

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved
A	PRODUCTION RELEASE PER ECO 5344	6-28-02	

304-0204 304-0204.SCH

304-1004 304-1004.SCH

304-0304 304-0304.SCH

304-1104 304-1104.SCH

304-0404 304-0404.SCH

304-1204 304-1204.SCH

304-0504 304-0504.SCH

304-1304 304-1304.SCH

304-0604 304-0604.SCH

304-1404 304-1404.SCH

304-0704 304-0704.SCH

304-1504 304-1504.SCH

304-0804 304-0804.SCH

304-1604 304-1604.SCH

304-0904 304-0904.SCH

304-1704 304-1704.SCH

UNLESS OTHERWISE NOTED:

- 1.0 All resistor values are expressed in Ohms.
- 1.1 All resistors are 1/8 Watt SMT types with their tolerance and material coded into their value.

VALUE	1%, Metal Film	5%, Carbon Film
0 Ohm to 0.99 Ohms	0R to 0R976	0R to 0R91
1 Ohm to 99 Ohms	1R00 to 97R6	1R0 to 91R
100 Ohms to 999 Ohms	100R0 to 976R0	100R to 910R
1k Ohm to 9k9 Ohms	1k00 to 9k76	1k0 to 9k1
10k Ohms to 99k Ohms	10k0 to 97k6	10k to 91k
100k Ohms to 999k Ohms	100k0 to 976k0	100k to 910k
1M Ohm to 99M Ohms	1M00 to 97M6	1M0 to 91M

- 2. All resistor networks are 2%, 1/8 Watt types with their values expressed in Ohms.
- 3.0 All capacitor values are expressed in Farads
- 3.1 All 100n bypass capacitors are 10%, 50 Volt, X7R, Ceramic Monolithic types.
- 3.2 All 100p RF capacitors are 5%, 50 Volt, NP0, Ceramic Monolithic types.
- 3.3 All NPO capacitors are 5%, 50 Volt, Ceramic Monolithic types.
- 3.4 All MY capacitors are 5%, 50 Volt, Metalized Polyester types.
- 3.5 All PP capacitors are 5%, 50 Volt, Metalized Polypropylene types.
- 3.6 All PC capacitors are 5%, 50 Volt, Metalized Polycarbonate types.
- 3.7 All electrolytic capacitors are 20%, 16 Volt (or higher), Aluminum Electrolyte types.
- 3.8 All TA capacitors are 20%, 16 Volt (or higher), Tantalum Electrolyte types.
- 4. For complete information on any component please see the associated bill of materials.
- 5. All net names preceded by a / are active low signals.
- 6. V+ = +12 Vdc, V- = -12 Vdc, VCC = +5 Vdc

THAT Corporation 45 Sumner Street
Milford, MA
508-478-9200

Title: **QSC Digital Cinema Monitor**
DCM-I Rear Panel PCB

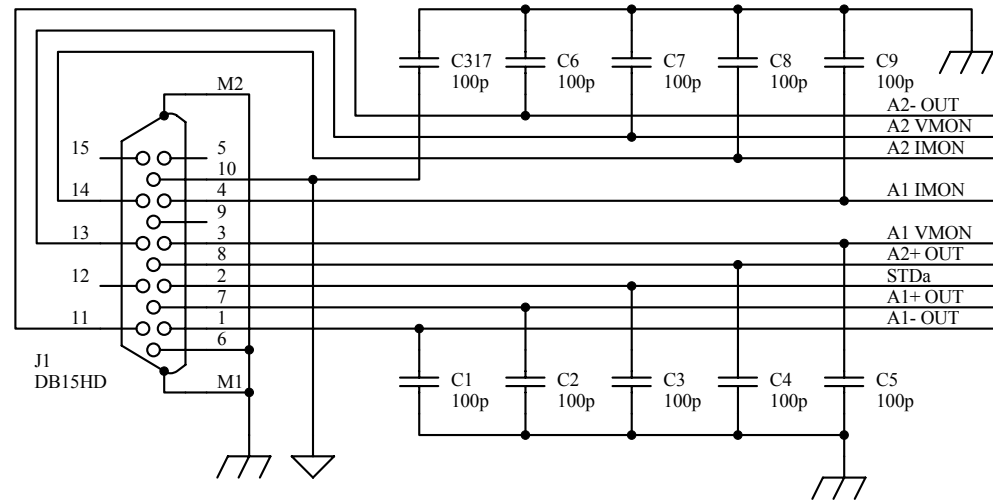
Checked:	Date:
Proj. Eng.:	Date:
Chf. Eng.:	Date:
Production:	Date:

Size: B	Drawing Number: PC-000093-00	Revision: A
Date: 28-Jun-2002	Drawn by: A. ARANDA	Sheet 1 of 17
File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\SH0093rA.PRJ		

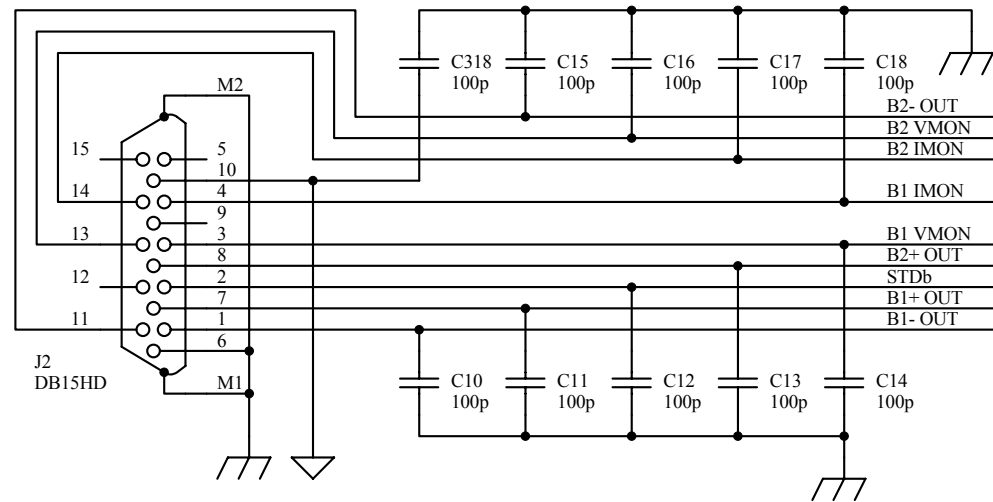
This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved

