



WE SIMPLY SOUND BETTER.

Reference 50

SERVICE MANUAL

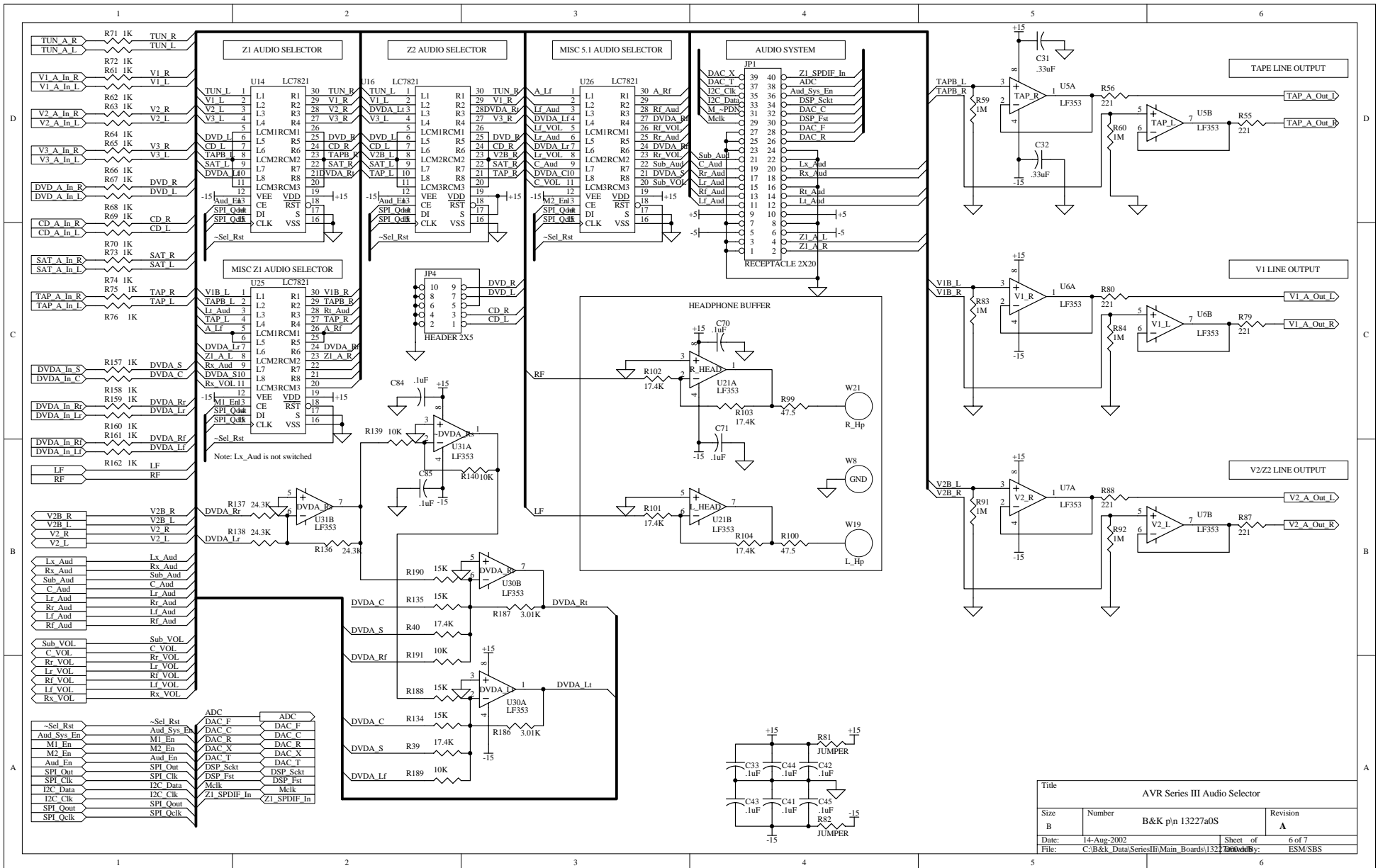
B&K COMPONENTS, LTD.
2100 Old Union Road
Buffalo, New York 14227-2725
U.S.A.

B & K

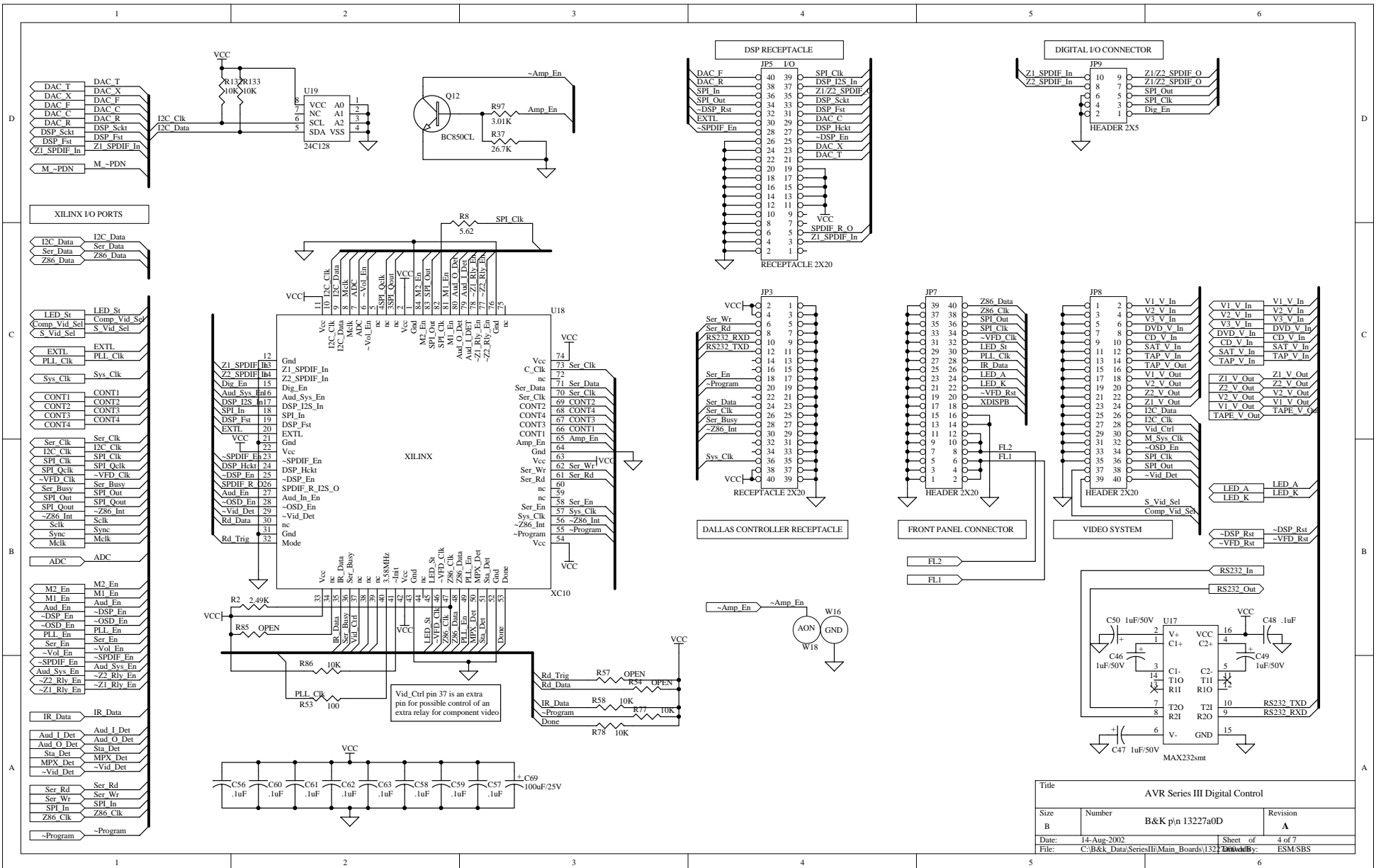
WE SIMPLY SOUND BETTER.

