

**B & K**

WE SIMPLY SOUND BETTER.

**AVR 305 / 307**

**SERVICE MANUAL**

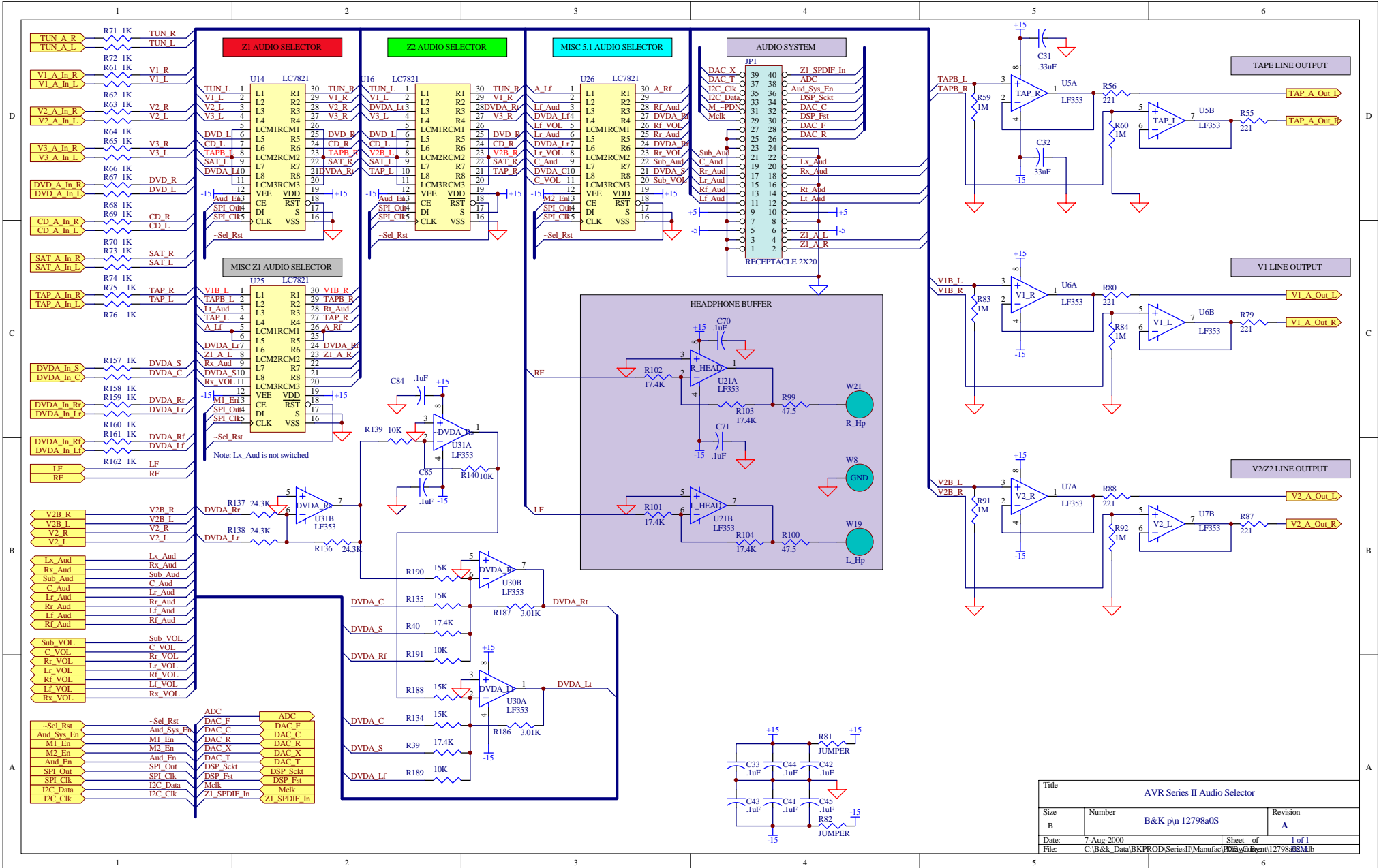
B&K COMPONENTS, LTD.  
2100 Old Union Road  
Buffalo, New York 14227-2725  
U.S.A.

**B & K**

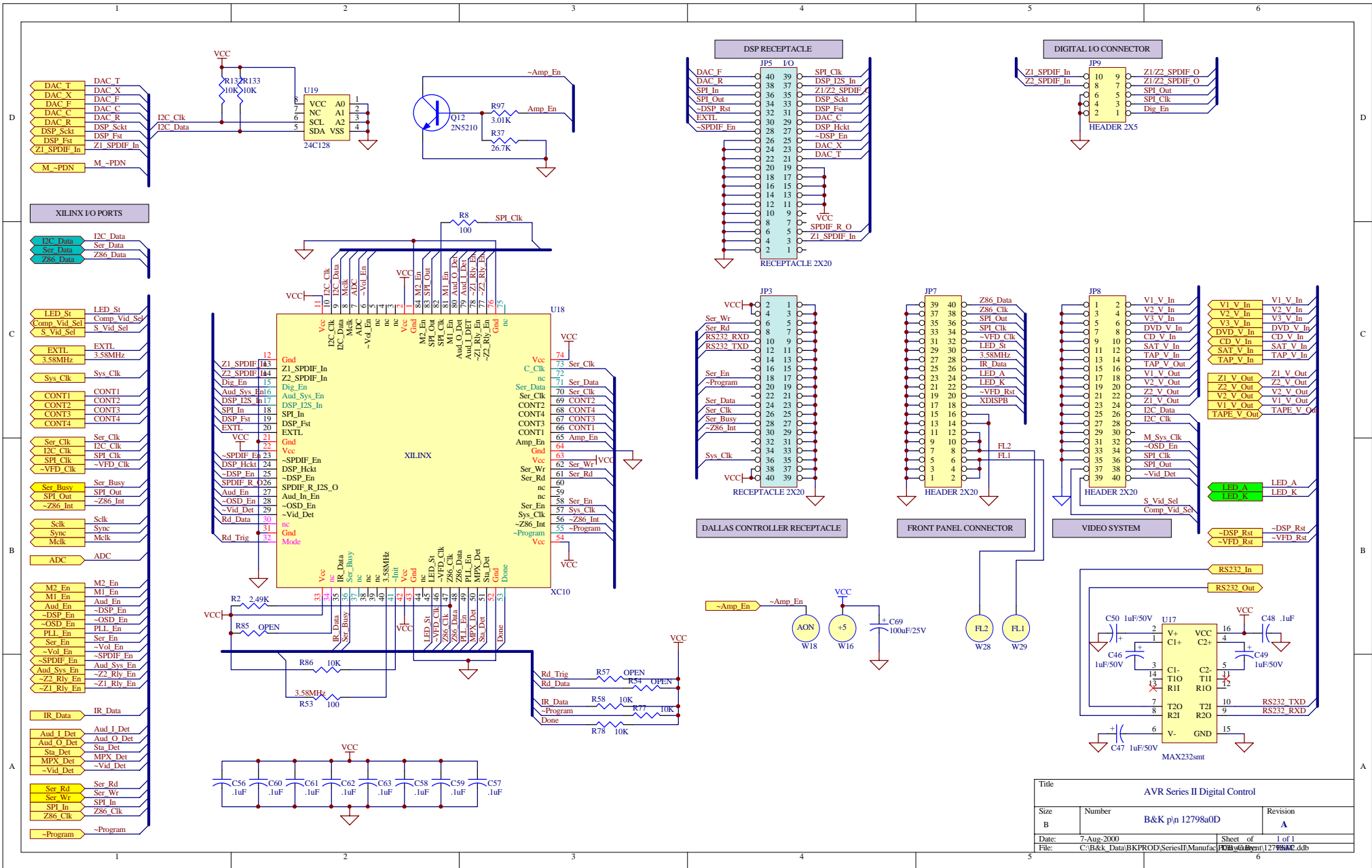
WE SIMPLY SOUND BETTER.