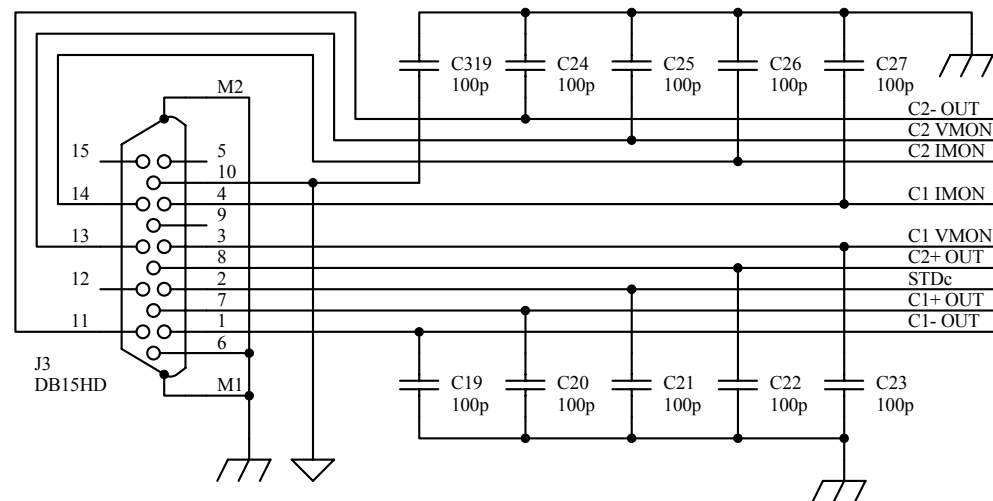
LEFT CHANNEL



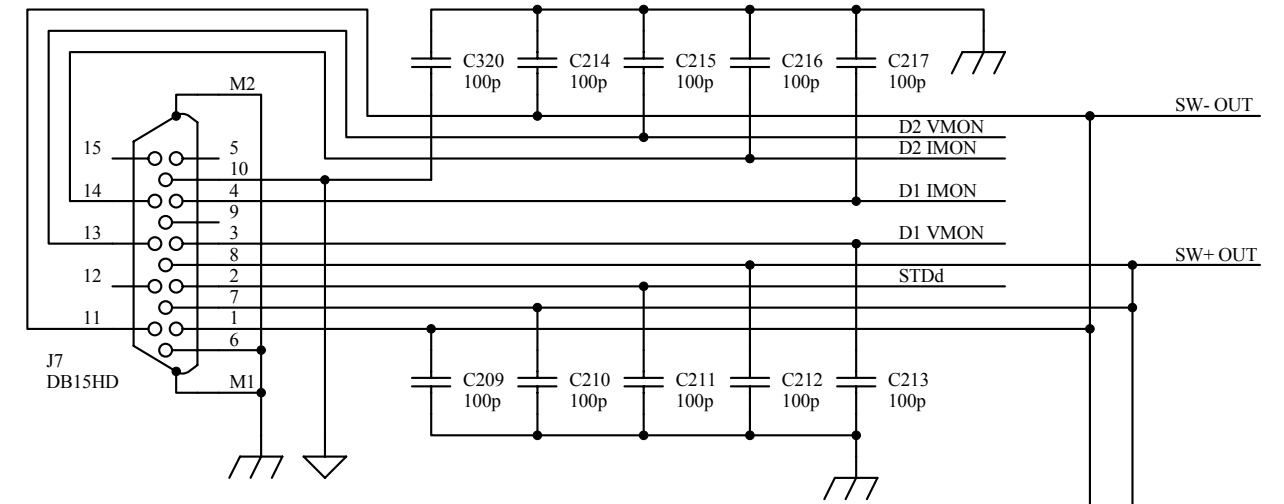
CENTER CHANNEL



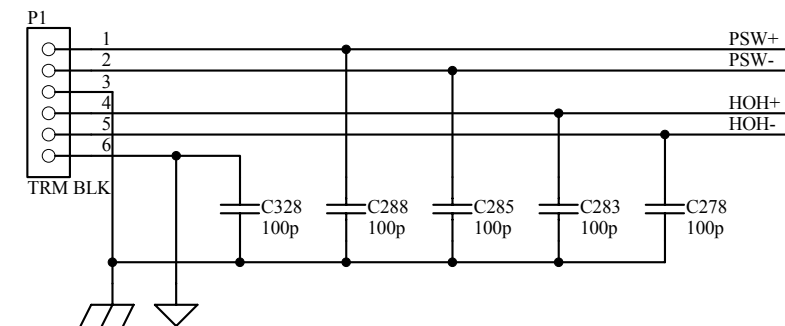
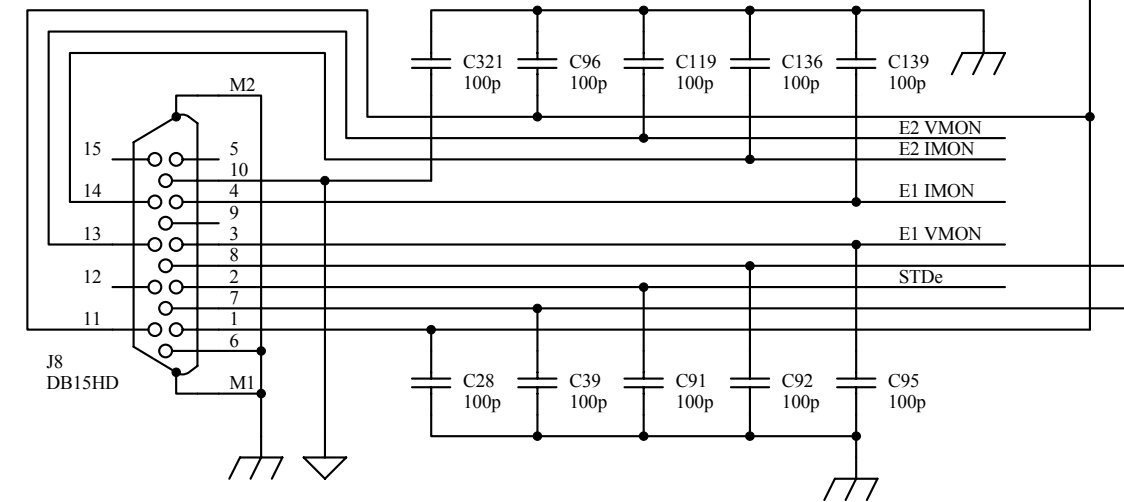
RIGHT CHANNEL



SUBS 1 & 2



SUBS 3 & 4



From Remote Powered Subwoofer Output Driver

From Hard of Hearing Output Driver

THAT Corporation 45 Sumner Street
Milford, MA 01850
508-478-9200

Title: **DCM-1 Rear Panel PCB**
Screen & Subwoofer Dataports, Aux Outputs

Checked:	Date:
Proj. Eng.:	Date:
Chf. Eng.:	Date:
Production:	Date:

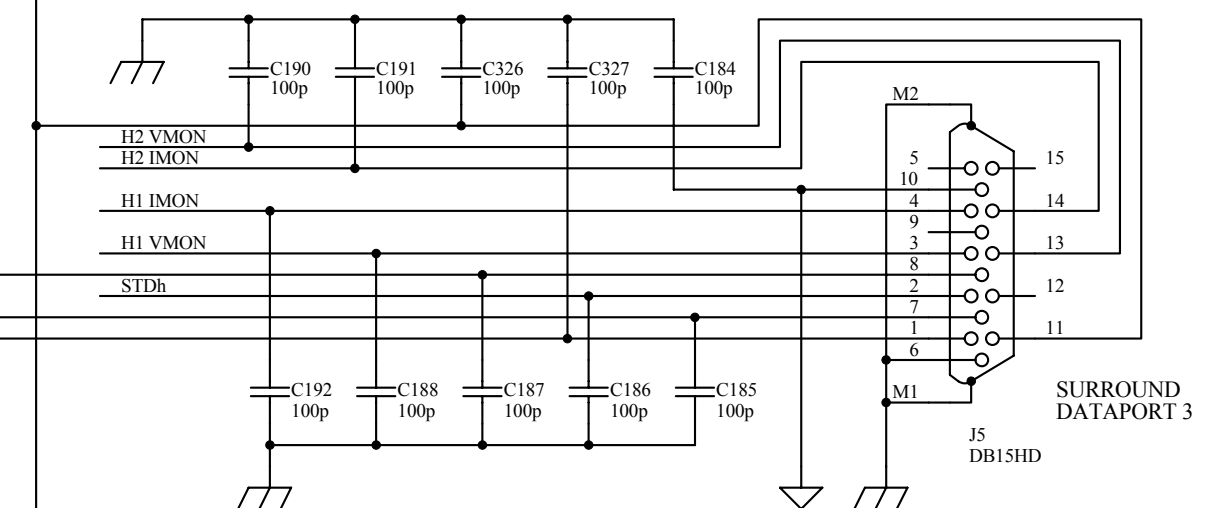
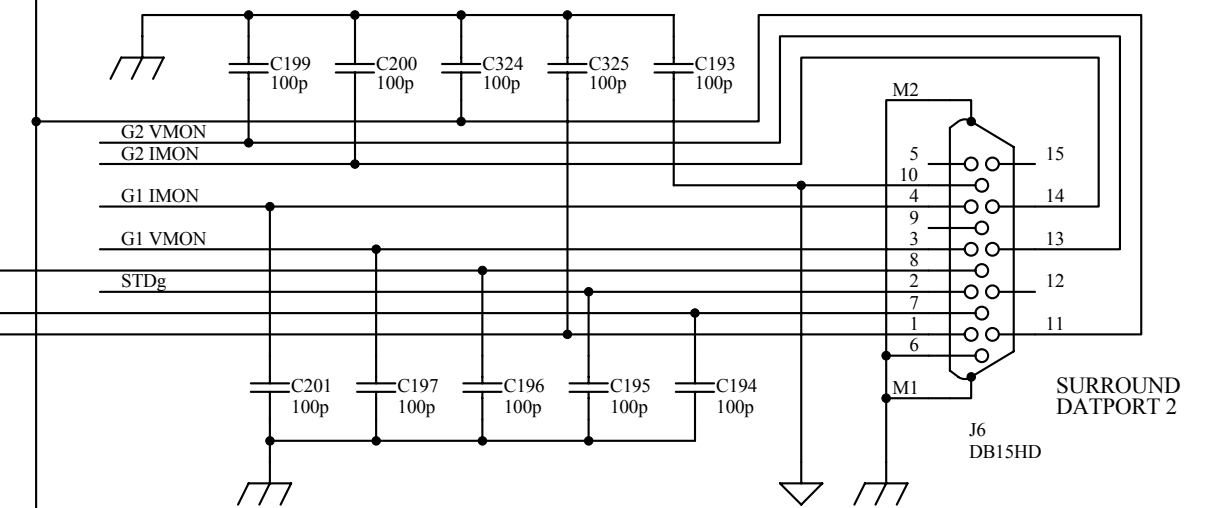
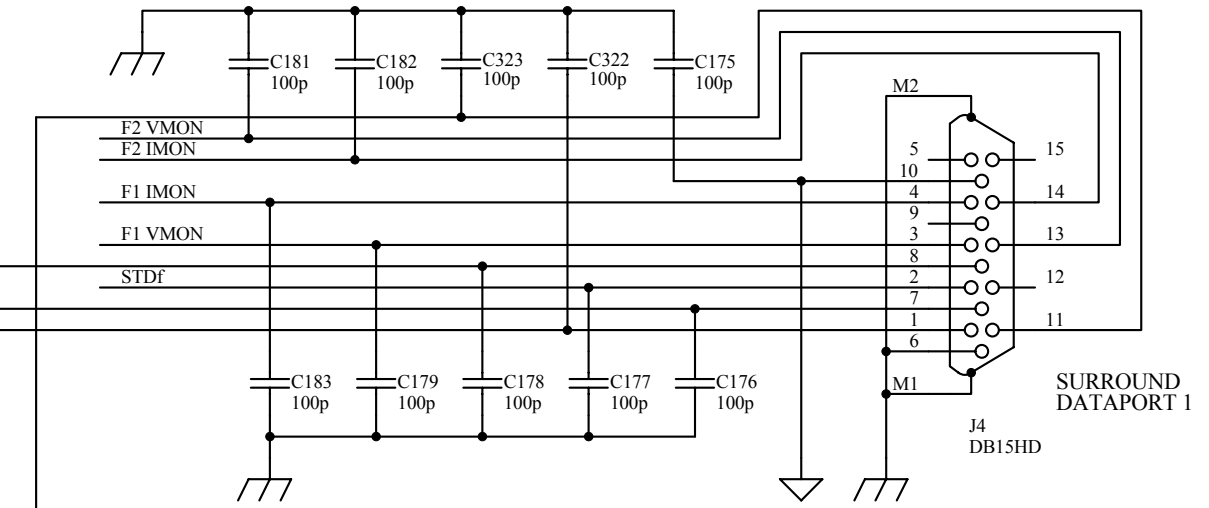
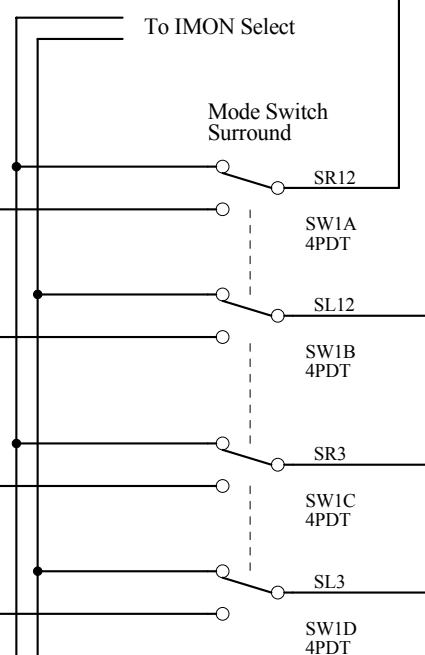
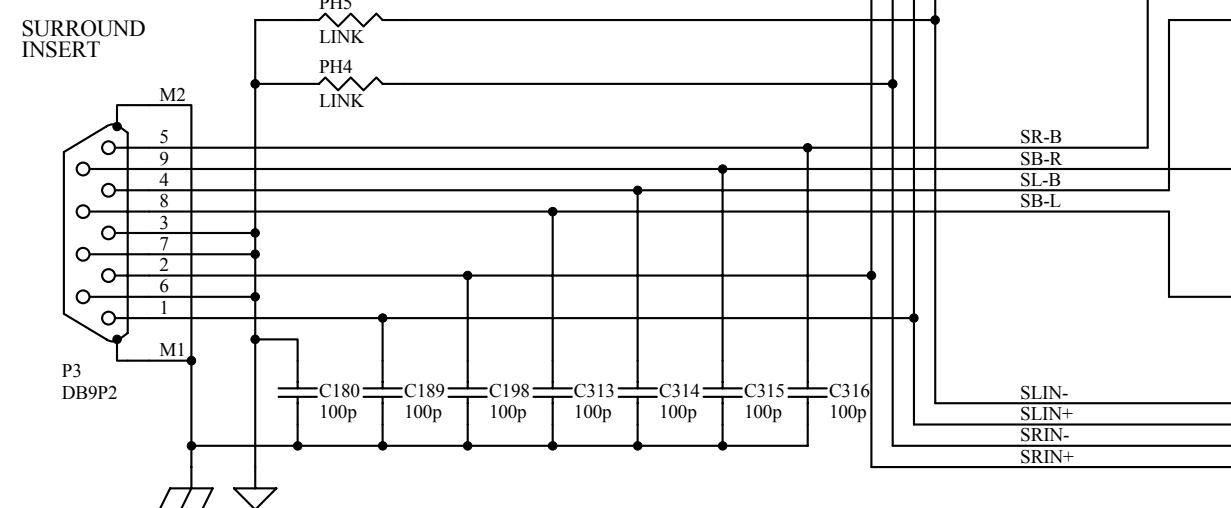
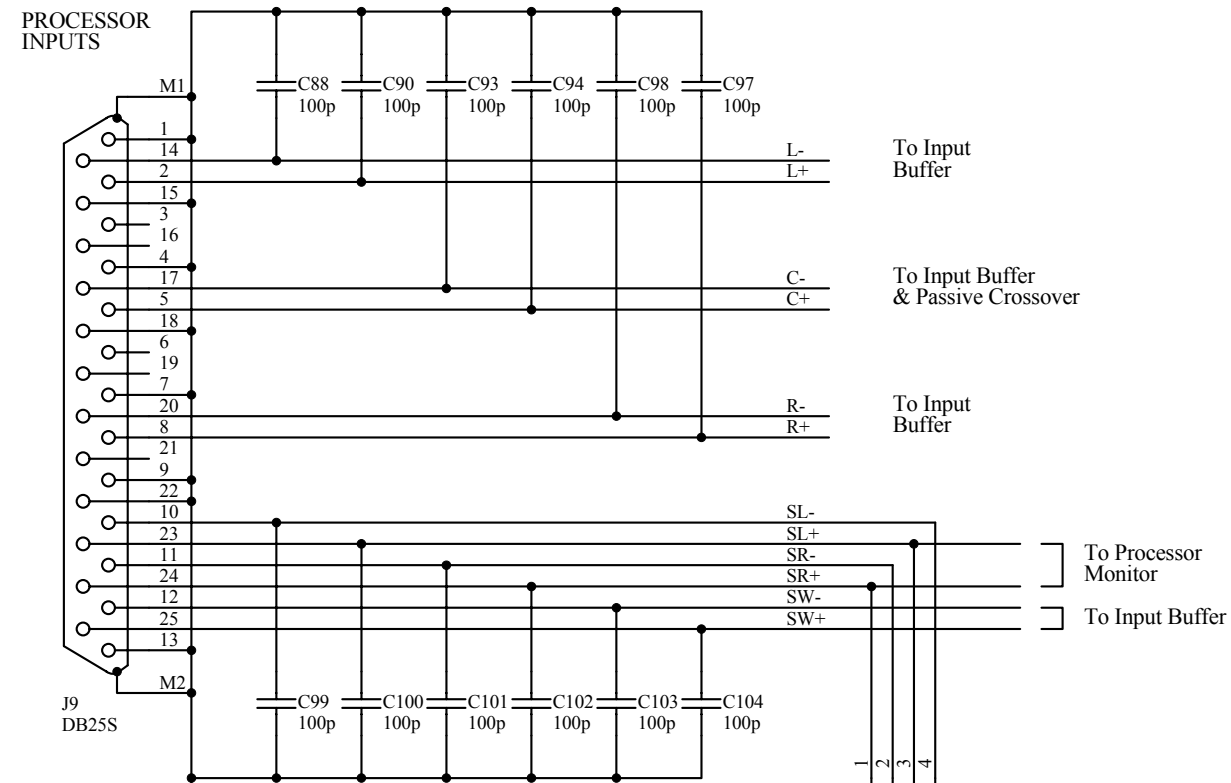
Size: B	Drawing Number: PC-000093-00	Revision: A
Date: 28-Jun-2002	Drawn by: A. ARANDA	Sheet 3 of 17
File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-0304.SCH		

