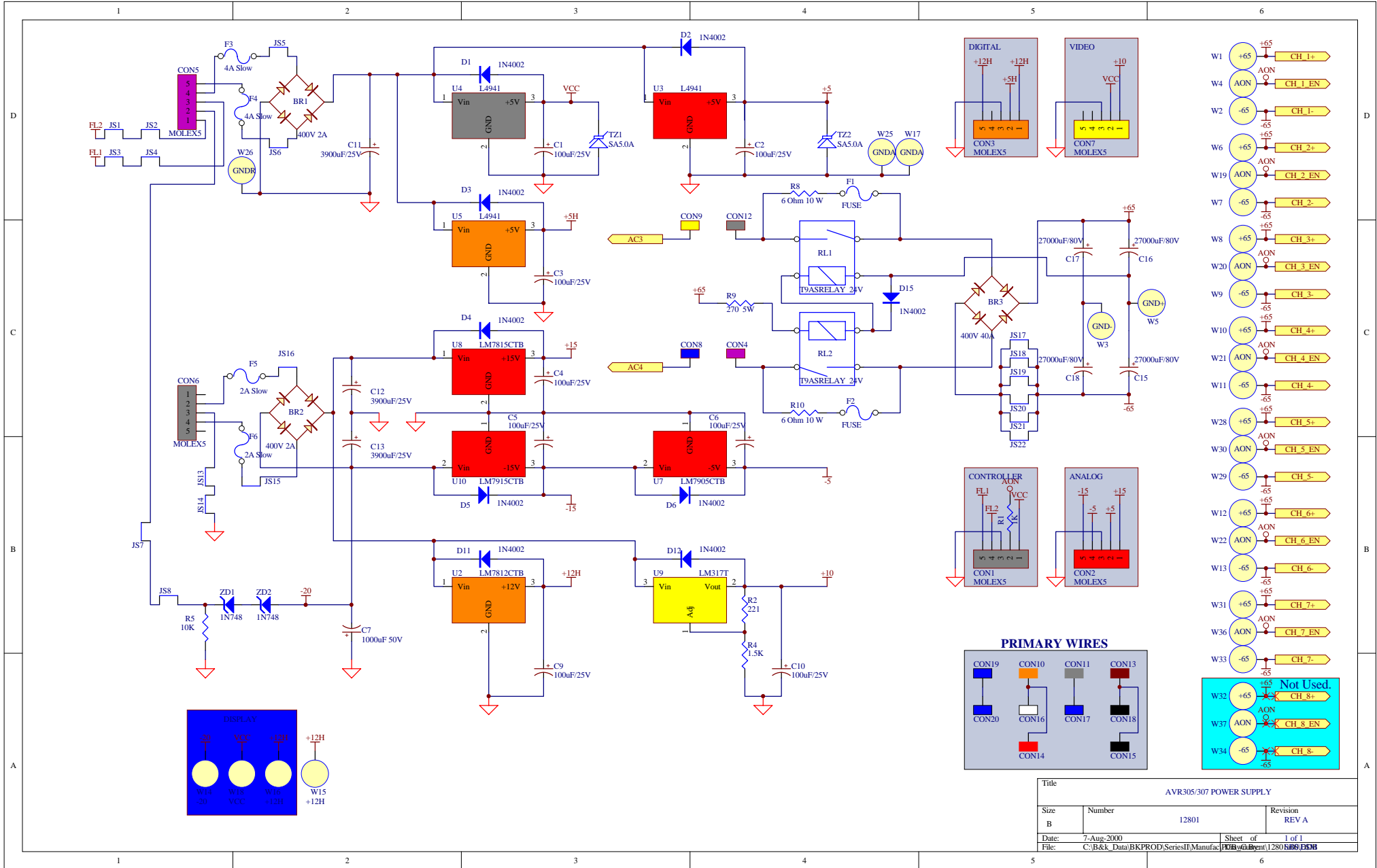
Title		
AVP/AVR/REF/TP ROTARY ENCODER BOARD		
Size	Number	Revision
A		A
Date:	7-Aug-2000	Sheet 1 of 1
File:	C:\B&k_Data\BKPROD\SeriesII\Manufact\PCB\Gubent\12760a00.DDB	