# **Schematics**

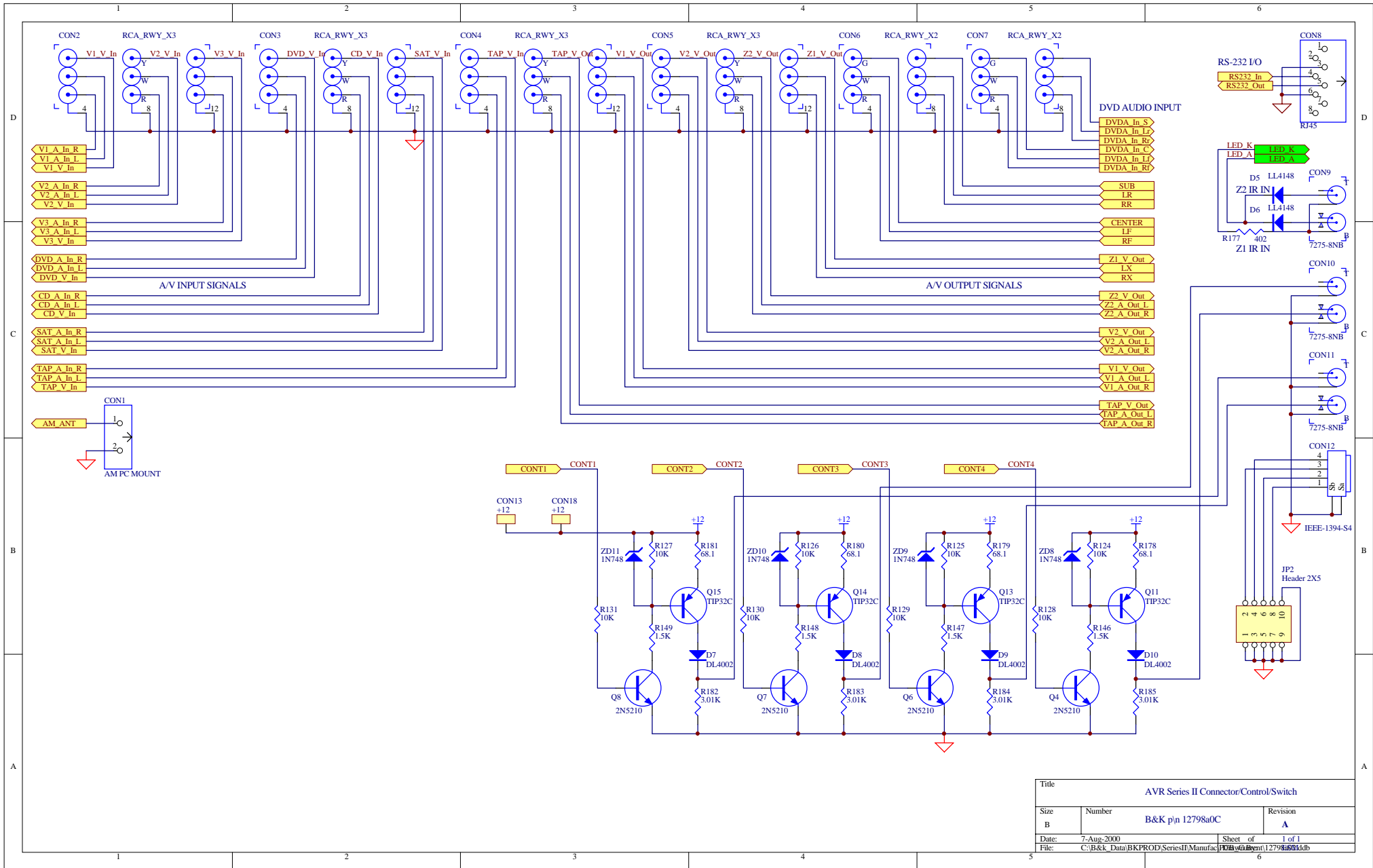
B&K COMPONENTS, LTD.  
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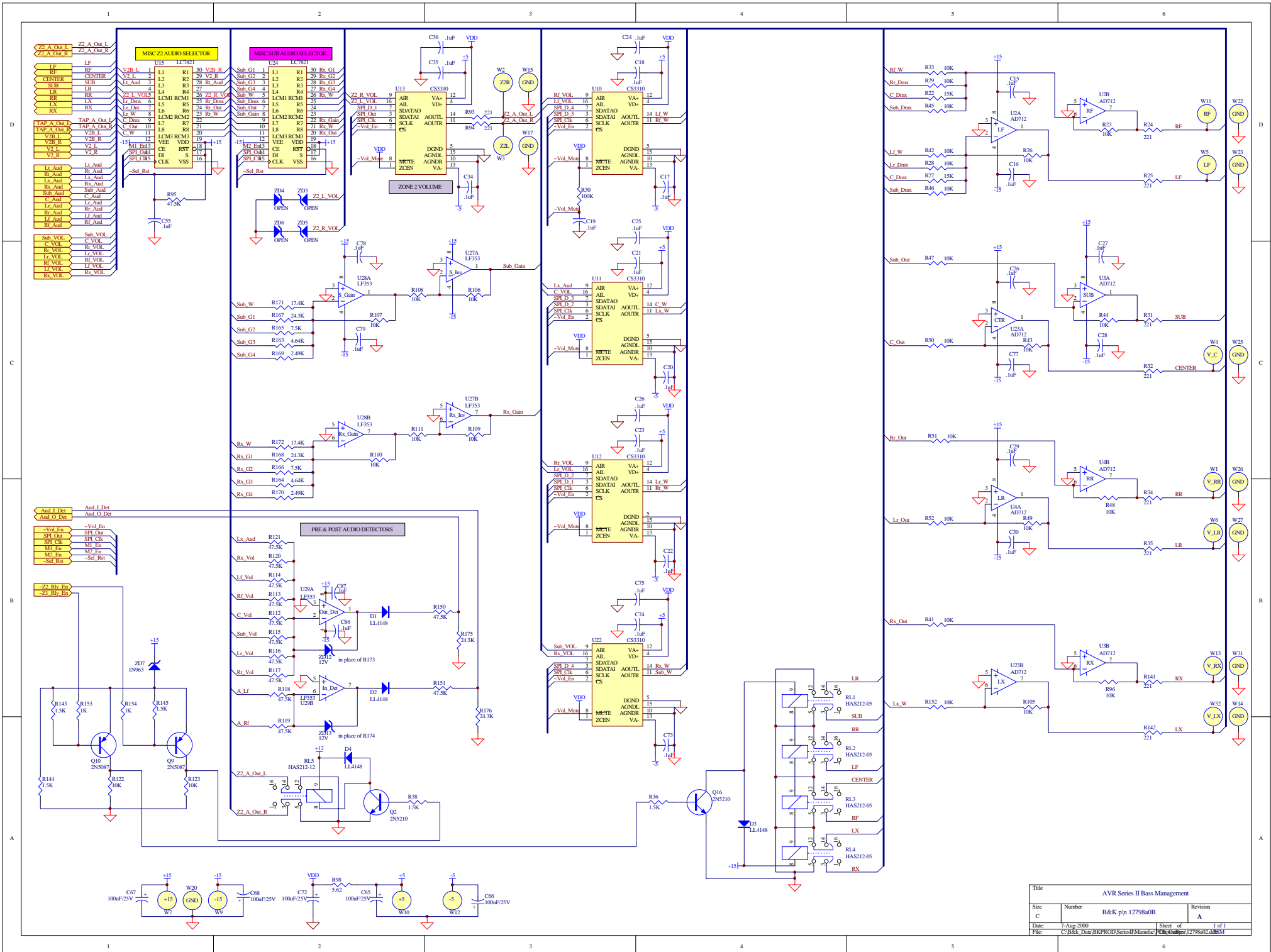
Title		
AVR Series II Audio Selector		
Size	Number	Revision
B	B&K p/n 12798a0S	A
Date:	7-Aug-2000	Sheet of 1 of 1
File:	C:\B&K_Data\BKPROD-SeriesII\Manufact\PCB\61\Bent12798a0S.Mtb	