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved

D
C
B
A

D
C
B
A



THAT Corporation 45 Sumner Street
 Milford, MA 008-478-9200

Checked:	Date:	Title: DCM-1 Rear Panel PCB Surround Dataports & Insert, Processor Input
Proj. Eng.:	Date:	
Chf. Eng.:	Date:	Size: B Drawing Number: PC-000093-000 Revision: A
Production:	Date:	Date: 28-Jun-2002 Drawn by: A. ARANDA Sheet 4 of 17 File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-0404.SCH

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved

D

C

B

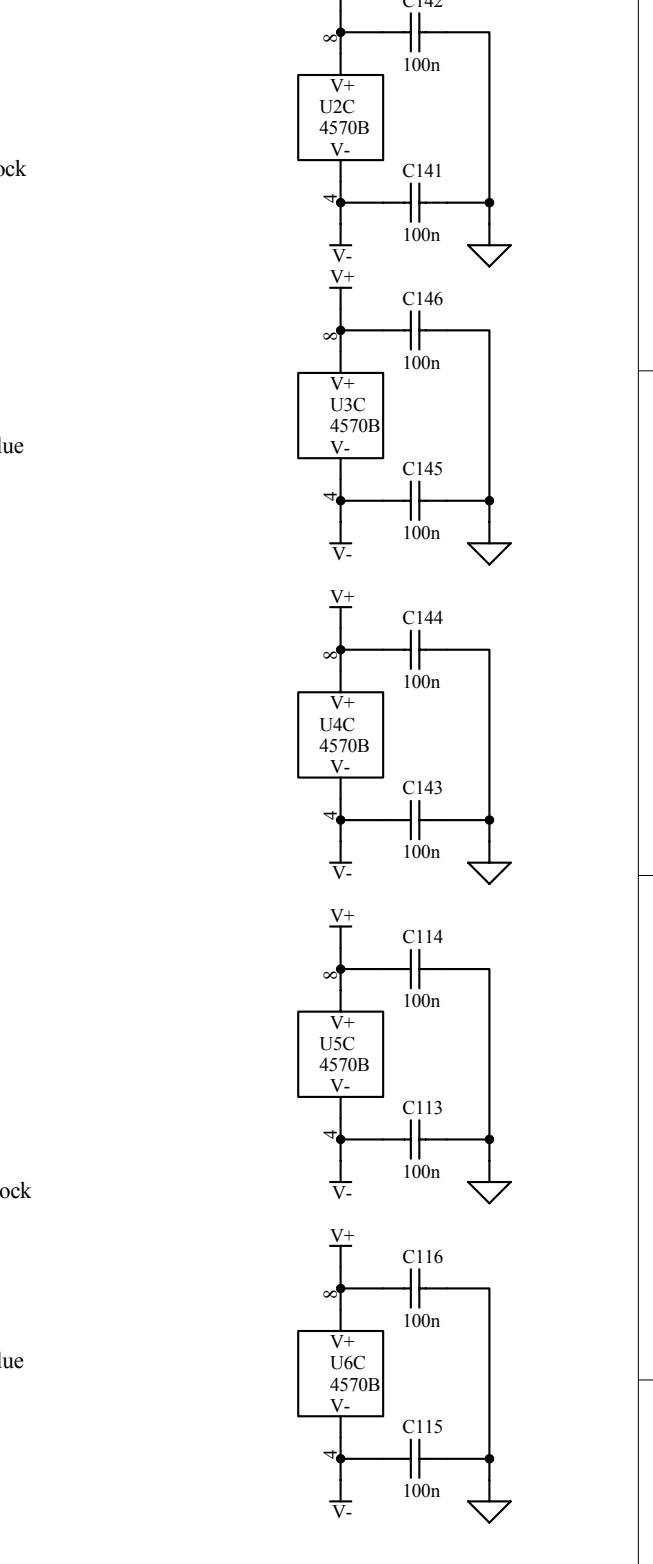
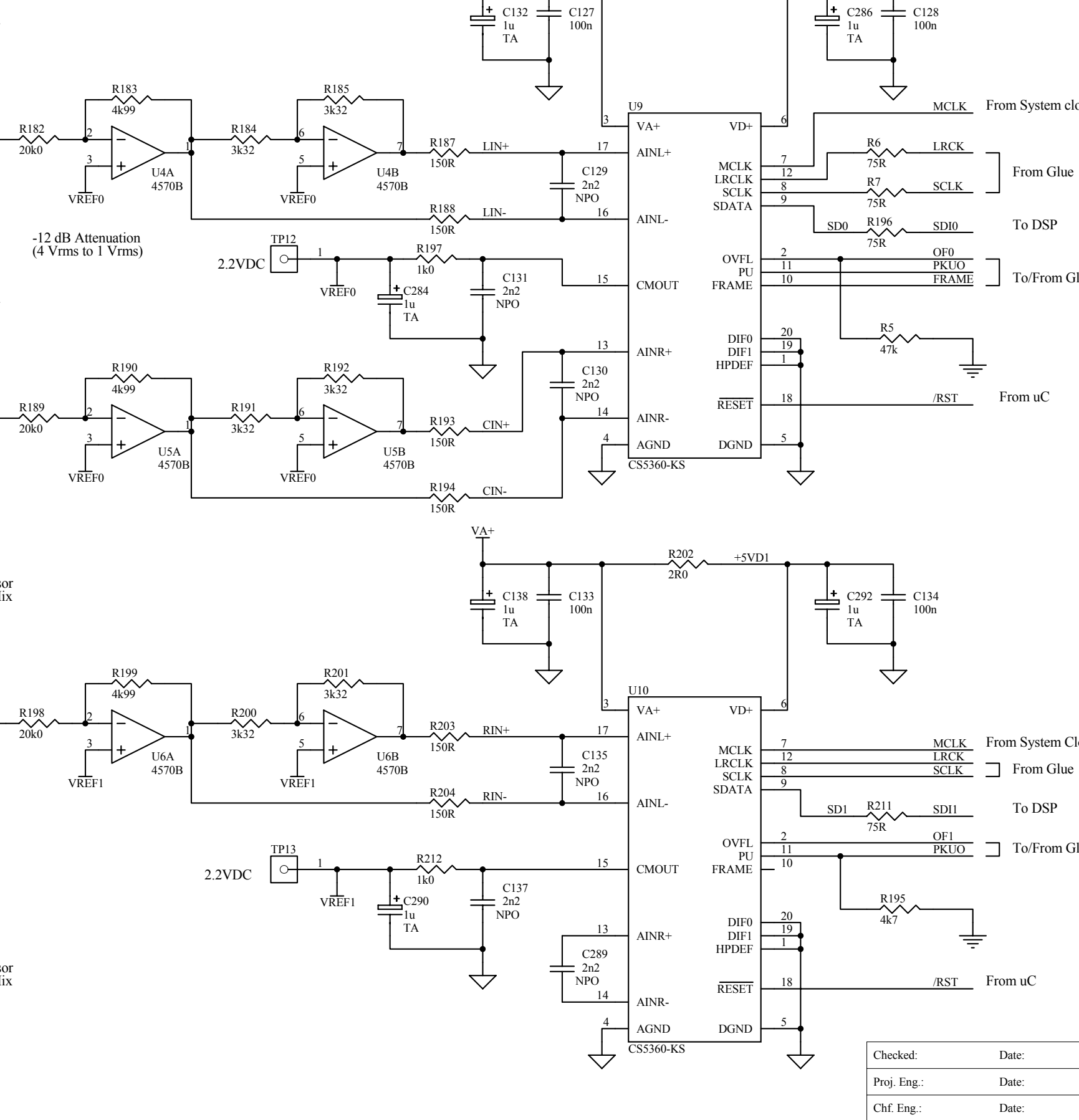
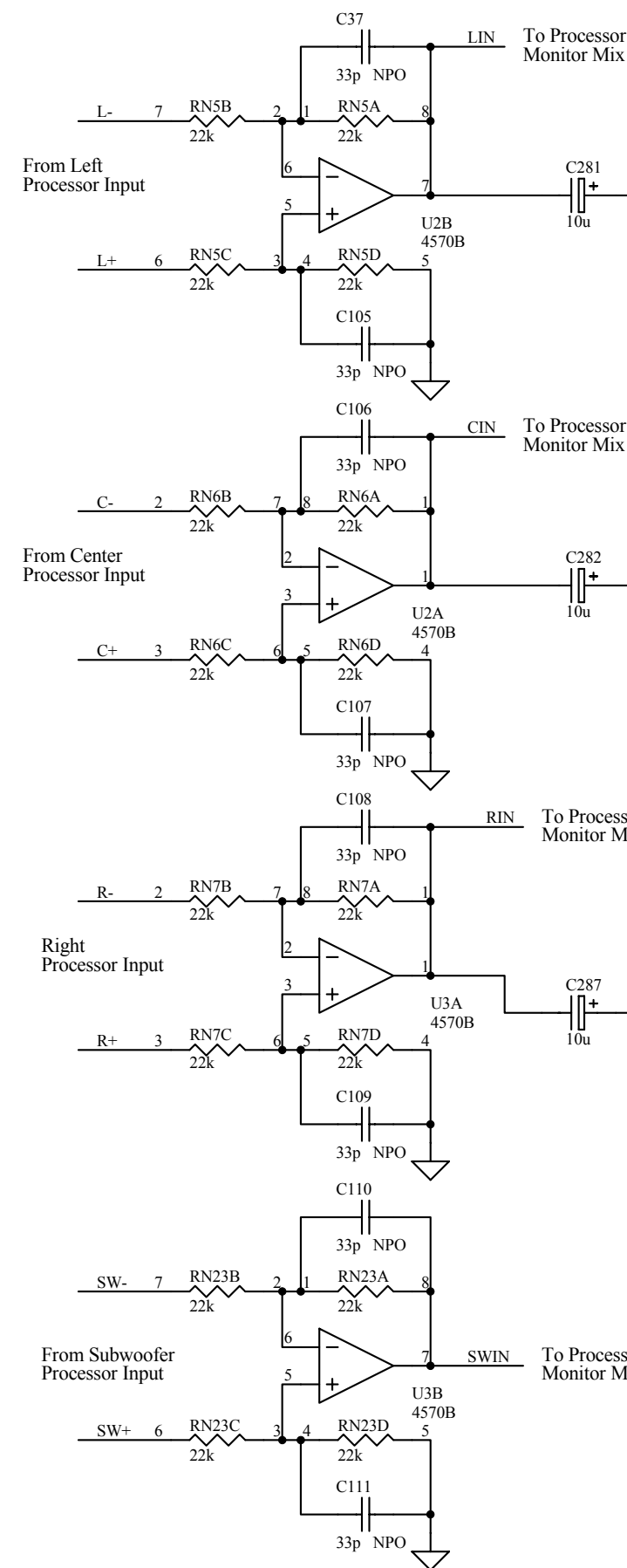
A