1

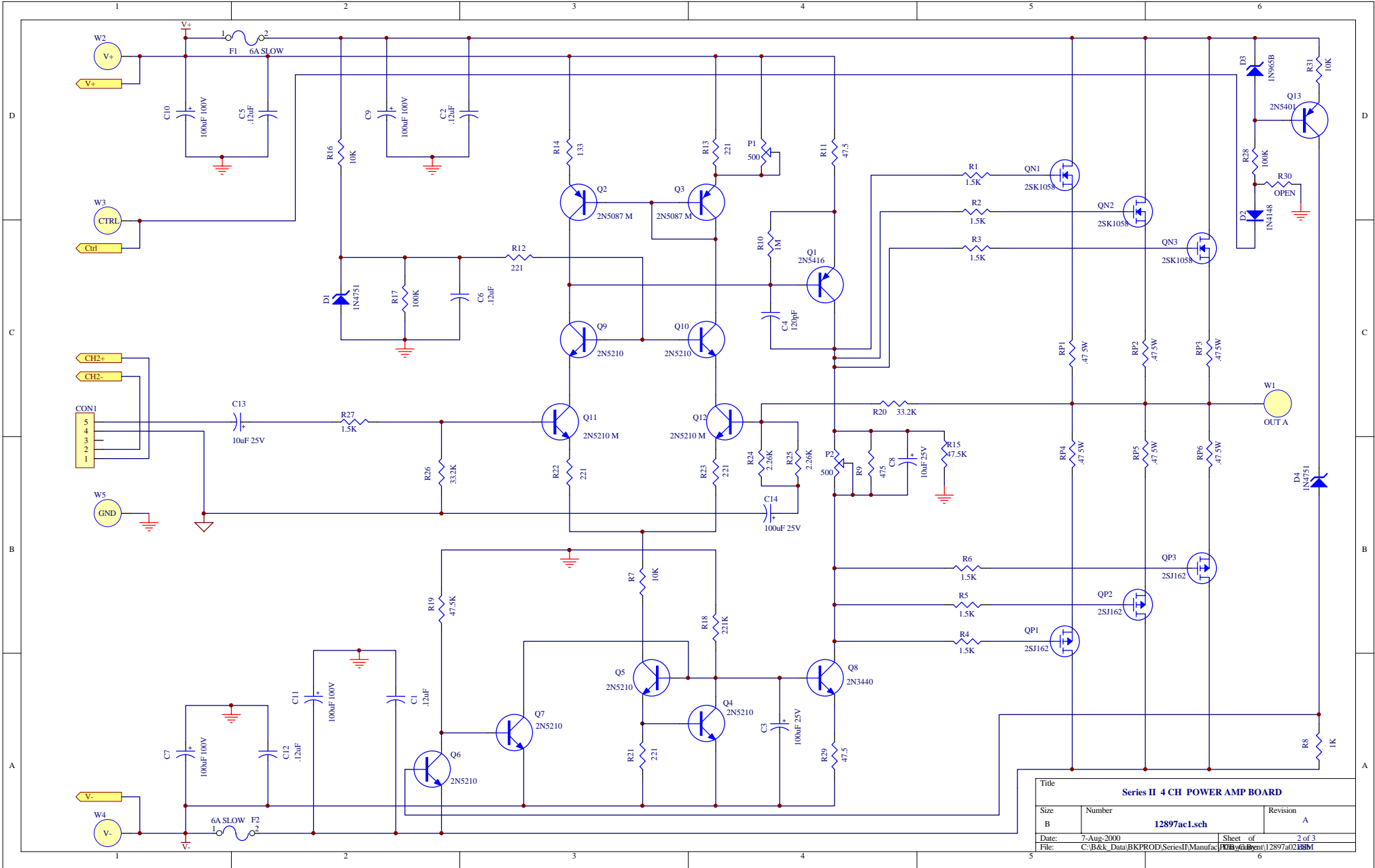
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3