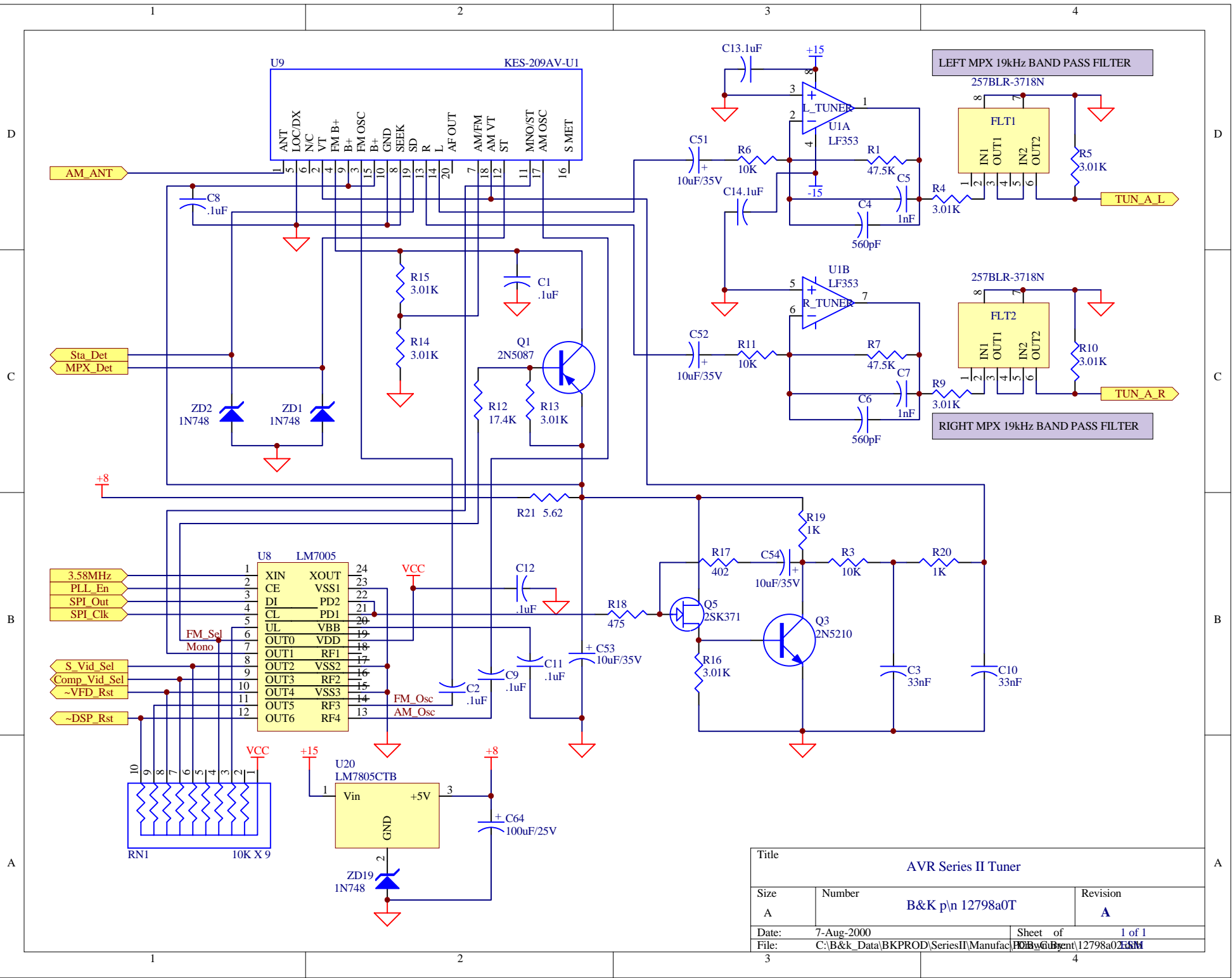
Title			AVR Series II Digital Control		
Size	Number	B&K p/n 12798a0D		Revision	A
B					
Date:	7-Aug-2000	Sheet of	1 of 1		
File:	C:\B&K_Data\BKPROD-SeriesII\Manufact\PCB\G1Bent12798a0D.ddb				



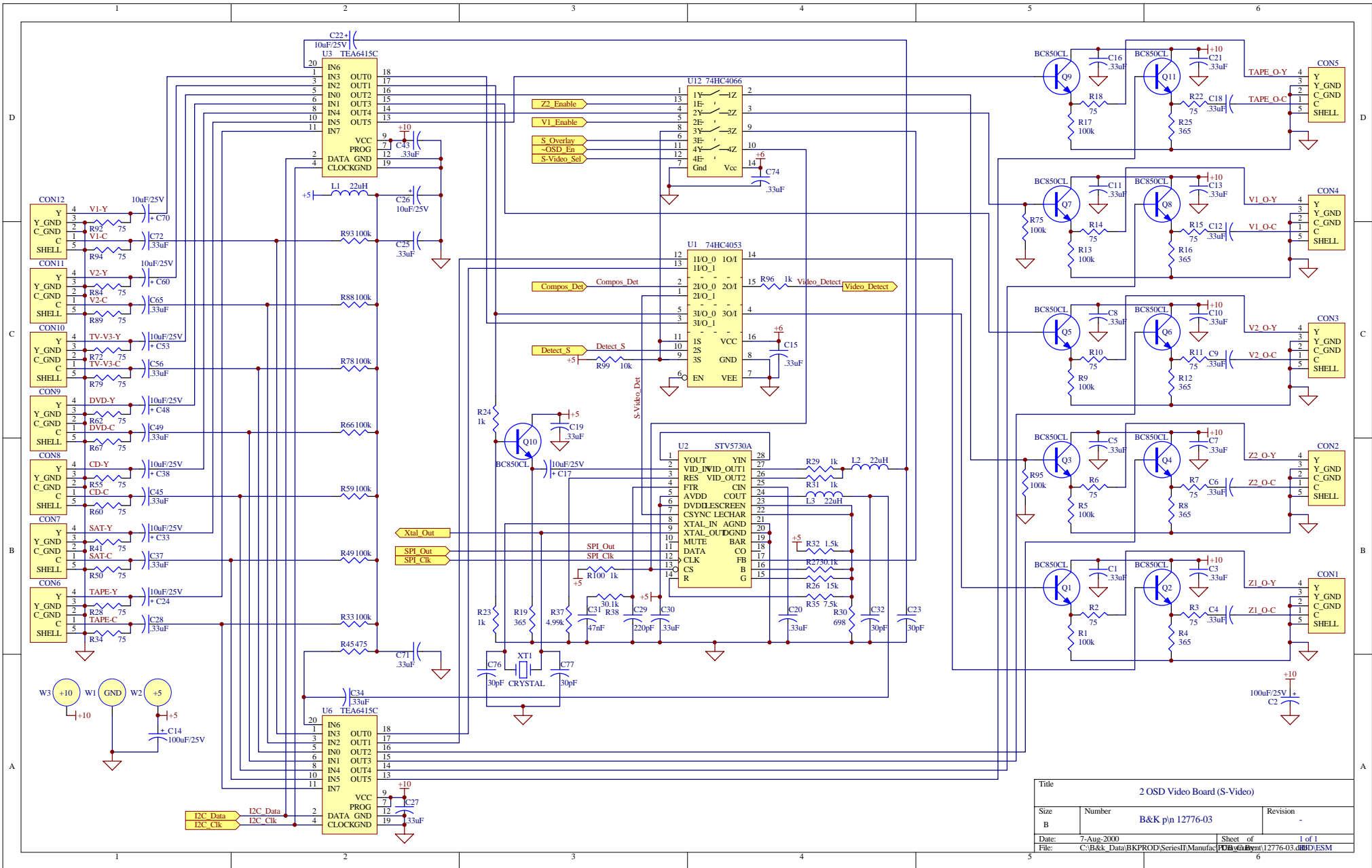
Title			AVR Series II Connector/Control/Switch		
Size	Number	B&K p/n 12798a0C		Revision	A
Date:	7-Aug-2000	Sheet of	1 of 1		
File:	C:\B&K_Data\BKPROD\SeriesII\Manufact\PCB\Bent\12798a0C.ddb				



Title			
AVR Series II Bass Management			
Size	Number	Revision	Revision
C	B&K p/n 12798/0B	A	
Date:	7/Aug/2000	Sheet:	1 of 1
File:	C:\B&K_13m\BKPROJ\SeriesII\Manufact\B&K13m12798/02_3BMS1	Drawn:	