D

C

B

A



Checked:	Date:
Proj. Eng.:	Date:
Chf. Eng.:	Date:
Production:	Date:

THAT Corporation 45 Sumner Street
Milford, MA 01854
508-478-9200

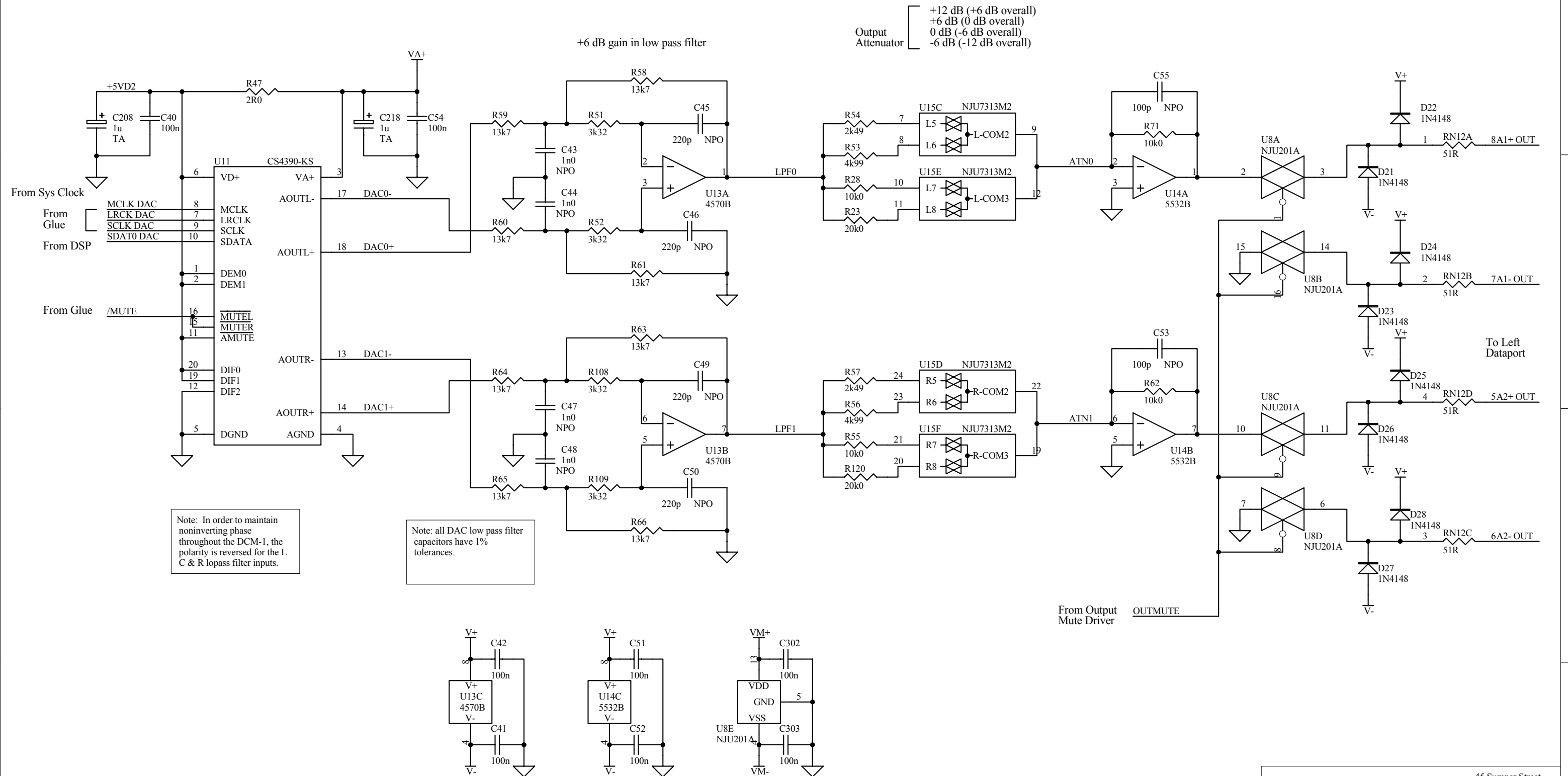
Title: **DCM-1 Rear Panel PCB
Input Buffers & A/D Converters**

Size: **B** Drawing Number: **PC-000093** Revision: **A**

Date: 28-Jun-2002 Drawn by: A. ARANDA Sheet 5 of 17
File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-0504.SCH

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

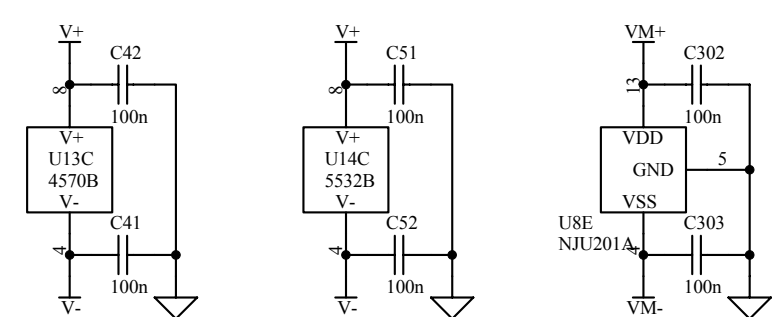
Rev	Description	Date	Approved



Note: In order to maintain noninverting phase throughout the DCM-1, the polarity is reversed for the L & R lopass filter inputs.

Note: all DAC low pass filter capacitors have 1% tolerances.