Schematics

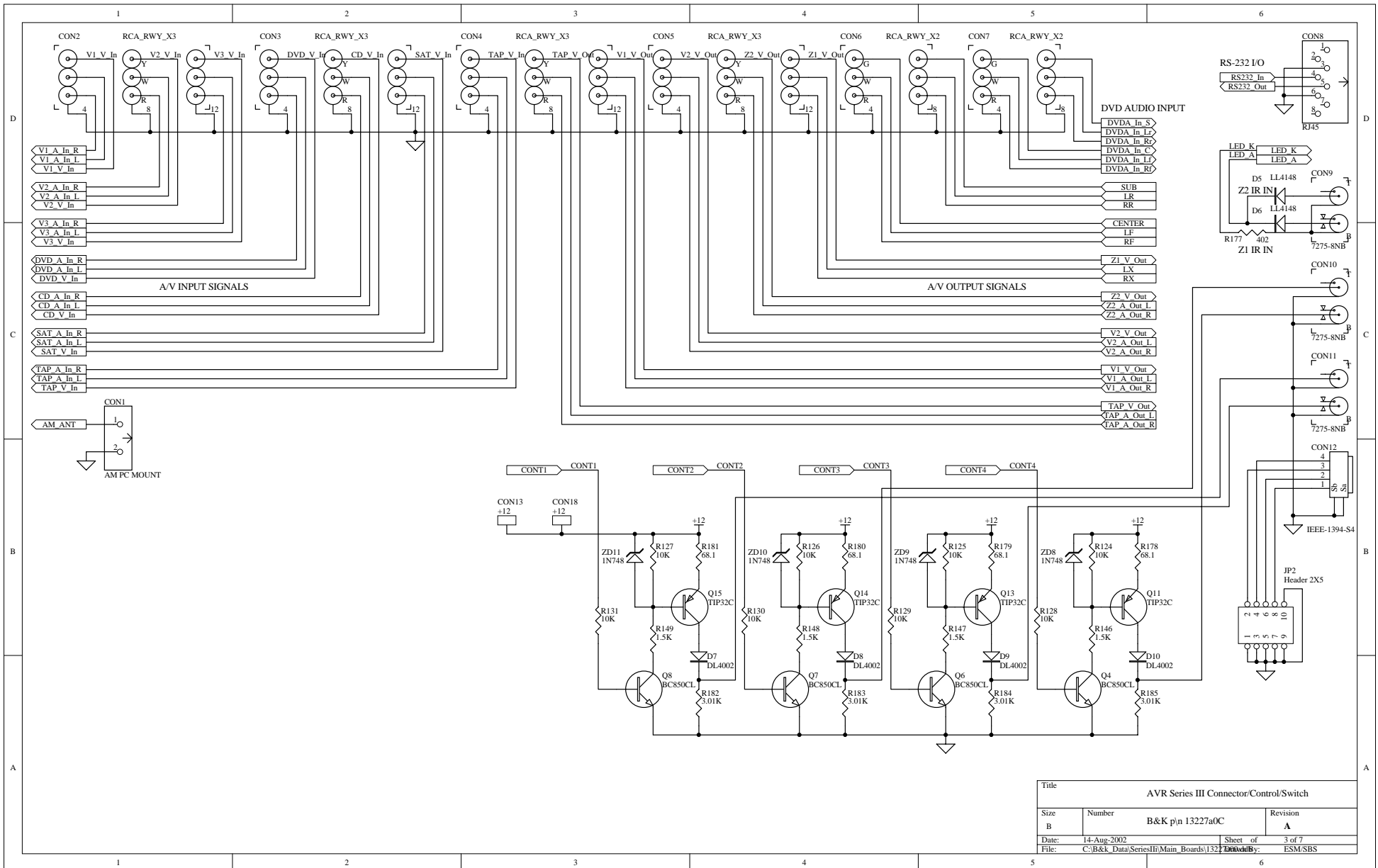
B&K COMPONENTS, LTD.
2100 Old Union Road
Buffalo, New York 14227-2725
U.S.A.



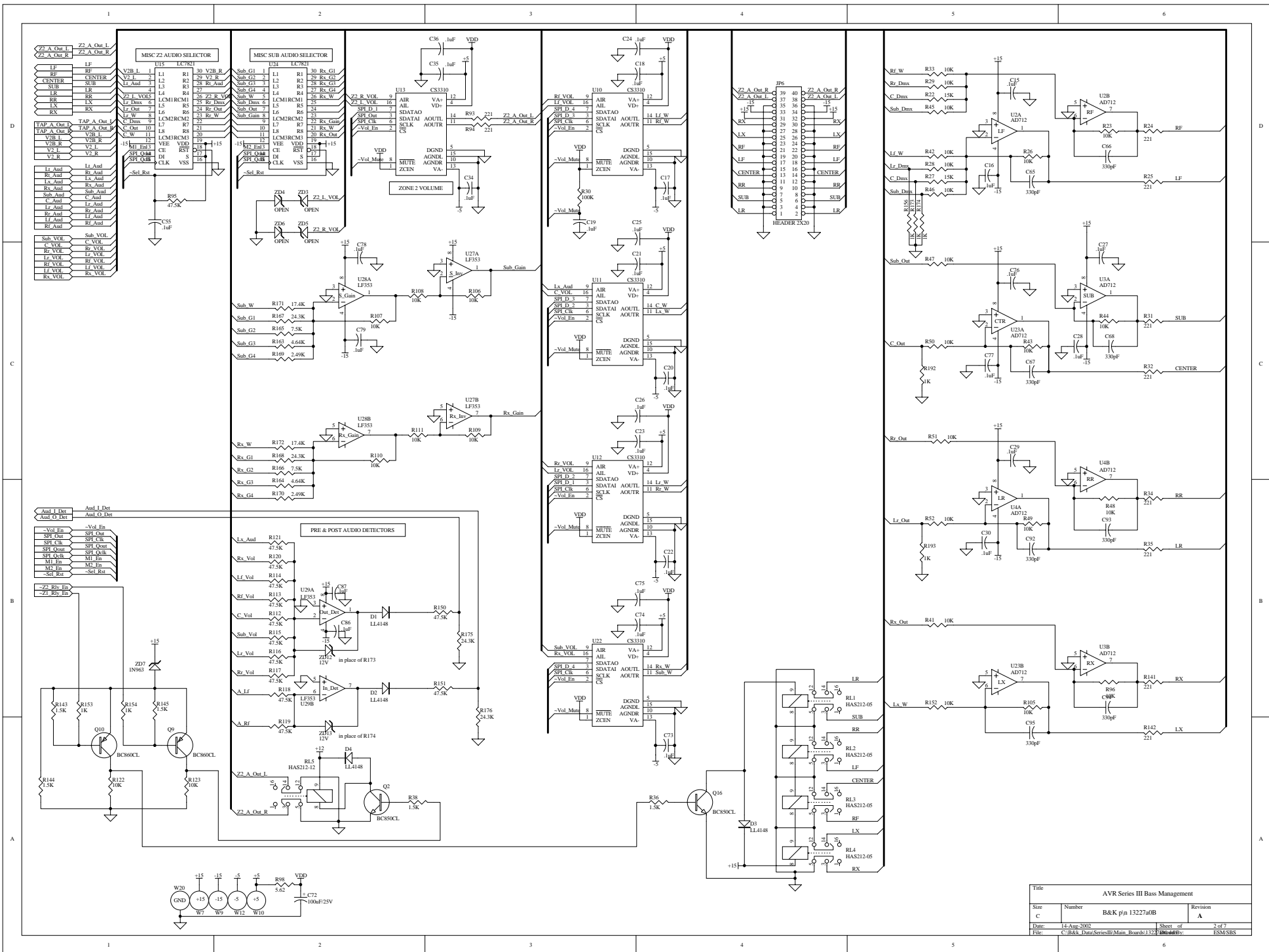
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AVR Series III Audio Selector			
Size	Number	B&K p/n 13227a0S	Revision
B			A
Date:	14-Aug-2002	Sheet of	6 of 7
File:	C:\B&K Data\SeriesIII\Main Boards\13227a0S.dwg	Drawn by:	ESM/SBS