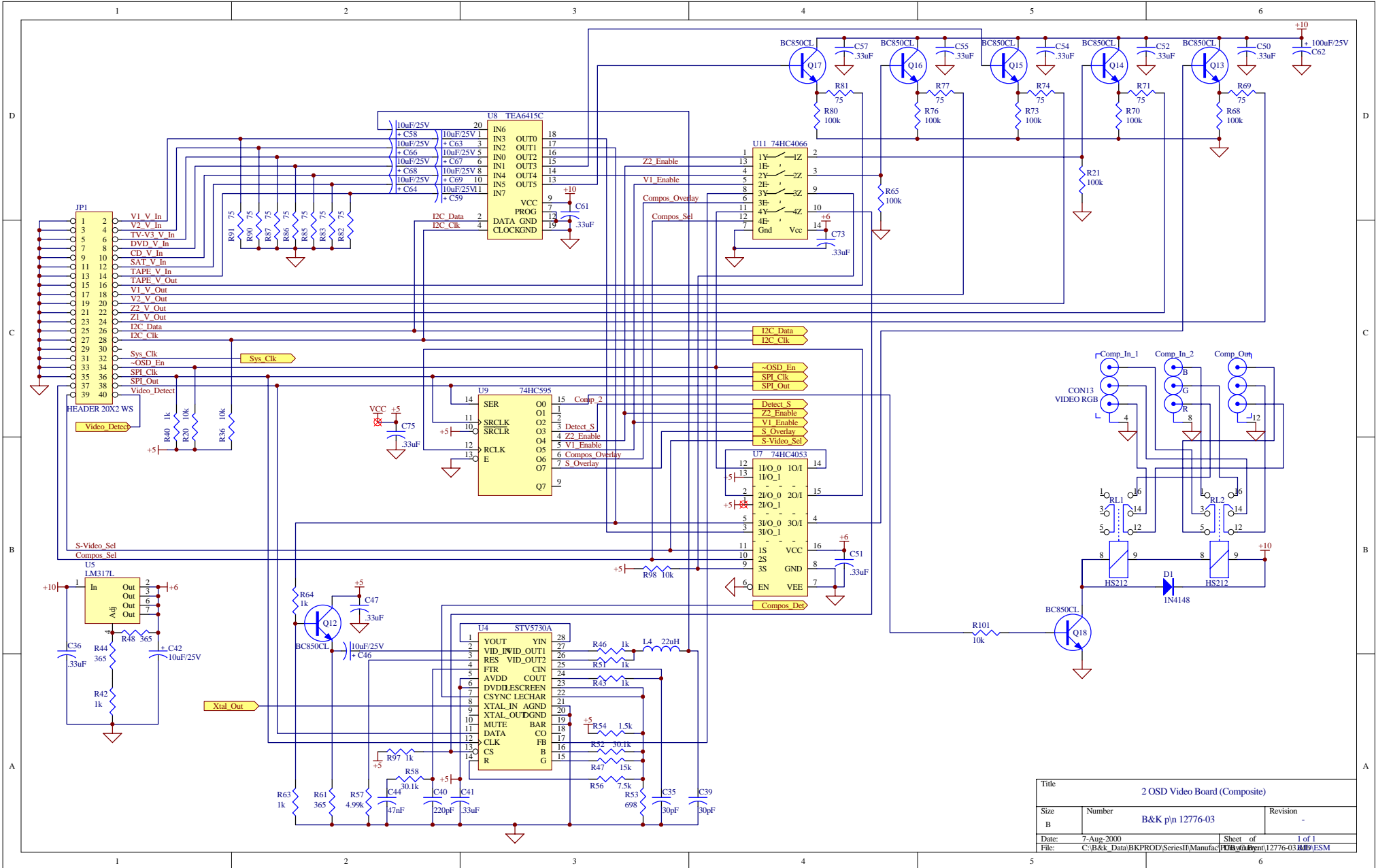


Title			AVR Series II Tuner		
Size	Number	B&K p/n 12798a0T		Revision	A
Date:	7-Aug-2000	Sheet of	1 of 1		
File:	C:\B&k_Data\BKPROD\SeriesII\Manufact\B&K\12798a0T.dsn				

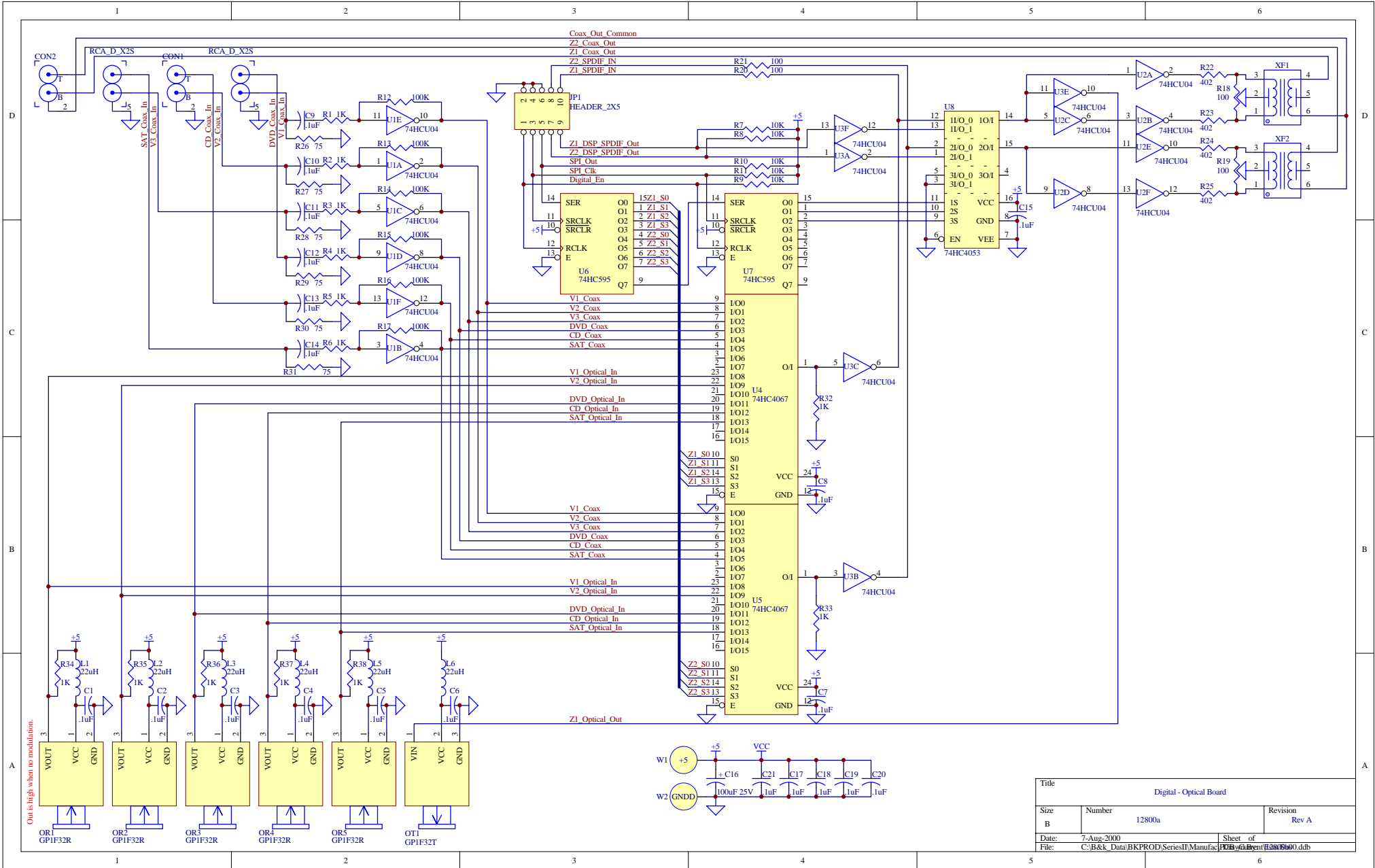


Title		2 OSD Video Board (S-Video)	
Size	Number	B&K p/n 12776-03	Revision -
Date:	7-Aug-2000	Sheet of	1 of 1
File:	C:\B&K_Data\BKPROD\SeriesI\Manufact\PCB\12776-03.DBD	File:	12776-03.DBD