Output Attenuator
 +12 dB (+6 dB overall)
 +6 dB (0 dB overall)
 0 dB (-6 dB overall)
 -6 dB (-12 dB overall)



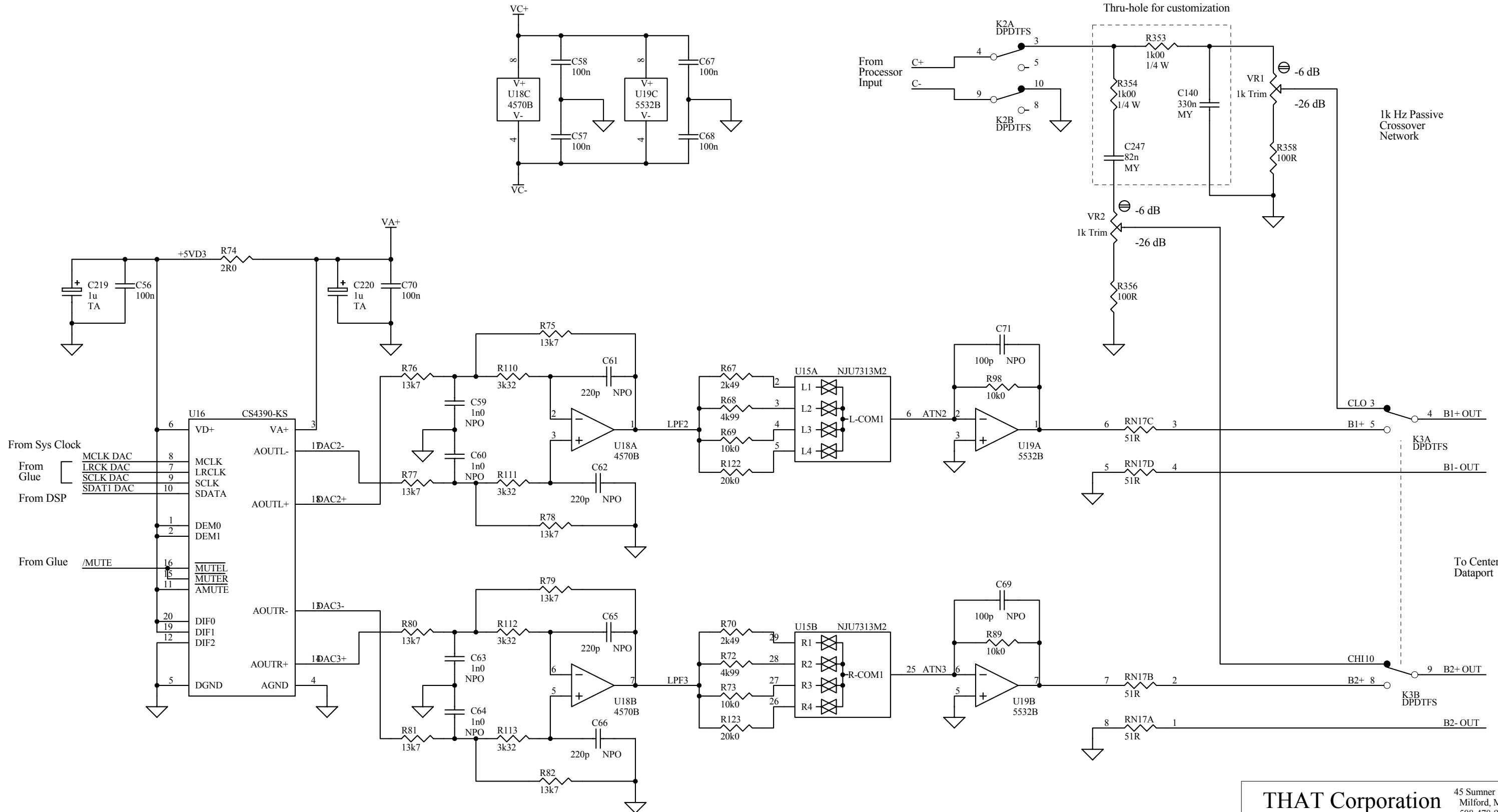
THAT Corporation 45 Sumner Street
 Milford, MA 01850
 508-478-9200

Title: **DCM-1 Rear Panel PCB**
 Left Channel D/A Converter

Checked:	Date:	Size: B	Drawing Number: PC-000093	Revision: A
Proj. Eng.:	Date:	Date: 28-Jun-2002	Drawn by: A. ARANDA	Sheet 6 of 17
Chf. Eng.:	Date:	File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-0604.SCH		
Production:	Date:			

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved



Note: all DAC low pass filter capacitors have 1% tolerances.

THAT Corporation 45 Sumner Street
 Milford, MA 01840
 508-478-9200

Title: **DCM-1 Rear Panel PCB**
 Center D/A Converter With Bypass Xover

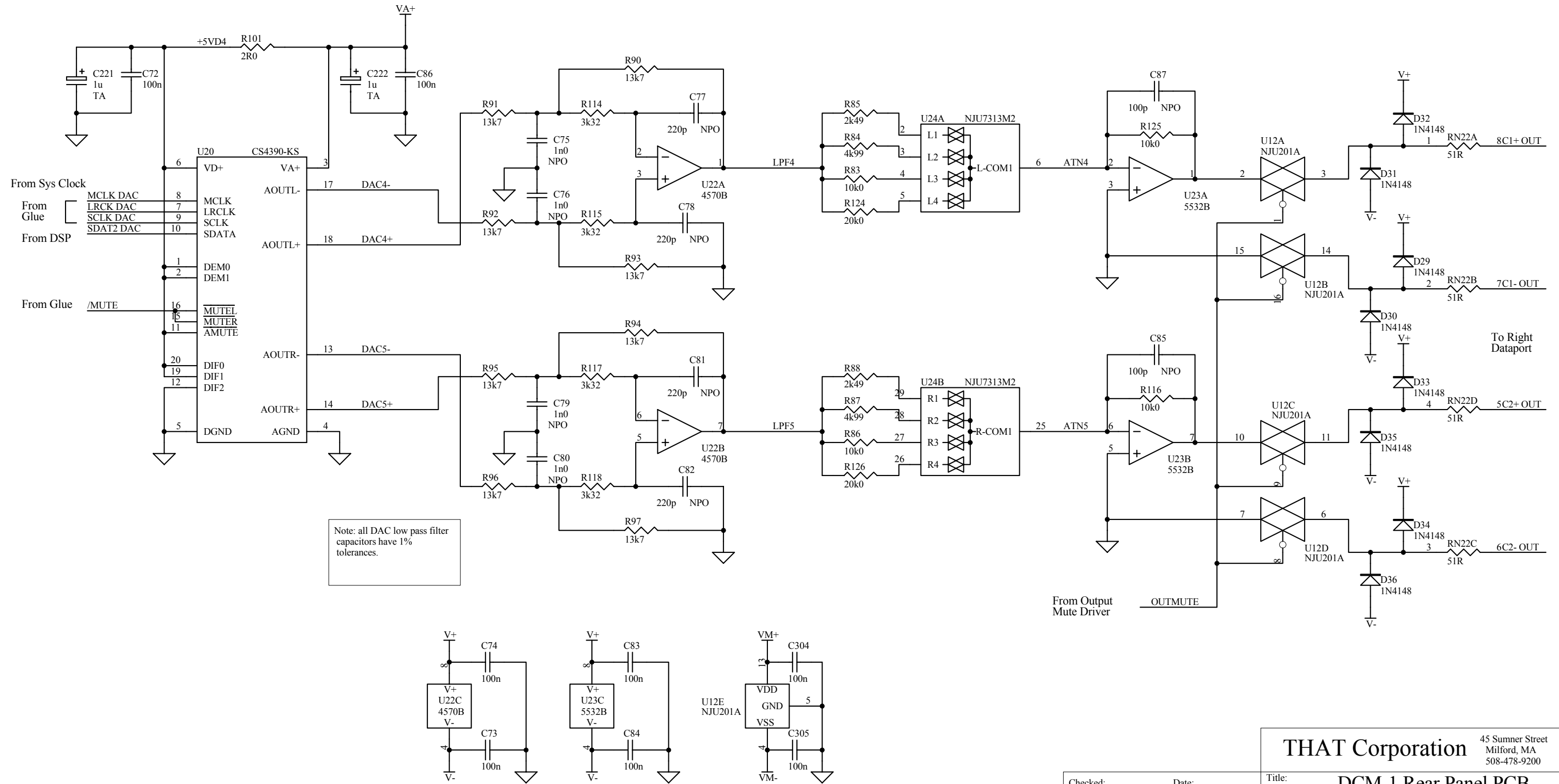
Checked: _____ Date: _____
 Proj. Eng.: _____ Date: _____
 Chf. Eng.: _____ Date: _____
 Production: _____ Date: _____

Size: **B** Drawing Number: **PC-000093** Revision: **A**

Date: 28-Jun-2002 Drawn by: A. ARANDA Sheet 7 of 17
 File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-0704.SCH