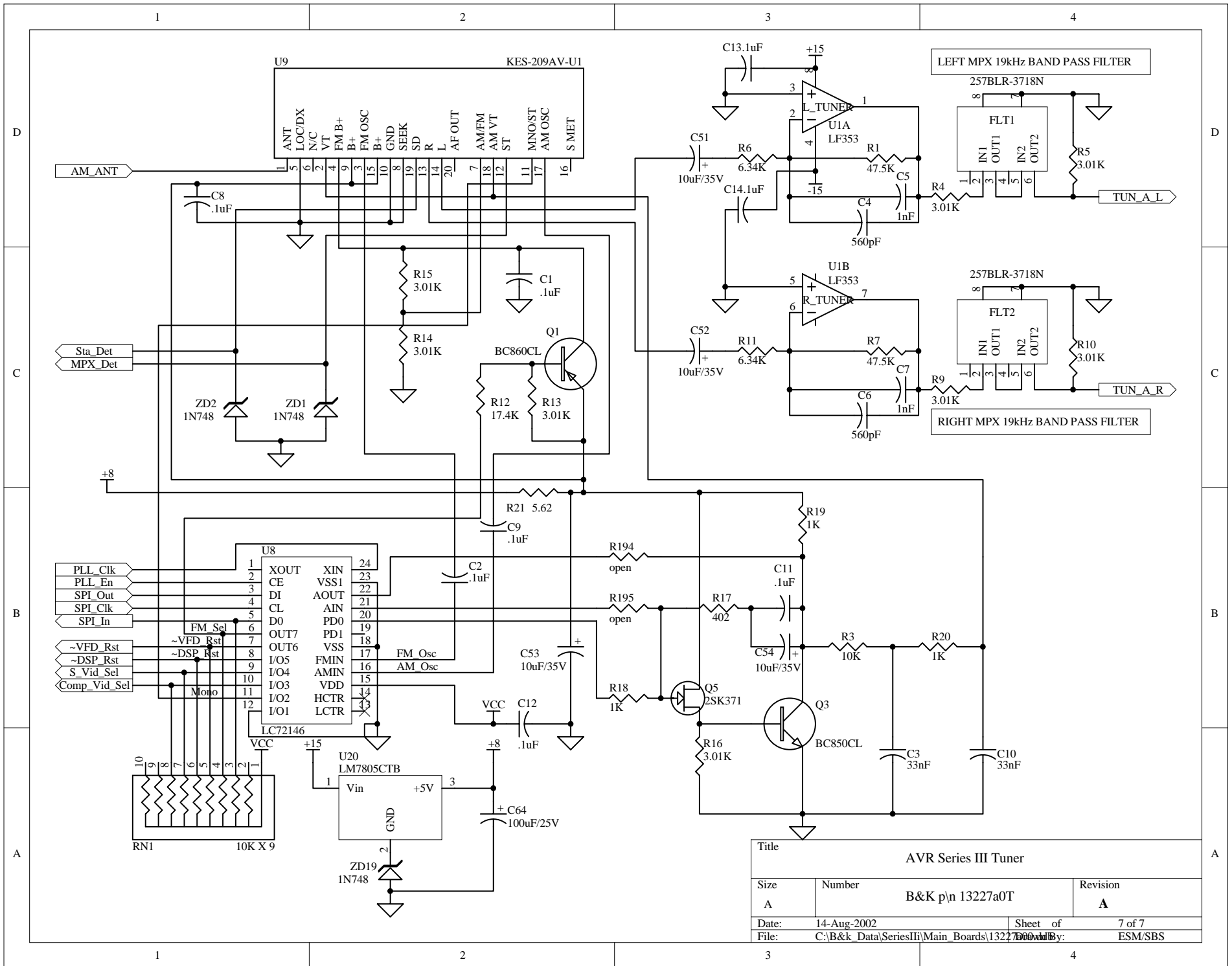
Title			
AVR Series III Digital Control			
Size	Number	B&K p/n 13227a0D	Revision
B			A
Date:	14-Aug-2002	Sheet of	4 of 7
File:	C:\B&k Data\SeriesIII\Main Boards\13227a0D.dwg	Drawn by:	ESM/SBS