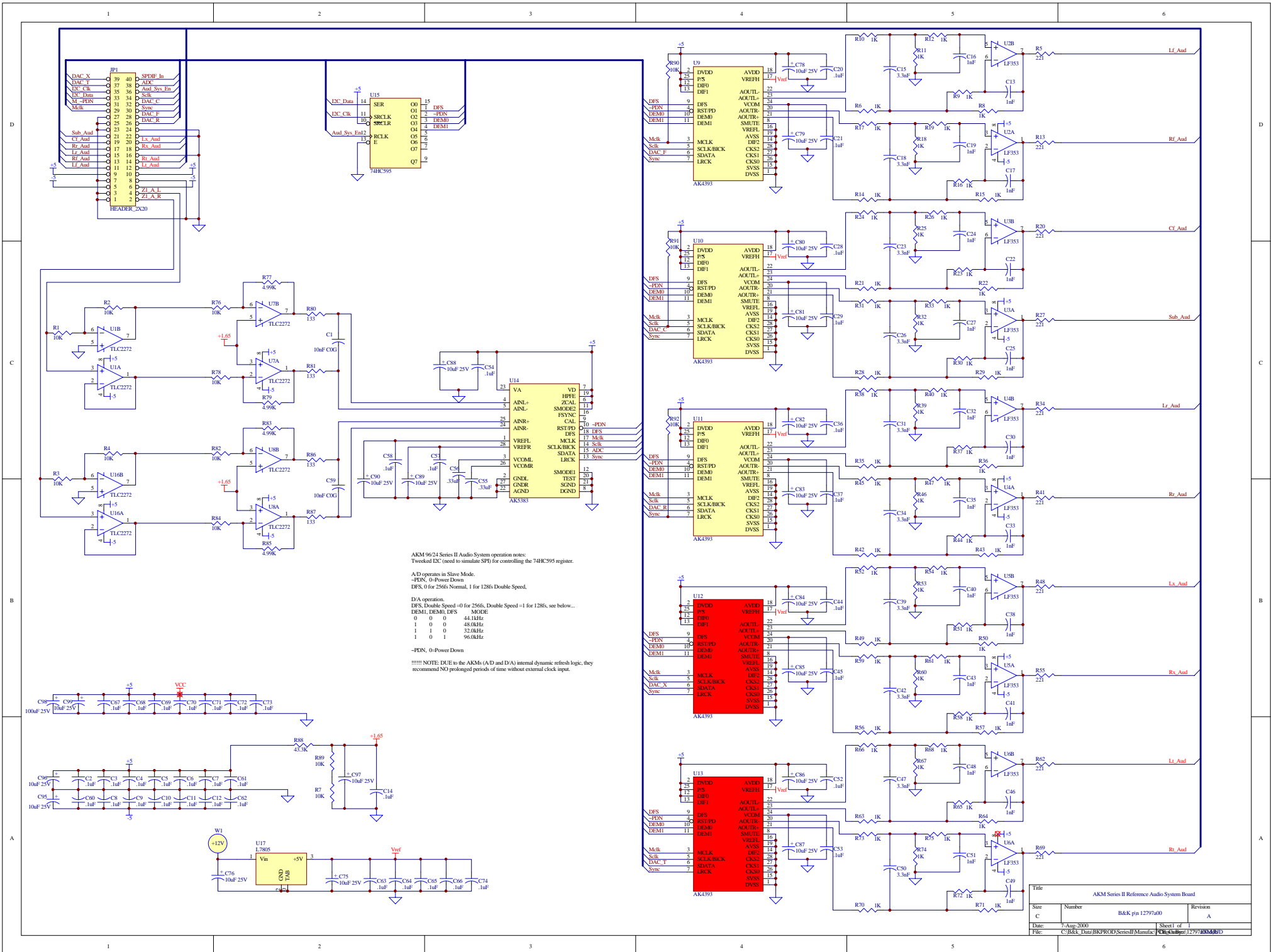


Title			2 OSD Video Board (Composite)			
Size	B	Number	B&K p/n 12776-03		Revision	-
Date:	7-Aug-2000	Sheet of	1 of 1			
File:	C:\B&K_Data\BKPROD\SeriesI\Manufact\PCB\Layout\12776-03\12776-03.M9	ESM				



Title		
Digital - Optical Board		
Size	Number	Revision
B	12800a	Rev A
Date:	7-Aug-2000	Sheet of
File:	C:\B&K_Data\BKPROD\SeriesI\Manufac\PCB\G1\Bent\13800000.ddb	

Out is high when no modulation.



AKM 9624 Series II Audio System operation notes:  
 Tweaked DC, need to simulate SP0 for controlling the 74HC955 register.

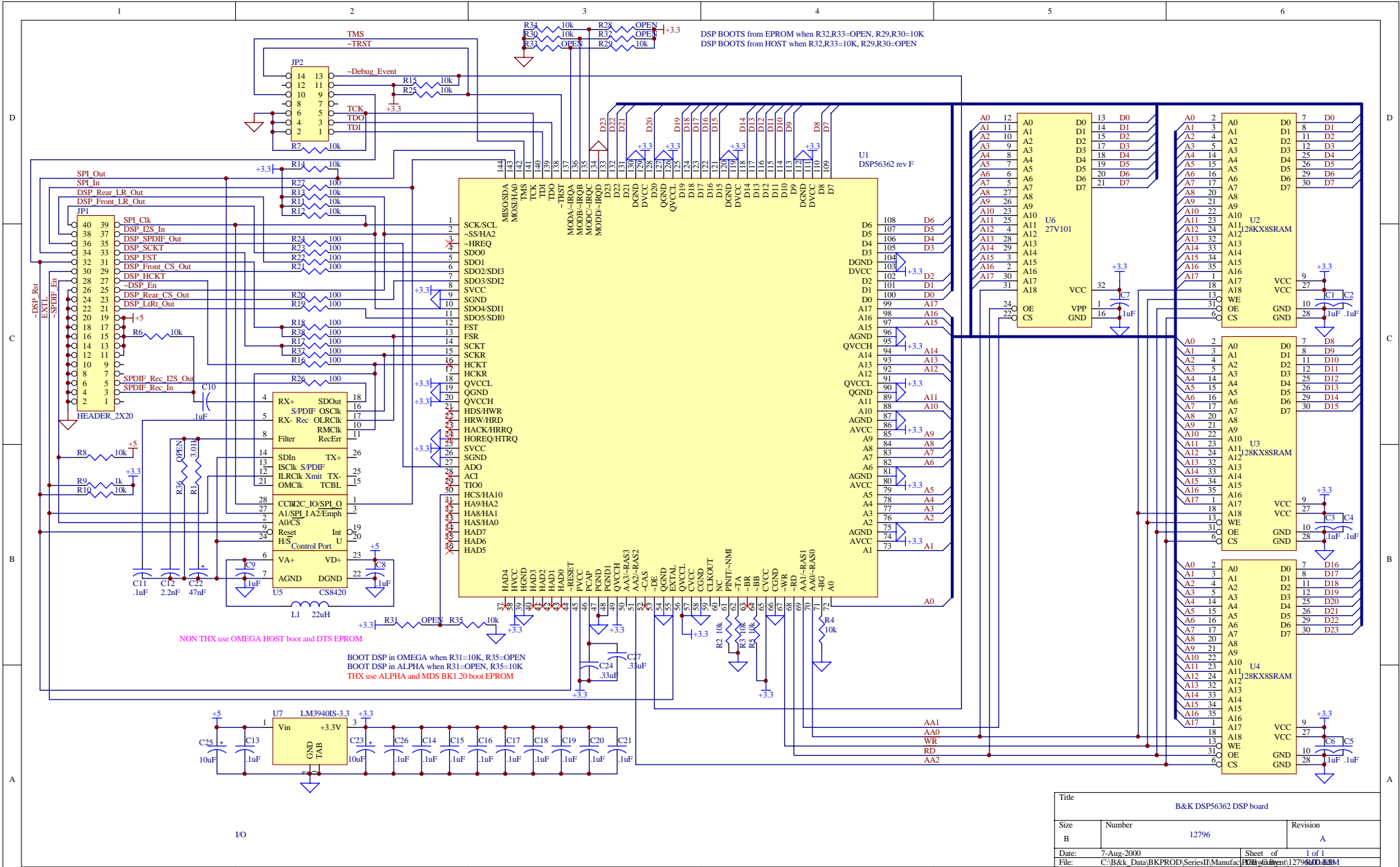
A/D operation in Slave Mode:  
 -PDN, 0=Power Down  
 DFS, 0 for 256fs Normal, 1 for 128fs Double Speed.