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

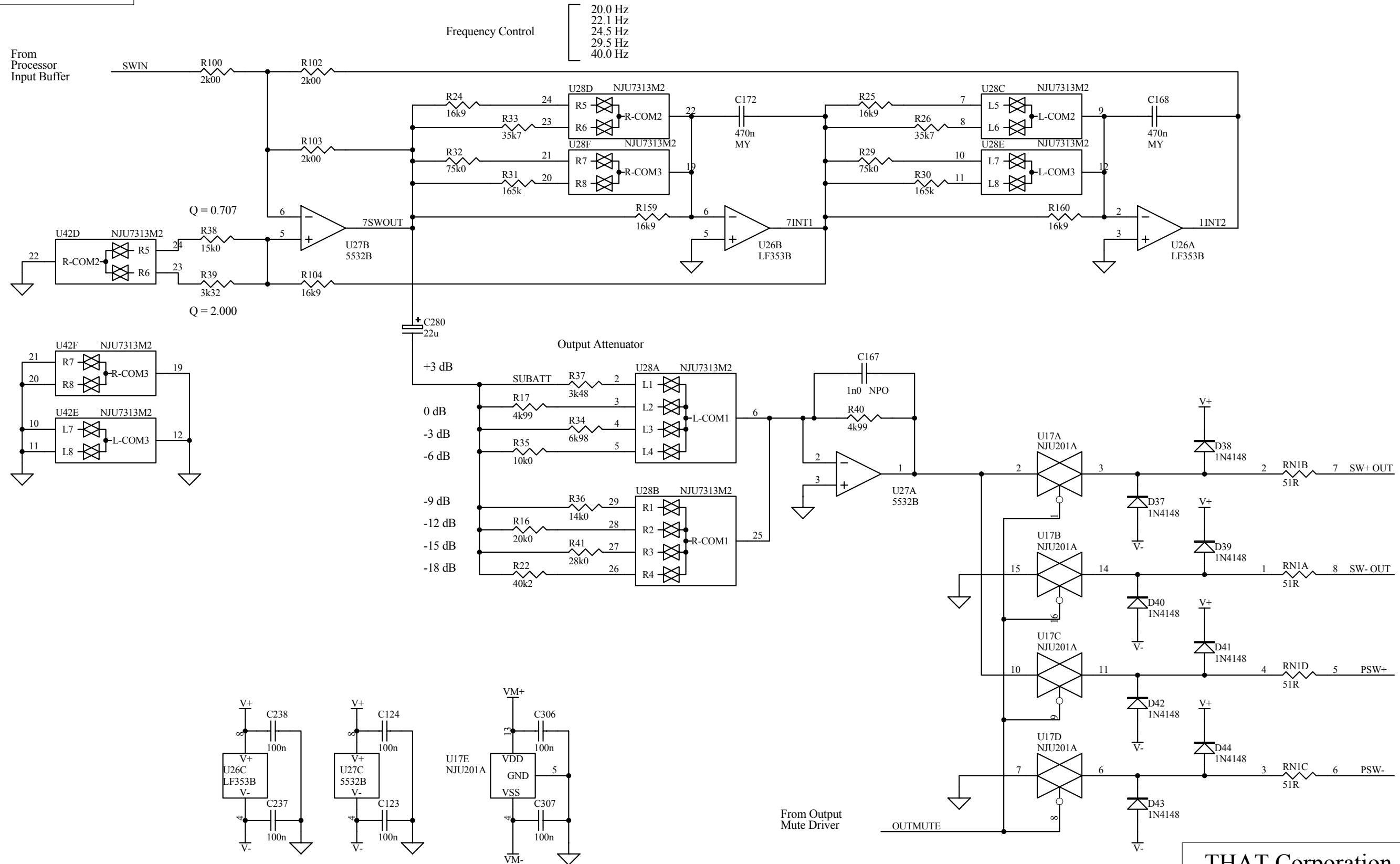
Rev	Description	Date	Approved



Checked:	Date:	Title: DCM-1 Rear Panel PCB Right Channel D/A Converter
Proj. Eng.:	Date:	
Chf. Eng.:	Date:	Size: B Drawing Number: PC-000093 Revision: A
Production:	Date:	Date: 28-Jun-2002 Drawn by: A. ARANDA Sheet 8 of 17 File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-0804.SCH

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved



THAT Corporation 45 Sumner Street
Milford, MA 508-478-9200

Title: **DCM-1 Rear Panel PCB**
Subwoofer Processing

Checked: _____ Date: _____
Proj. Eng.: _____ Date: _____
Chf. Eng.: _____ Date: _____
Production: _____ Date: _____

Size: **B** Drawing Number: **PC-000093-000** Revision: **A**

Date: 28-Jun-2002 Drawn by: A. ARANDA Sheet 9 of 17
File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-0904.SCH