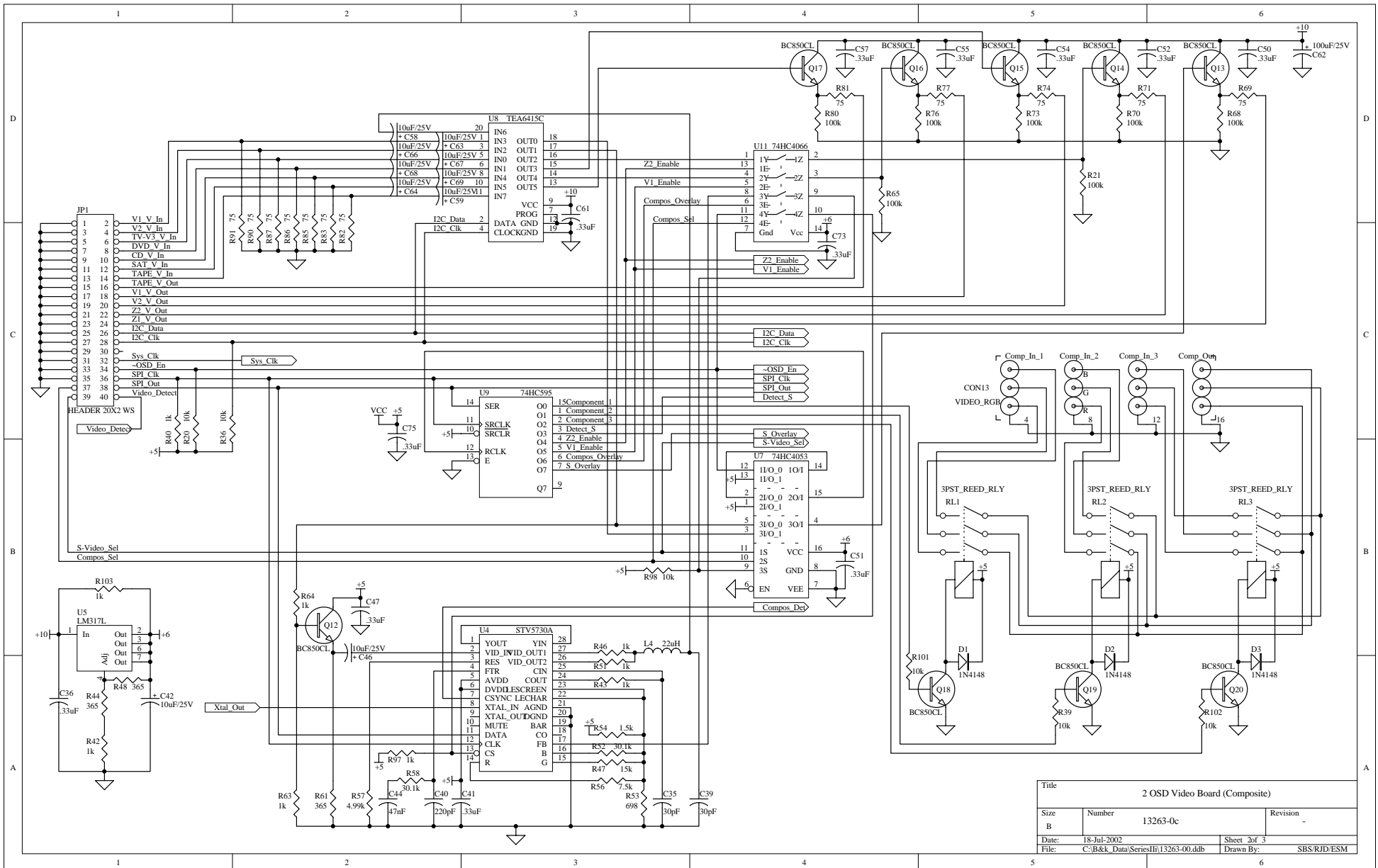
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Size	Number	B&K p/n 13227a0C		Revision			
B				A			
Date:	14-Aug-2002	Sheet of		3 of 7			
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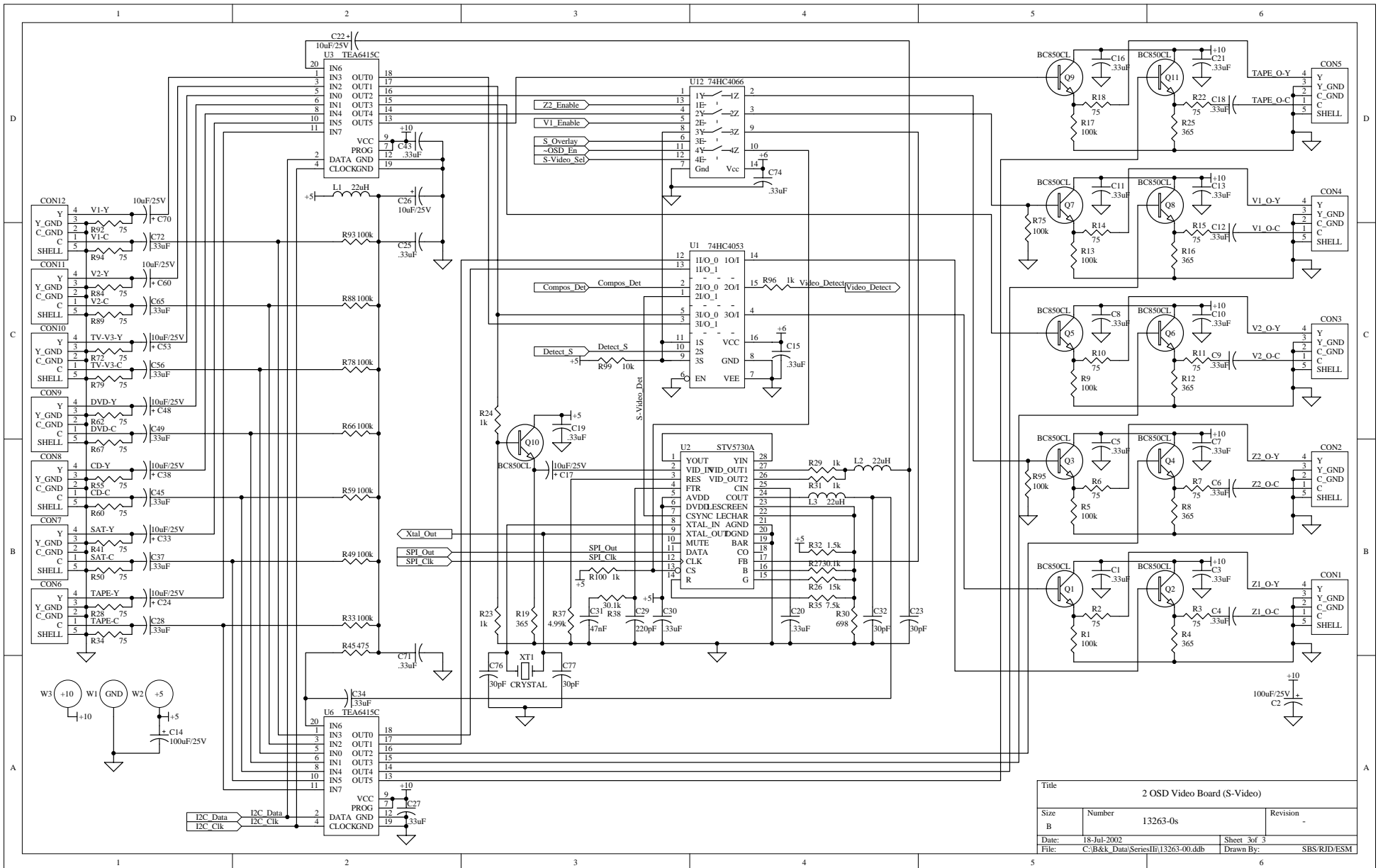
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AVR Series III Bass Management			
Size	Number	B&K p/n	Revision
C		13227a0B	A
Date:	14-Aug-2003	Sheet of	2 of 7
File:	C:\B&K_Data\SeriesIII\Main_Boards\13227a0B.dwg	Author:	ESMS/SBS