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

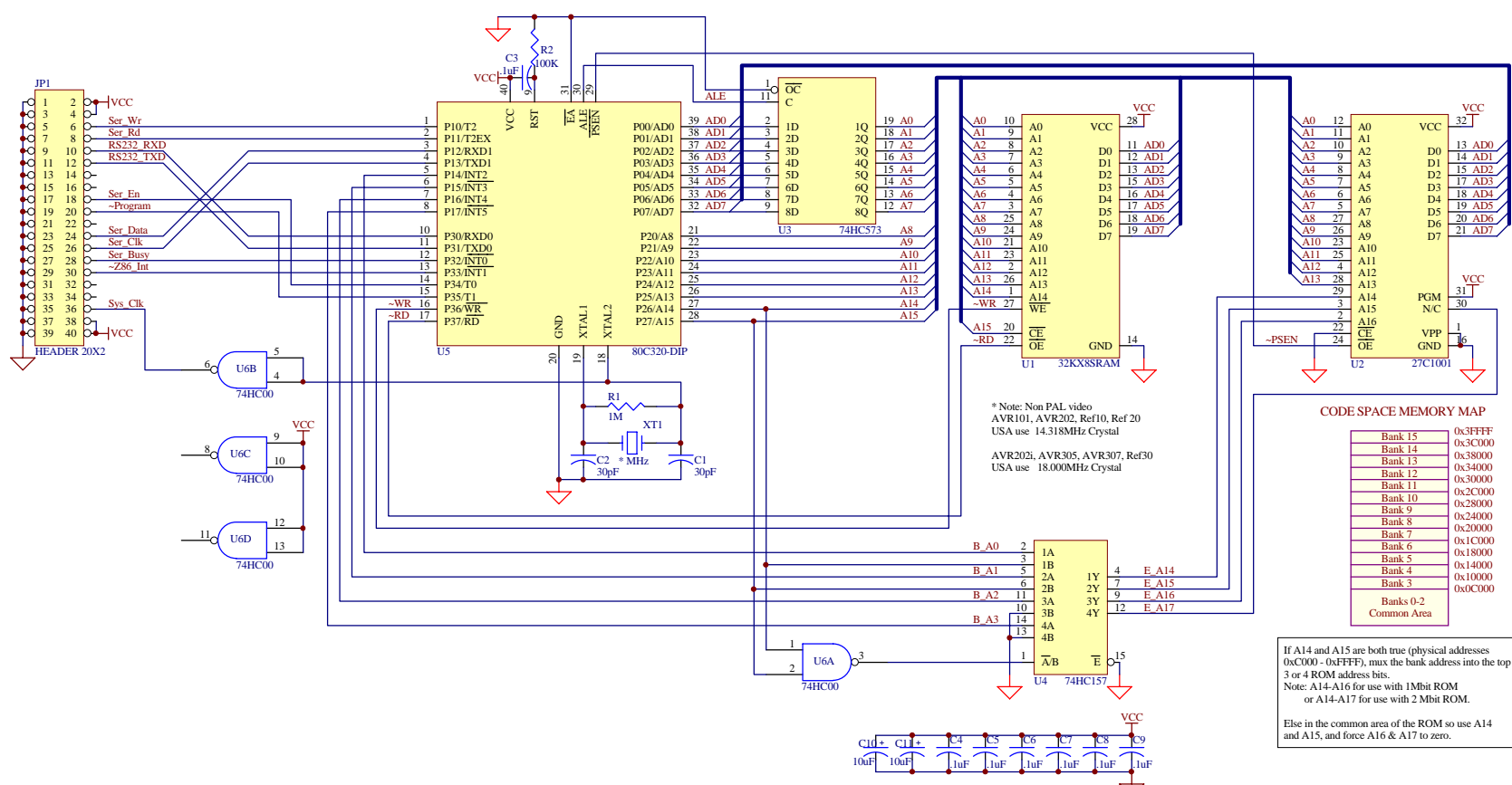
-PDN, 0=Power Down

!!!! NOTE: D/AE 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 12797aD	Revision
C			A
Date:	7/Aug/2000	Sheet 1 of	
File:	C:\B&K_Dsm\BKP\PROJ\SeriesII\Main\B&K_Board\12797aD.D		



Title		
B&K DSP56362 DSP board		
Size	Number	Revision
B	12796	A
Date:	7-Aug-2000	Sheet of 1 of 1
File:	C:\B&K_Data\BKPROD\SeriesI\Manufact\PCB\B&K\Bent\12796\B&K.DESM	

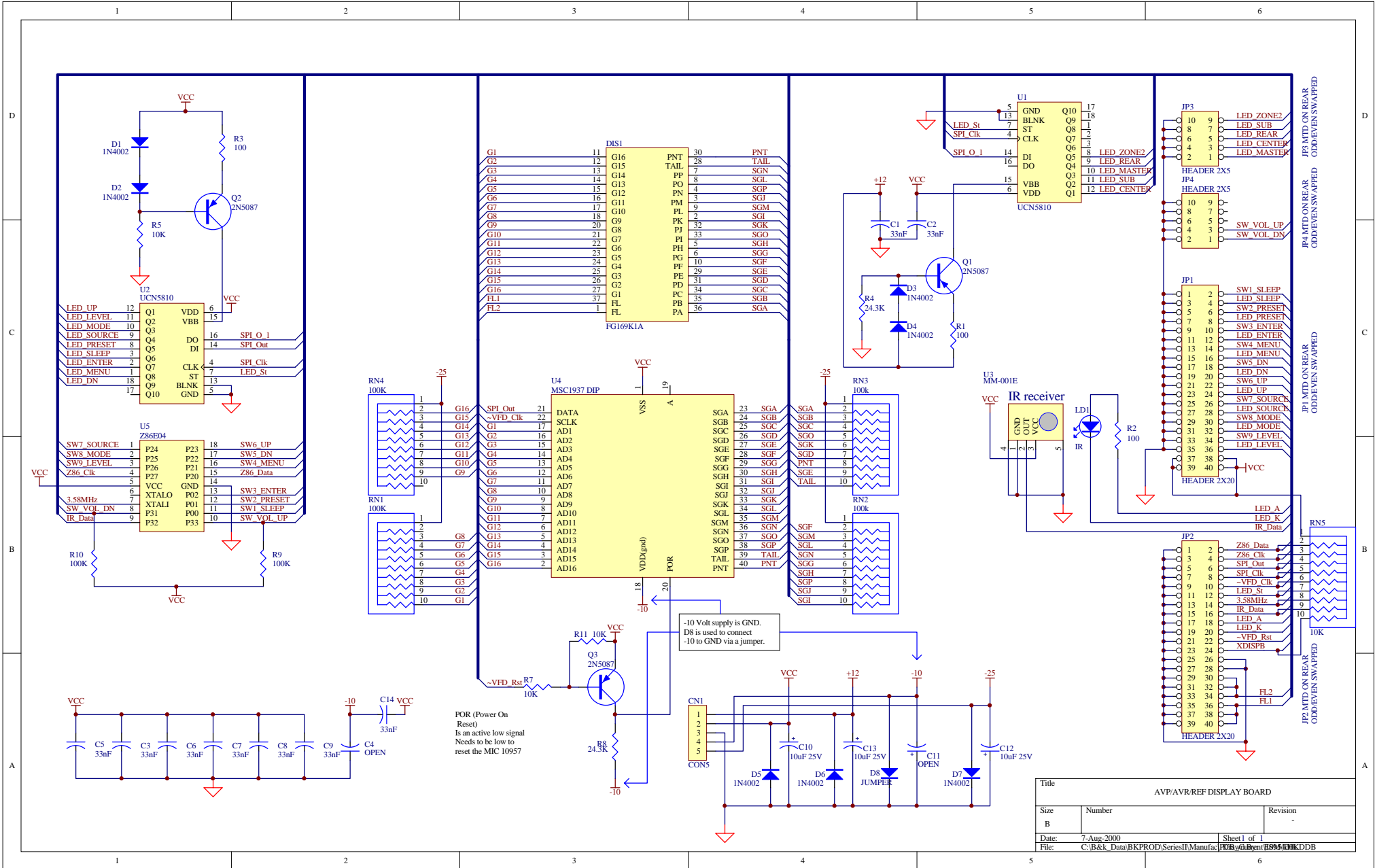


\* Note: Non PAL video  
 AVR101, AVR202, Ref10, Ref20  
 USA use 14.318MHz Crystal  
 AVR202i, AVR305, AVR307, Ref30  
 USA use 18.000MHz Crystal