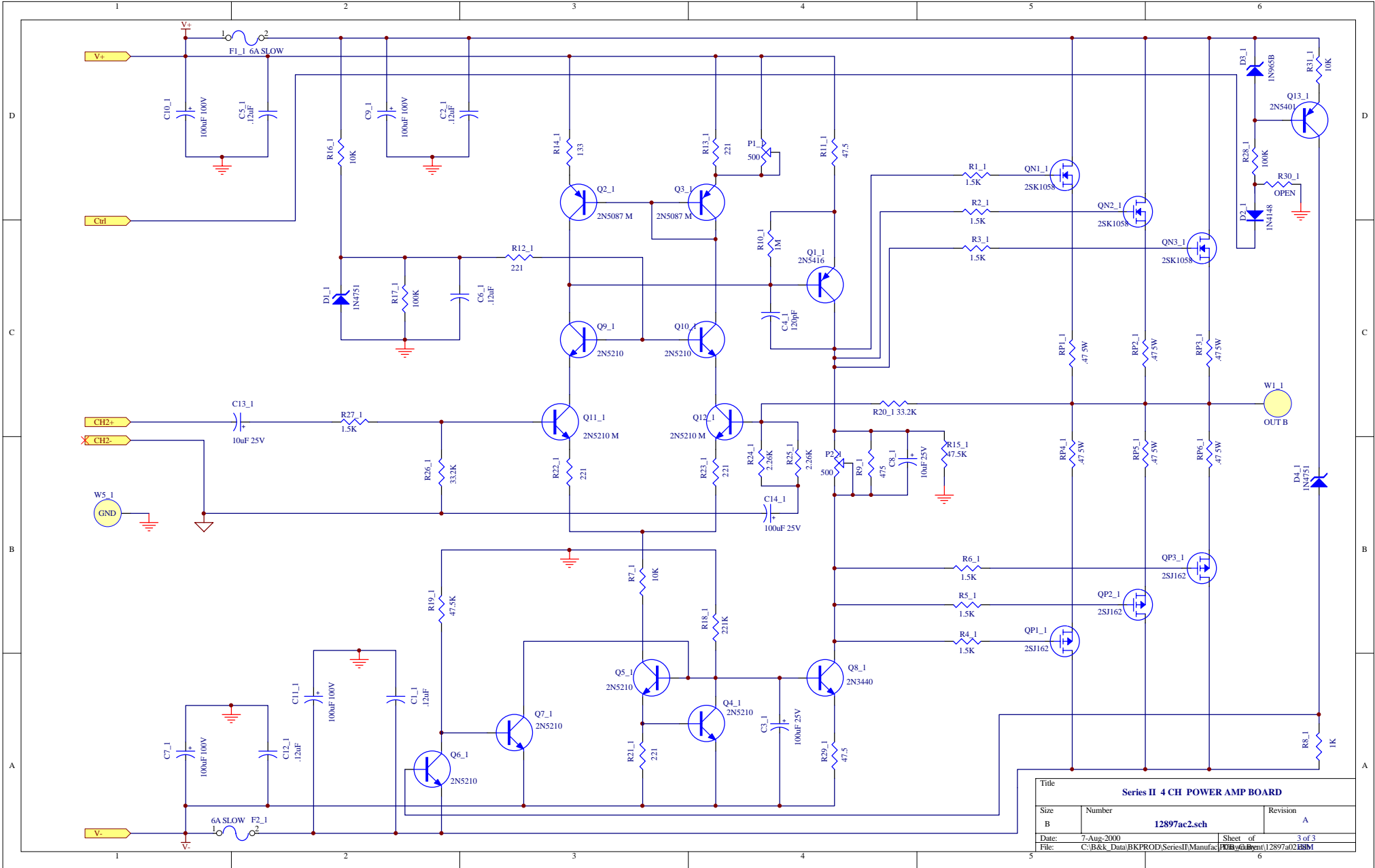
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Title			AVR305:307 POWER SUPPLY
Size	Number	Revision	
B	12801	REV A	
Date:	7-Aug-2000	Sheet of	1 of 1
File:	C:\B&K_Data\BKPROD-Series\F-Manufact\PCB\BkLib\12801\BIB\BIB		



Title		
Series II 4 CH POWER AMP BOARD		
Size	Number	Revision
B	12897ac1.sch	A
Date:	7-Aug-2000	Sheet of 2 of 3
File:	C:\B&K_Data\BKPROD\SeriesII\Manufact\PCB\61.Bent\12897a02.E88M	



Title		
Series II 4 CH POWER AMP BOARD		
Size	Number	Revision
B	12897ac2.sch	A
Date:	7-Aug-2000	Sheet of 3 of 3
File:	C:\B&K_Data\BKPROD\SeriesII\Manufact\PCB\61.Bent\12897a02.188M	