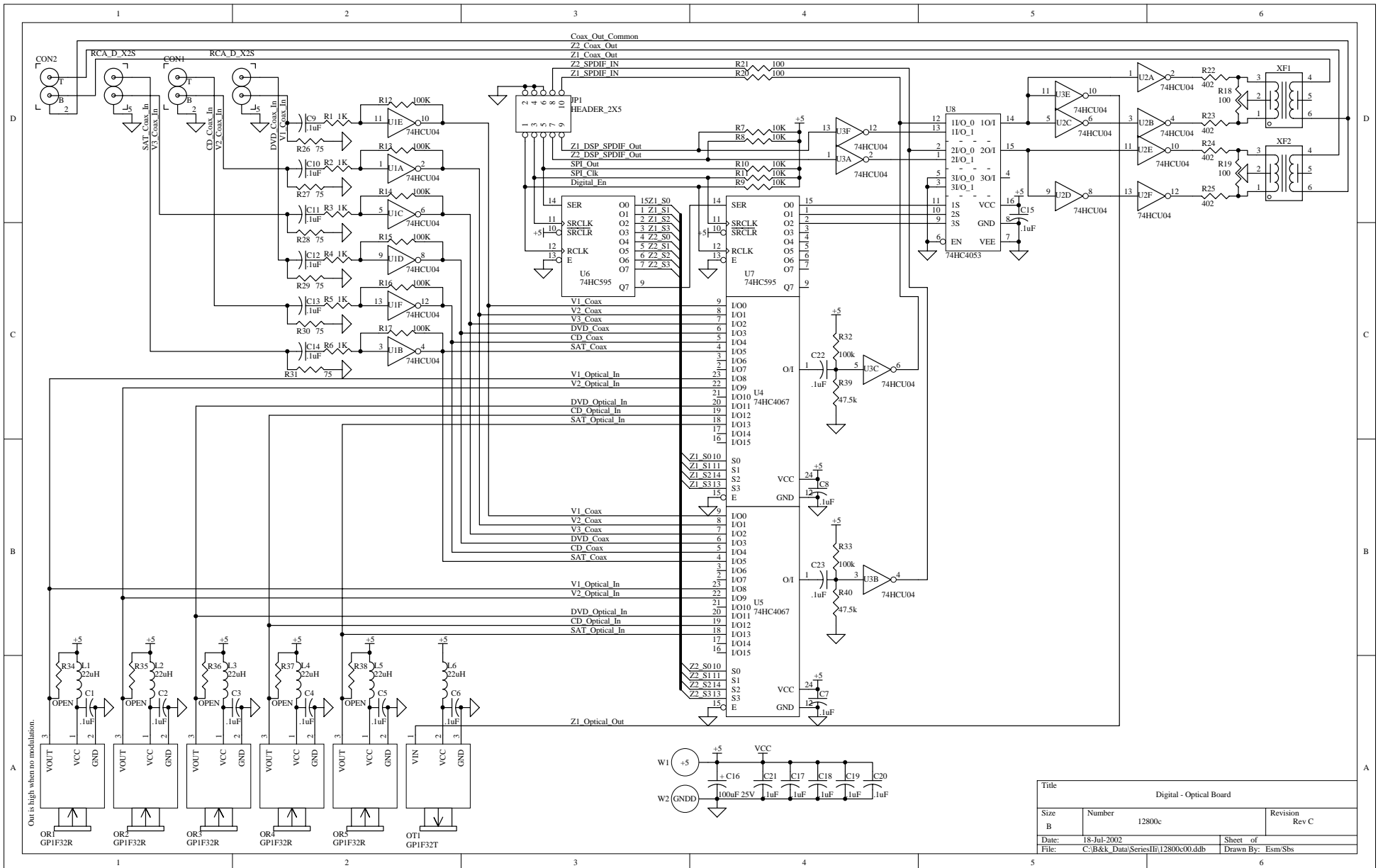
Title			AVR Series III Tuner		
Size	Number	B&K p/n 13227a0T		Revision	
A				A	
Date:	14-Aug-2002	Sheet of	7 of 7		
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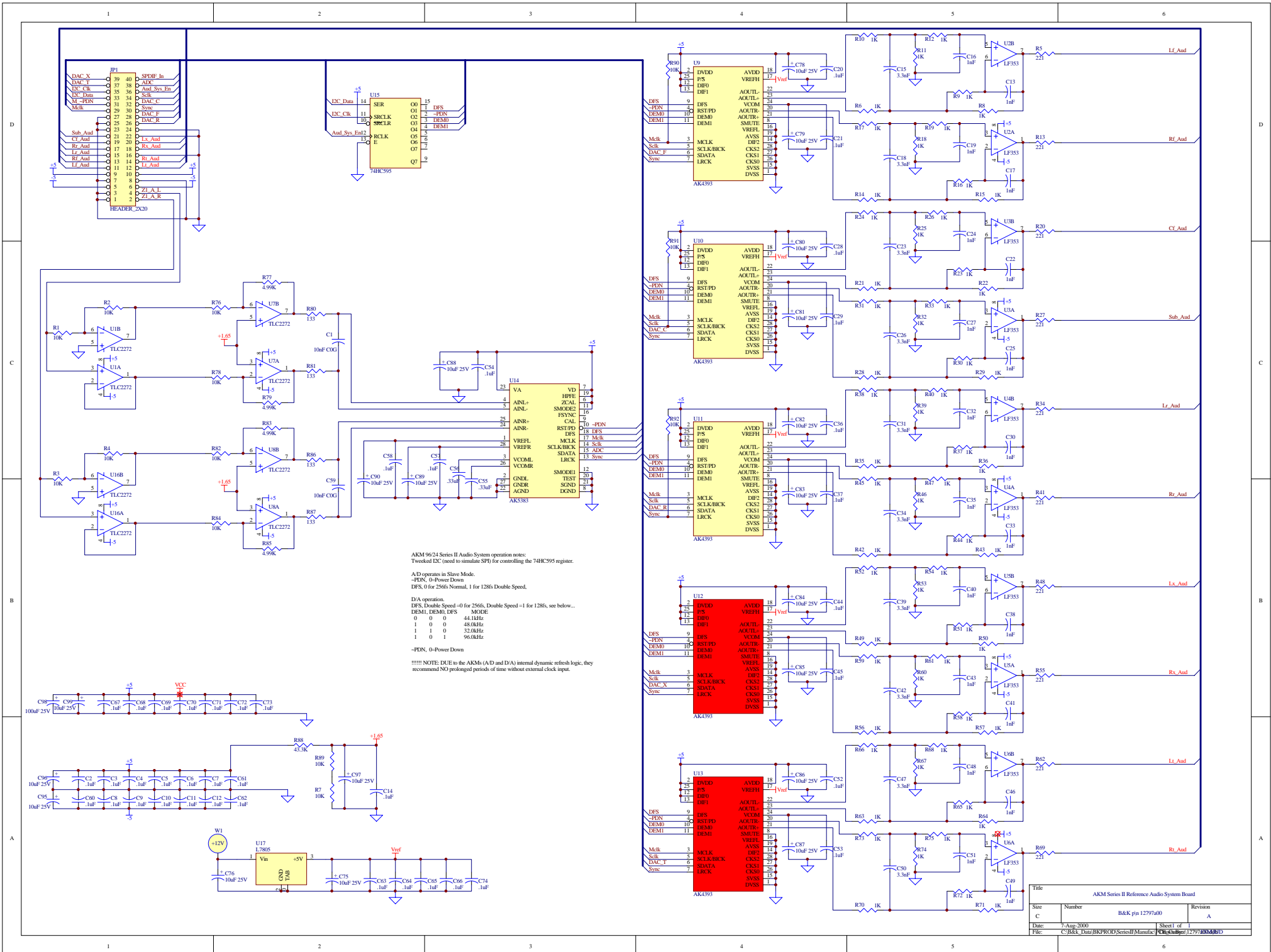
Title			
2 OSD Video Board (Composite)			
Size	Number	13263-0c	Revision
B			-
Date:	18-Jul-2002	Sheet	3 of 3
File:	C:\B&k Data\SeriesIn\13263-00.ddb	Drawn By:	SBS/RJD/ESM



Title			
2 OSD Video Board (S-Video)			
Size	Number	13263-0s	Revision
B			-
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\Series1\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 operation in Slave Mode:
 -PDN, 0=Power Down
 DFS, 0 for 256fs Normal, 1 for 128fs Double Speed.