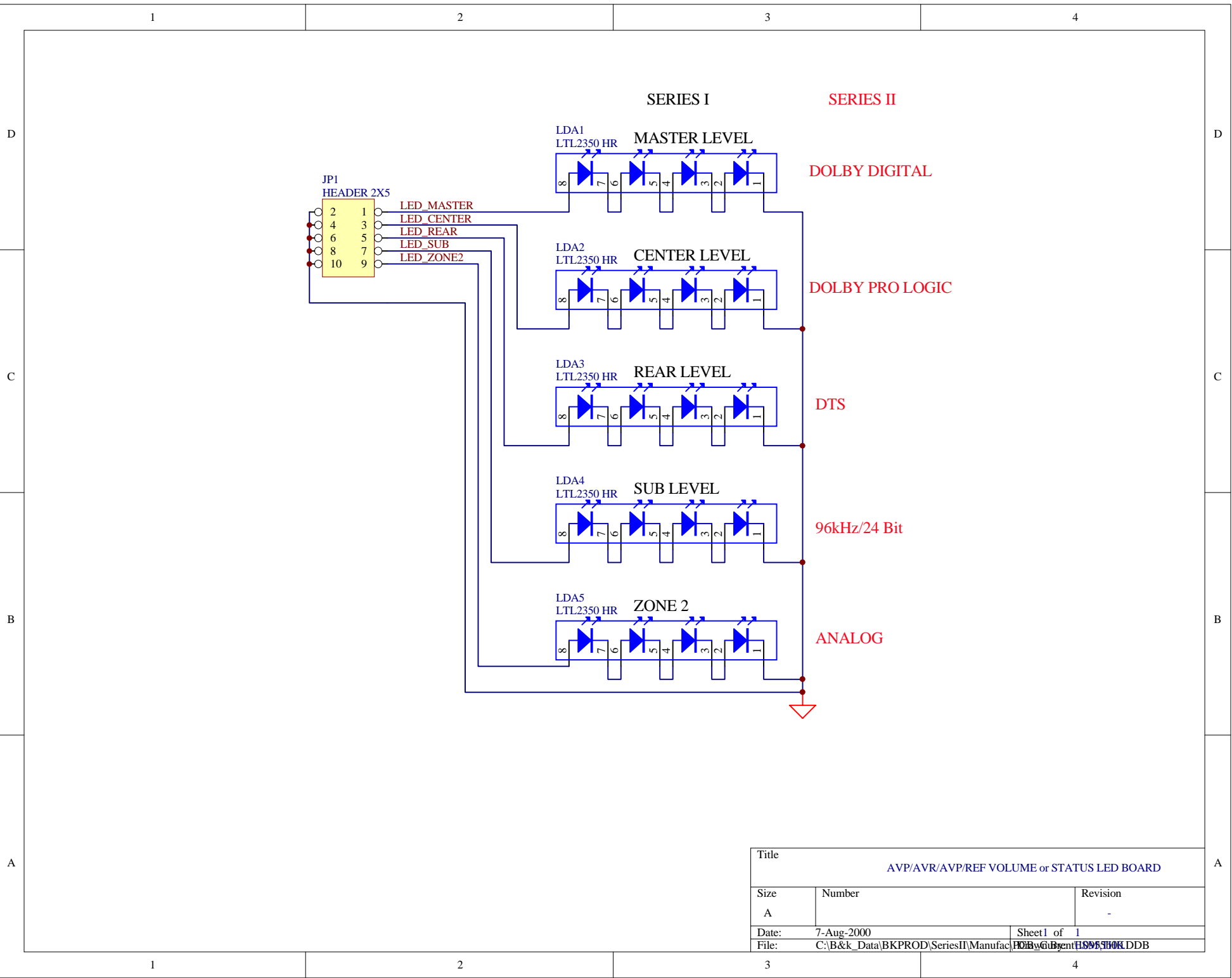
**CODE SPACE MEMORY MAP**

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\Series I\Manufact\PCB\6161\BSP6161K.DDB	



Title		
AVP/AVR/AVP/REF VOLUME or STATUS LED BOARD		
Size	Number	Revision
A		-
Date:	7-Aug-2000	Sheet 1 of 1
File:	C:\B&k_Data\BKPROD\SeriesI\Manufact\1095301.DDB	