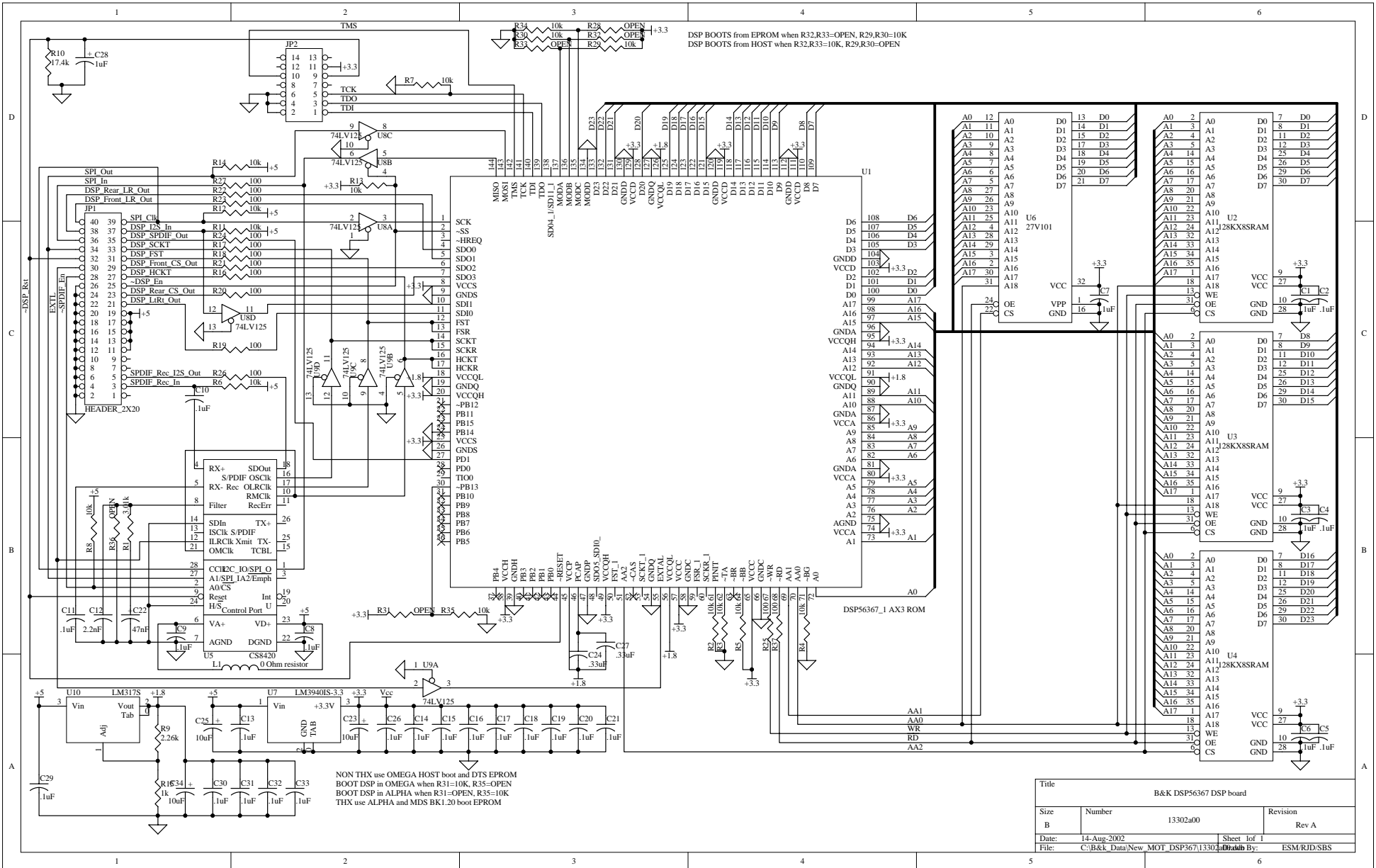
D/A operation:
 DFS, Double Speed=0 for 256fs, Double Speed=1 for 128fs, see below...
 DEM1, DEM0, DFS MODE:

0	0	0	44.1kHz
1	0	0	48.0kHz
1	1	0	32.0kHz
1	0	1	96.0kHz

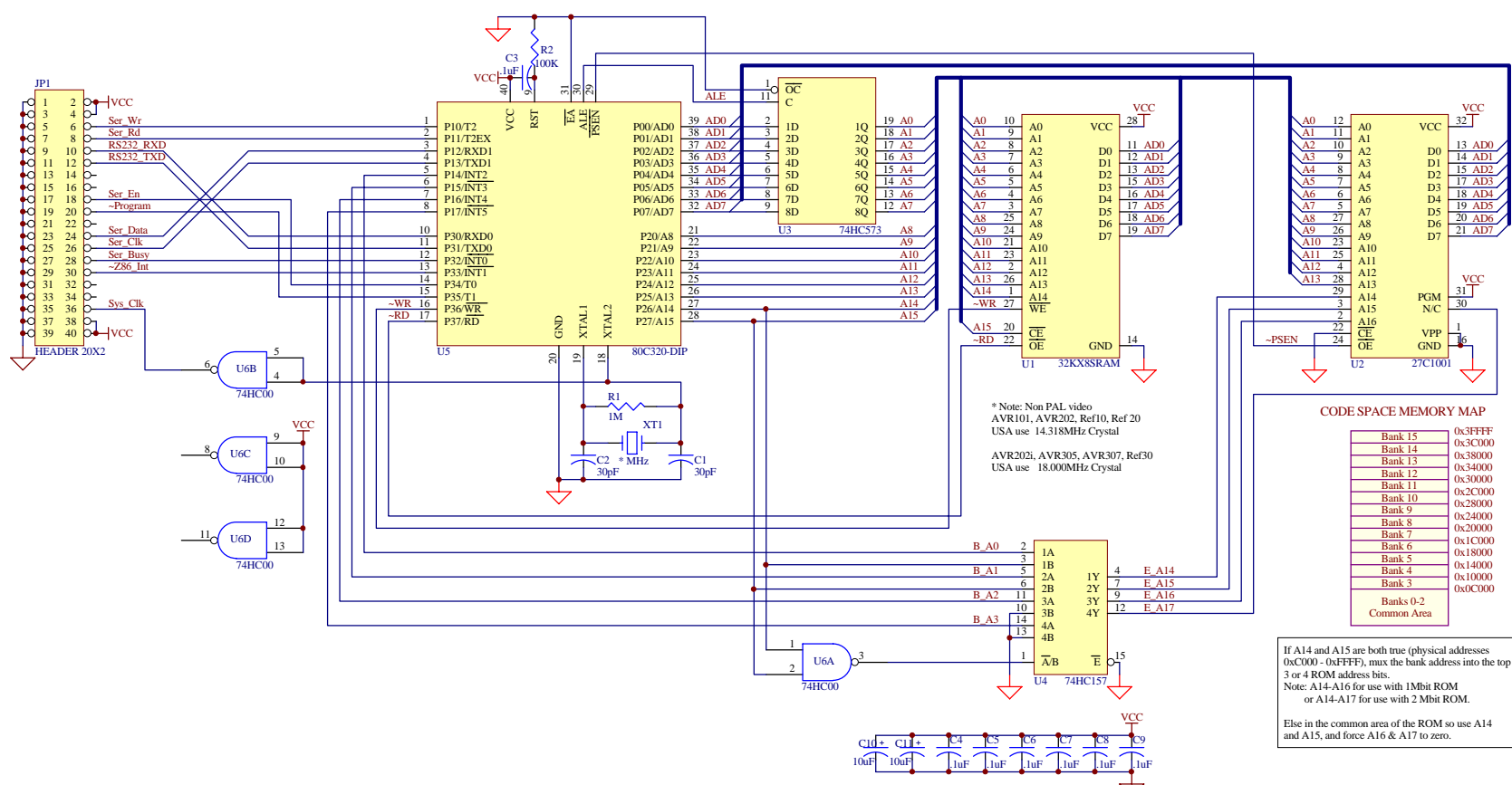
 -PDN, 0=Power Down

!!!!!! NOTE: D/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 12797aD	Revision
C			A
Date:	7/Aug/2000	Sheet 1 of	
File:	C:\B&K_15m\BKP\PROJ\SeriesII\Main\Ref\AKM12797aD.D	Sheet 1 of	



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

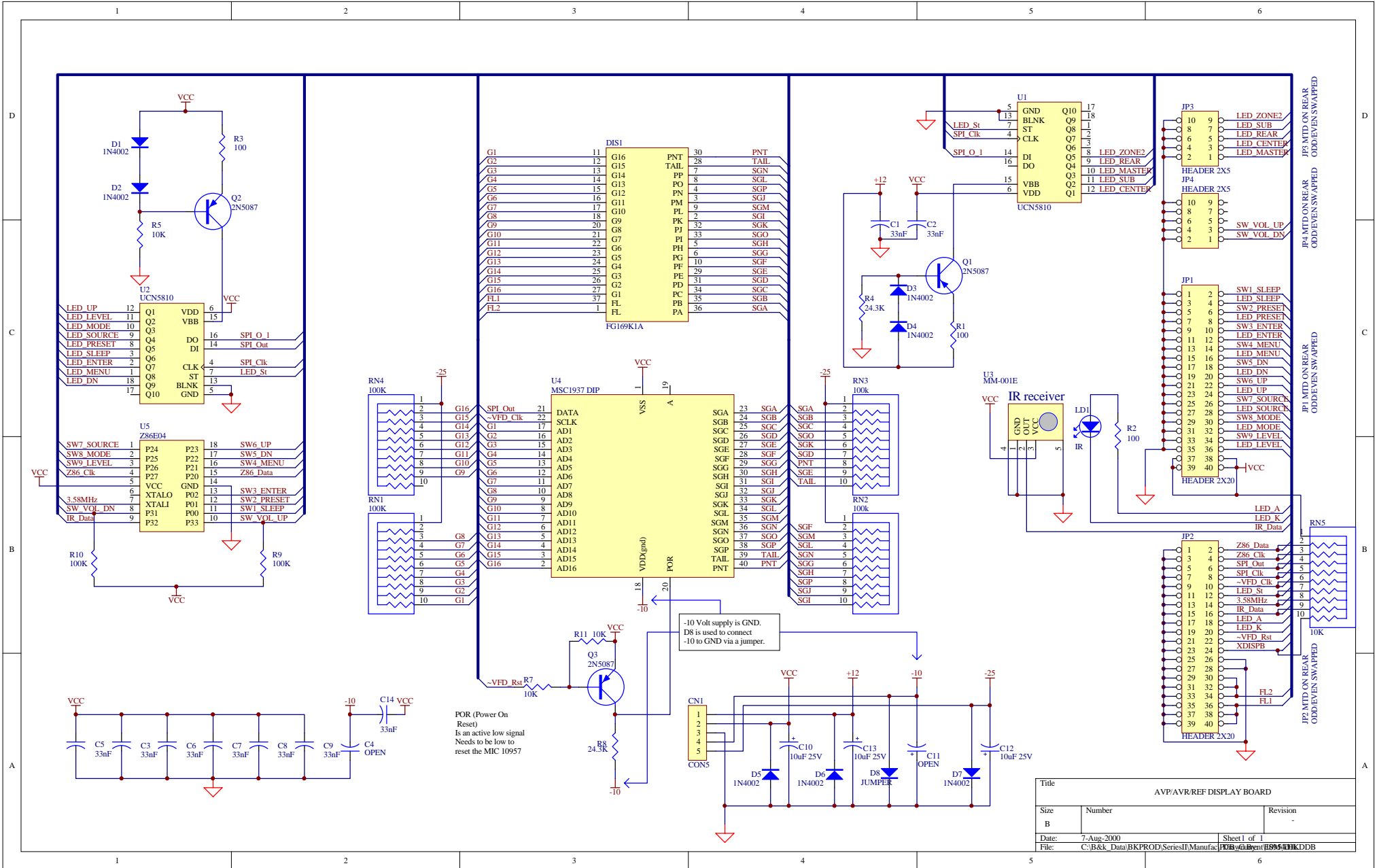


* Note: Non PAL video
 AVR101, AVR202, Ref10, Ref20
 USA use 14.318MHz Crystal
 AVR202i, AVR305, AVR307, Ref30
 USA use 18.000MHz Crystal

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\6181\B5561BK.DDB	

1

2

3

4

D

D

C

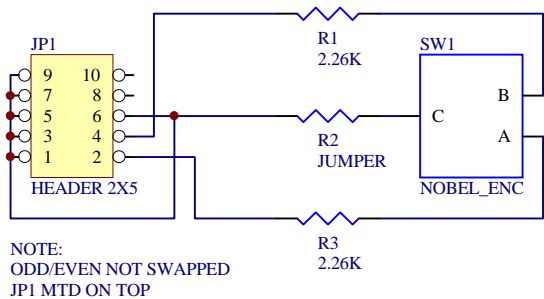
C

B

B

A

A



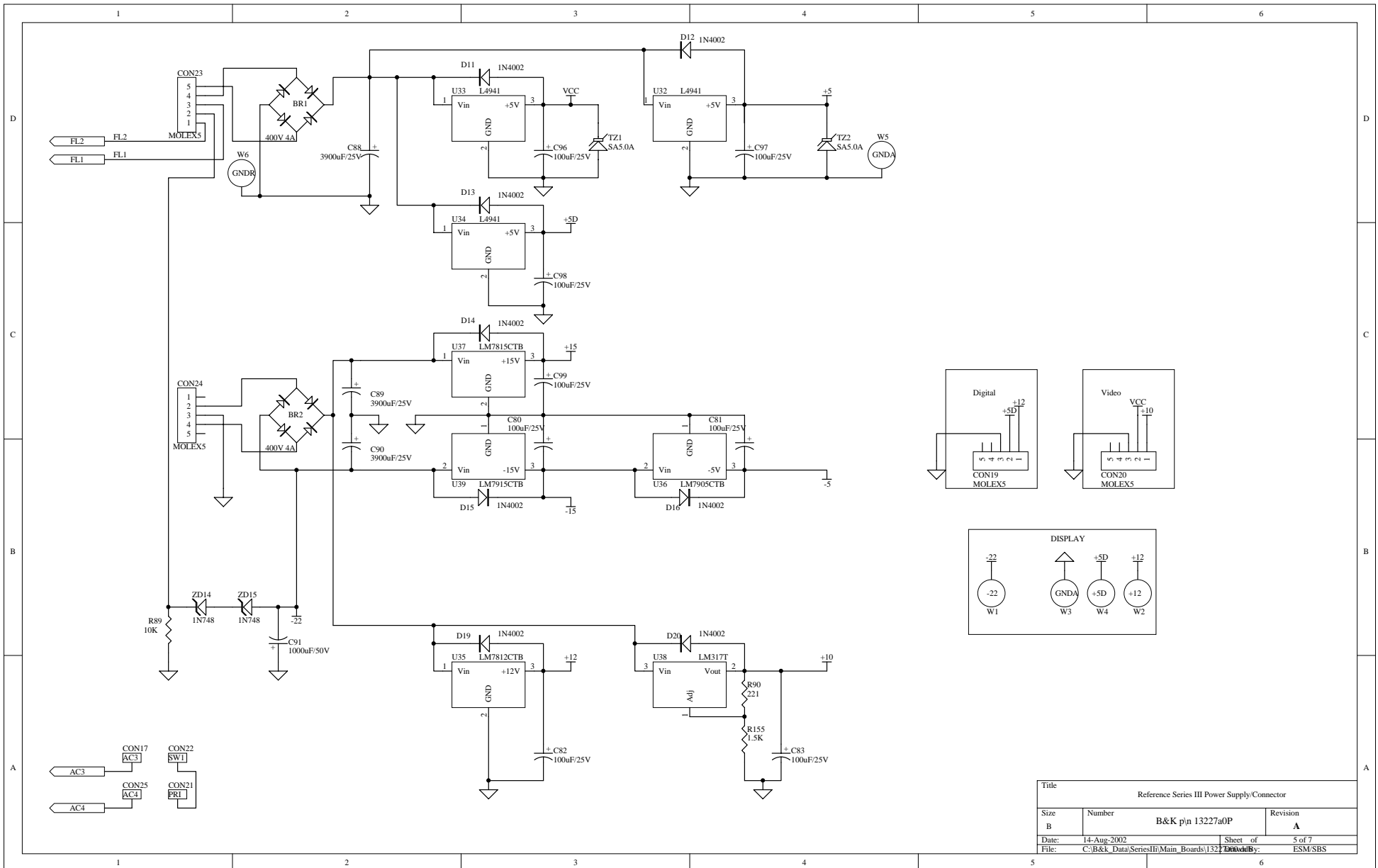
Title		
AVP/AVR/REF/TP ROTARY ENCODER BOARD		
Size	Number	Revision
A		A
Date:	7-Aug-2000	Sheet 1 of 1
File:	C:\B&k_Data\BKPROD\SeriesII\Manufact\PCB\Gubent\12760a00.DDB	

1

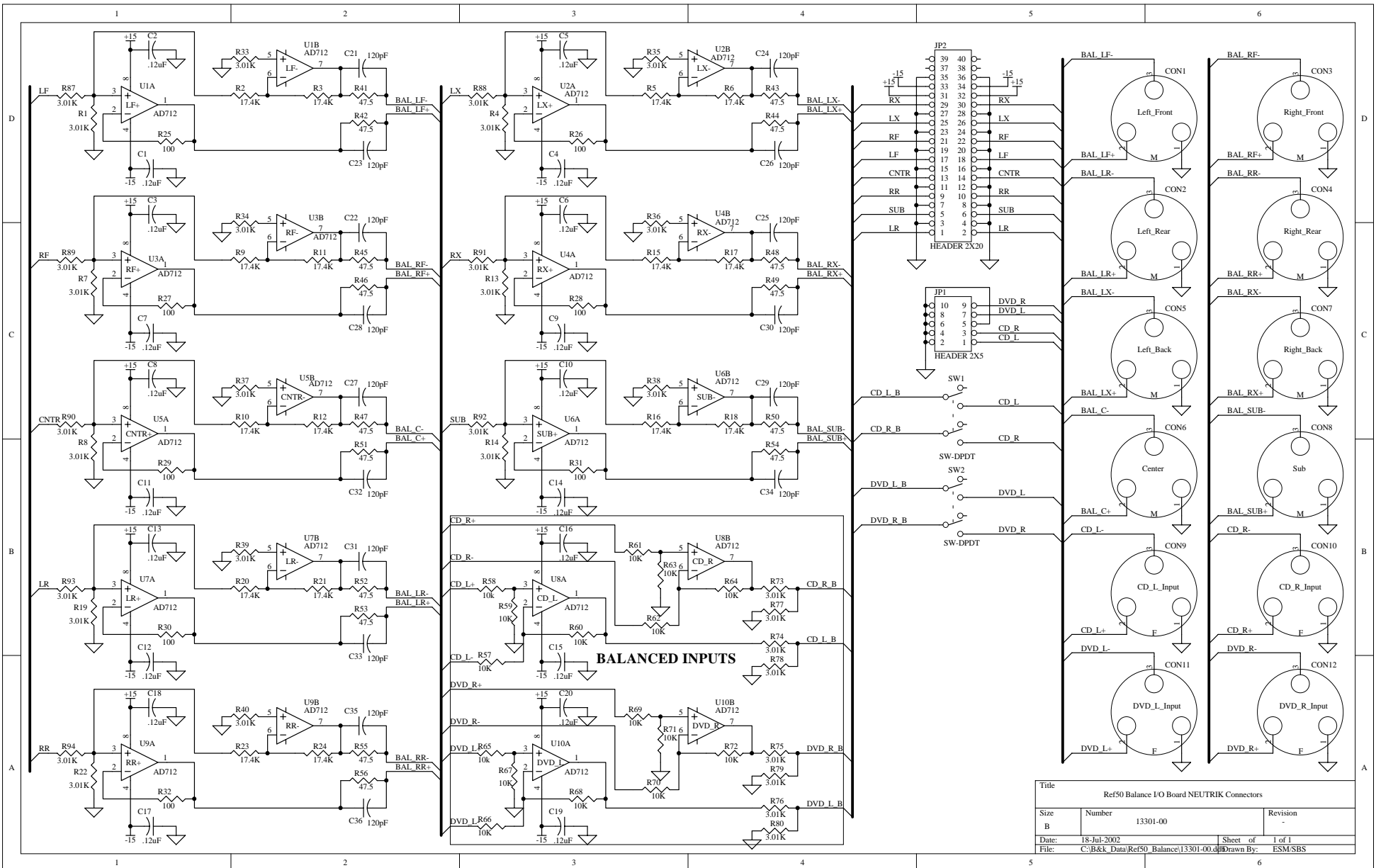
2

3

4



Title			
Reference Series III Power Supply/Connector			
Size	Number	Revision	
B	B&K p/n 13227a0P	A	
Date:	14-Aug-2002	Sheet of	5 of 7
File:	C:\B&k Data\SeriesIII\Main Boards\13227a0P.dwg	Drawn By:	ESM/SBS



Title			
Ref50 Balance I/O Board NEUTRIK Connectors			
Size	Number	13301-00	Revision
B			-
Date:	18-Jul-2002	Sheet of	1 of 1
File:	C:\B&k Data\Ref50 Balance\13301-00.dbl	Drawn By:	ESM/SBS