1

2

3

4

D

D

C

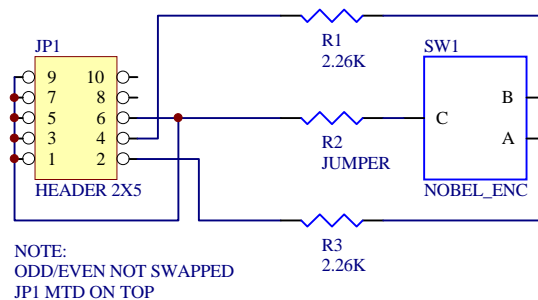
C

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\B&k\Bent12760a00.DDB	

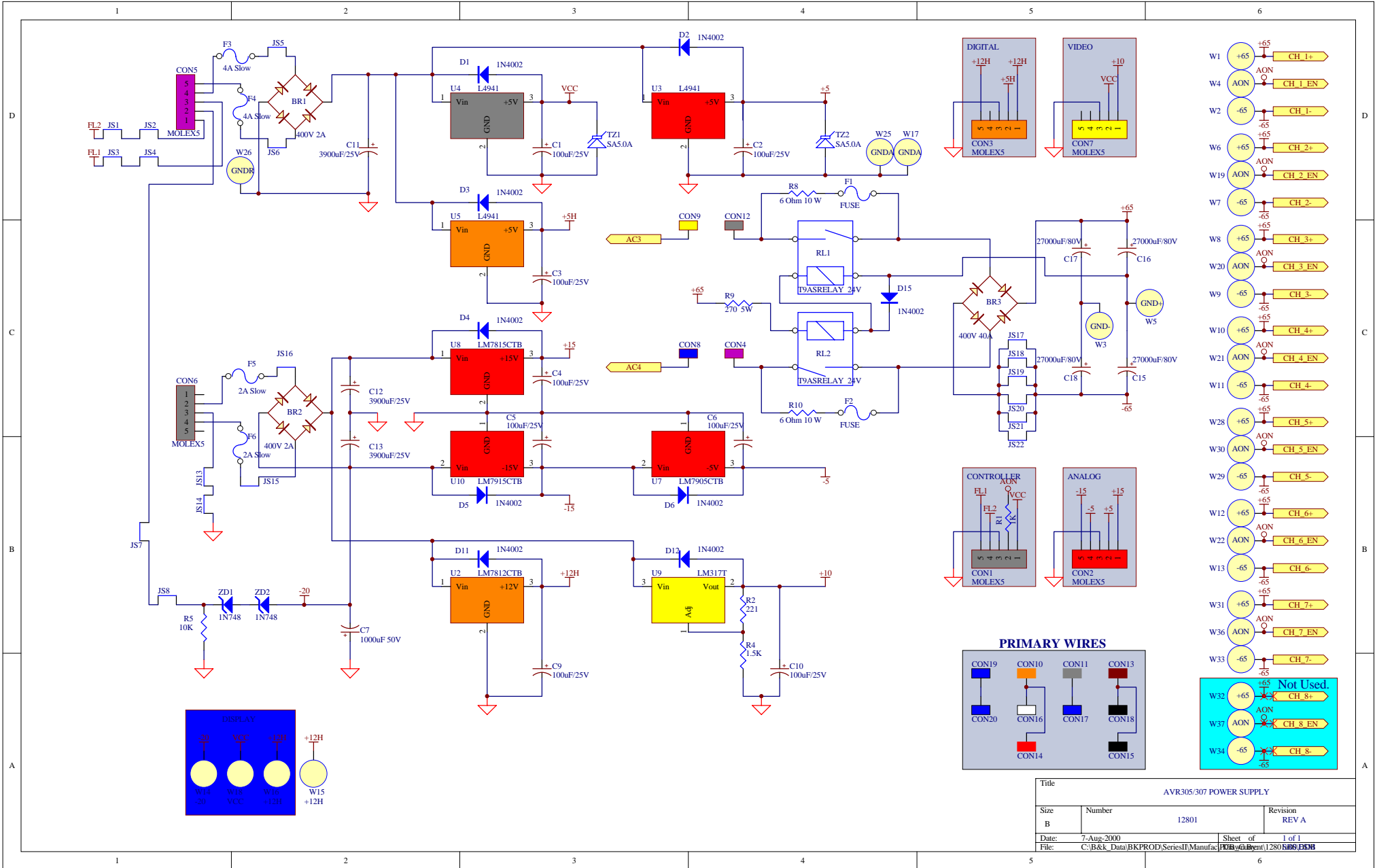
1

2

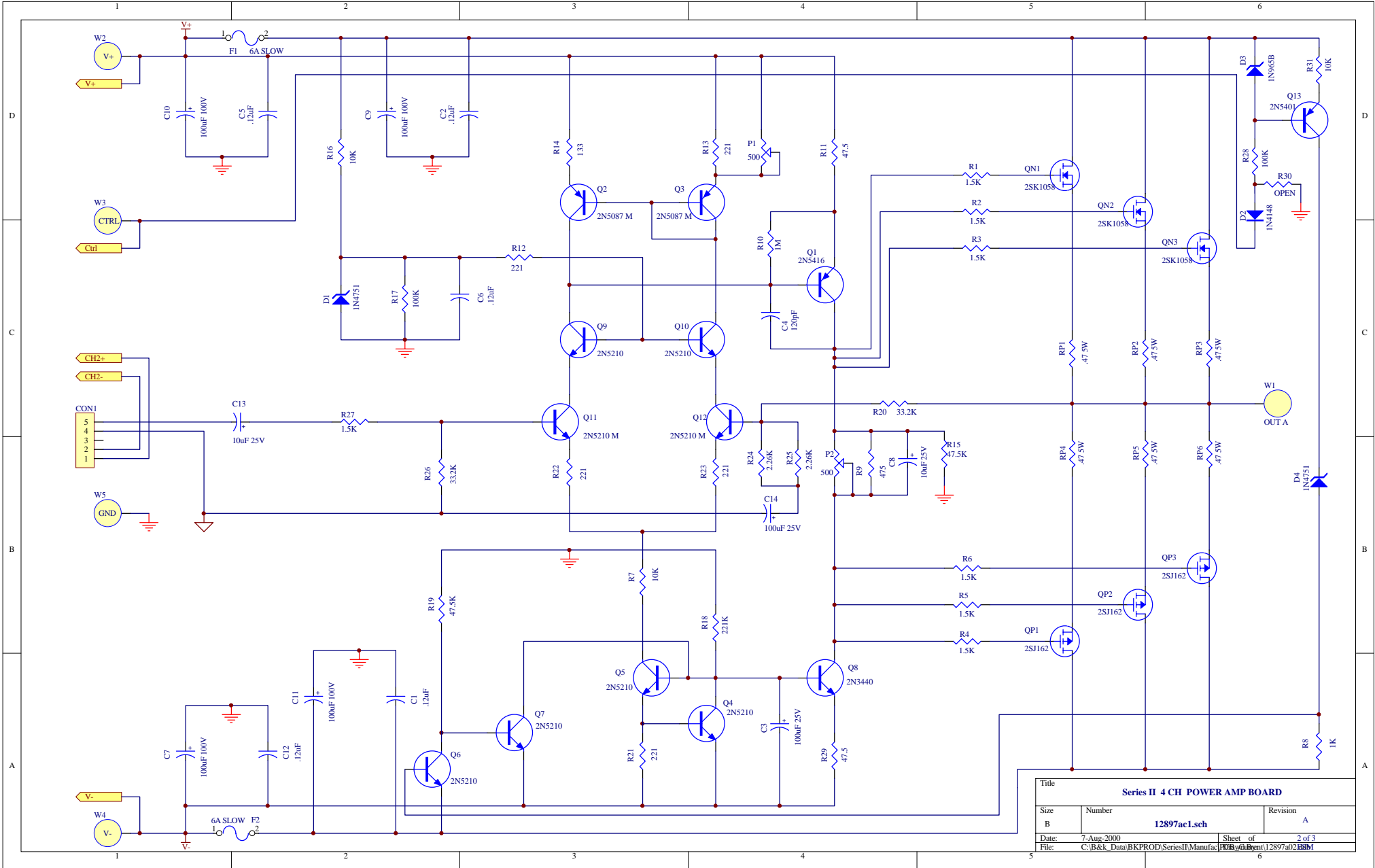
3

4

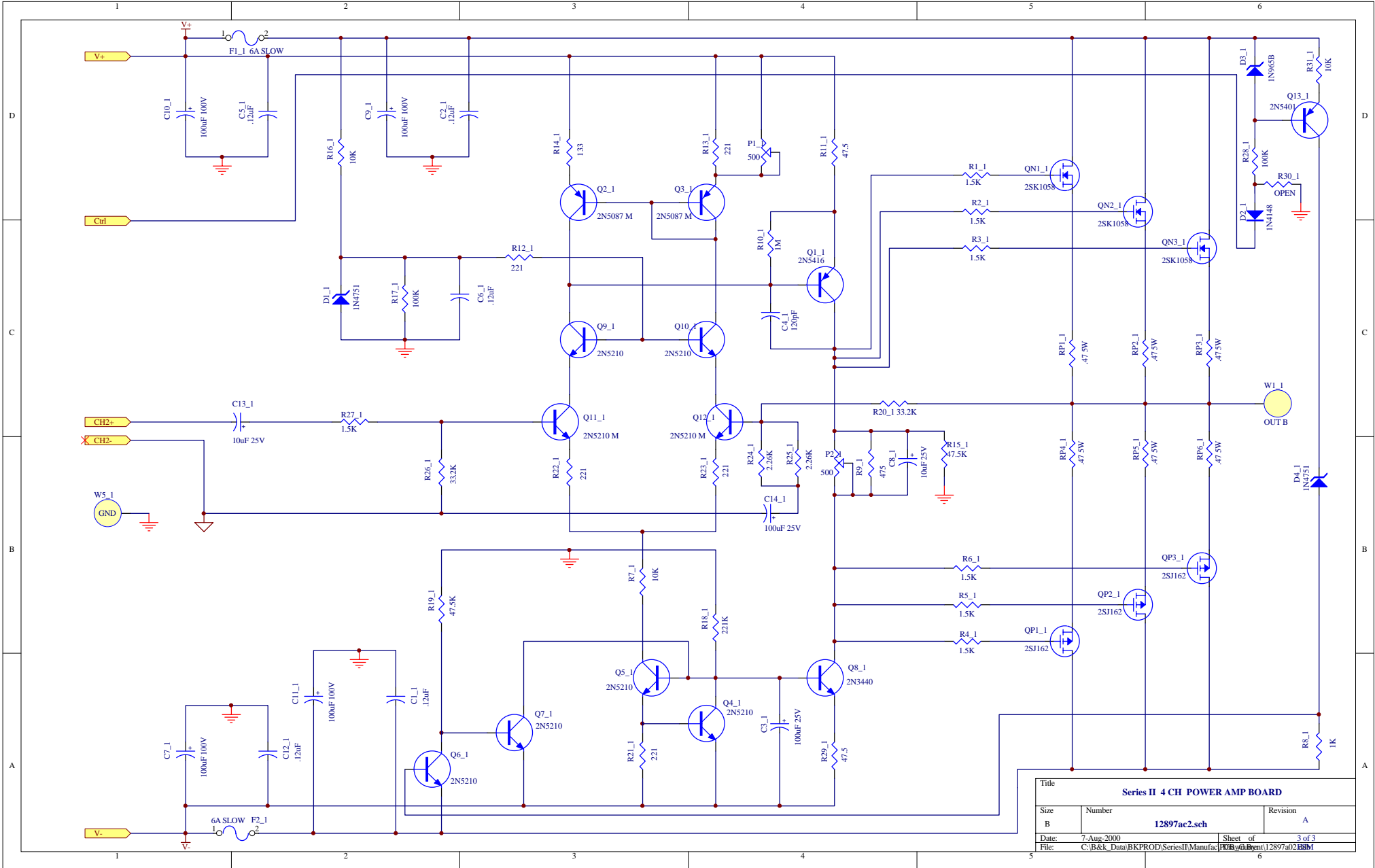




Title		AVR305:307 POWER SUPPLY	
Size	Number	Revision	
B	12801	REV A	
Date:	7-Aug-2000	Sheet of	1 of 1
File:	C:\B&K_Data\BKPROD-Series\F-Manufact\PCB\BkLib\12801.BIB		



Title		
<b>Series II 4 CH POWER AMP BOARD</b>		
Size	Number	Revision
B	<b>12897ac1.sch</b>	A
Date:	7-Aug-2000	Sheet of 2 of 3
File:	C:\B&K_Data\BKPROD\SeriesII\Manufact\PCB\61.Bent\12897a02.E8B.M	



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