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved

D

D

From Dataport Voltage Inputs

C

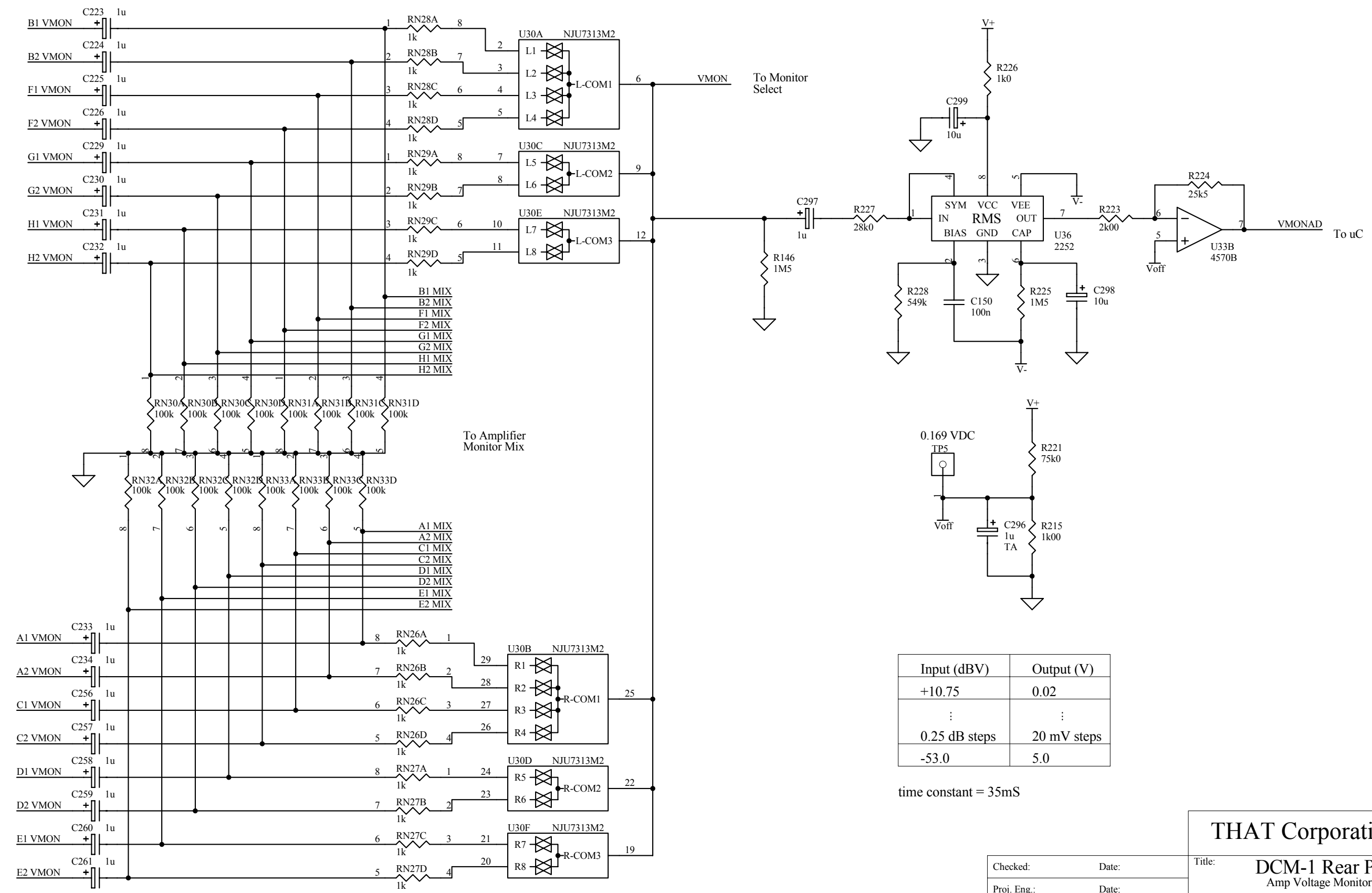
C

B

B

A

A



Input (dBV)	Output (V)
+10.75	0.02
⋮	⋮
0.25 dB steps	20 mV steps
-53.0	5.0

time constant = 35mS

THAT Corporation 45 Sumner Street
Milford, MA 508-478-9200

Title: **DCM-1 Rear Panel PCB Amp Voltage Monitor**

Size: **B** Drawing Number: **PC-000093** Revision: **A**

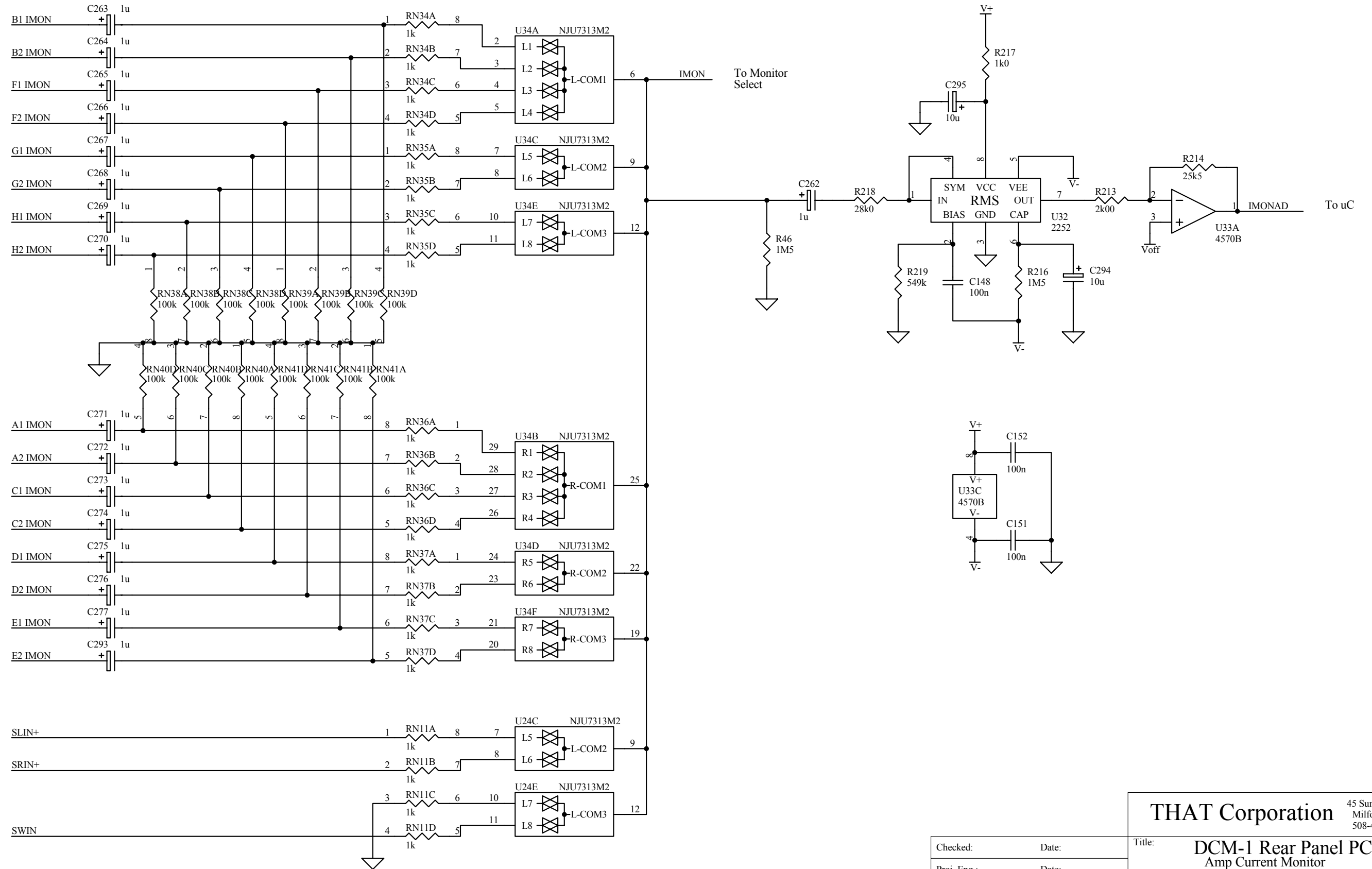
Date: 28-Jun-2002 Drawn by: A. ARANDA Sheet 10 of 17
File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-1004.SCH

Checked:	Date:
Proj. Eng.:	Date:
Chf. Eng.:	Date:
Production:	Date:

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved

From Dataport Current Inputs

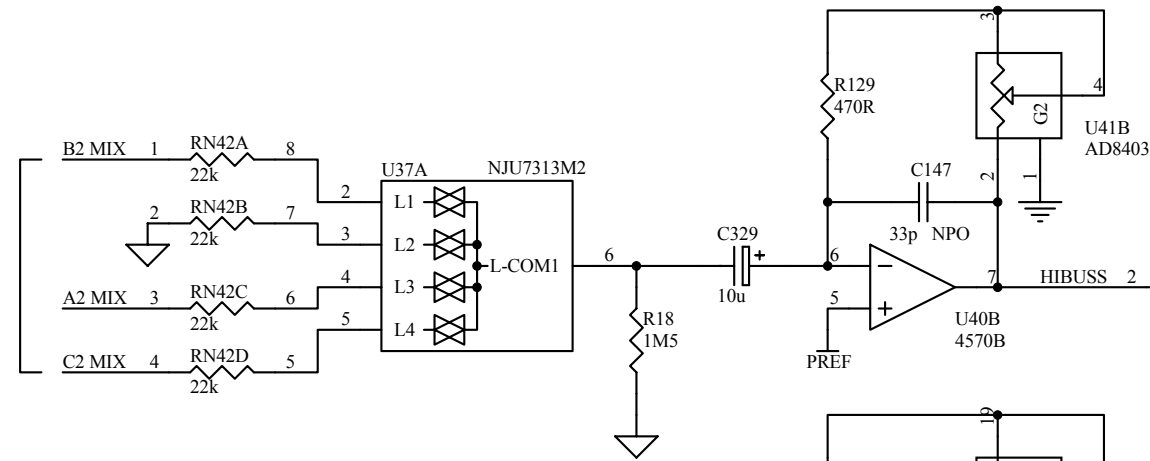


THAT Corporation 45 Sumner Street Milford, MA 508-478-9200		Title: DCM-1 Rear Panel PCB Amp Current Monitor		
		Size: B	Drawing Number: PC-000093	Revision: A
Checked:	Date:	Date: 28-Jun-2002	Drawn by: A. ARANDA	Sheet: 11 of 17
Proj. Eng.:	Date:	File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-1104.SCH		
Chf. Eng.:	Date:			
Production:	Date:			

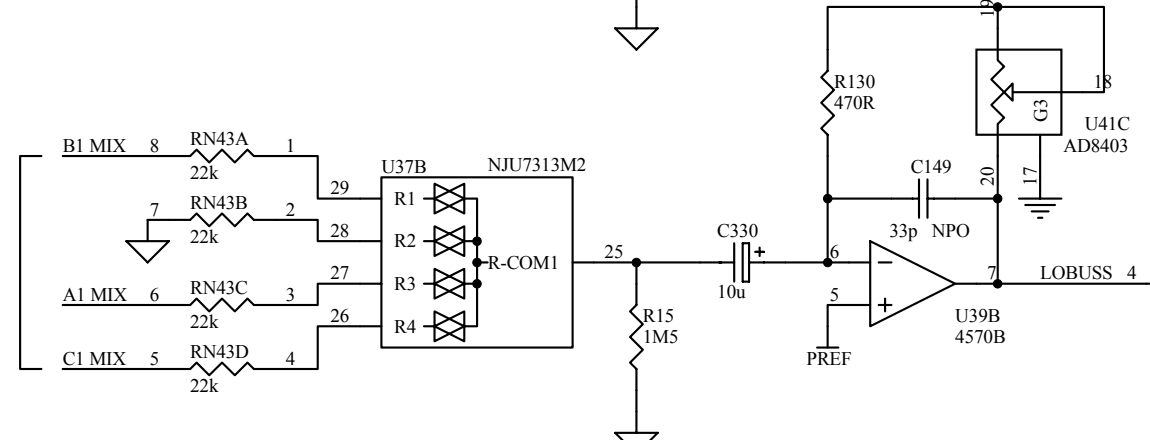
This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved

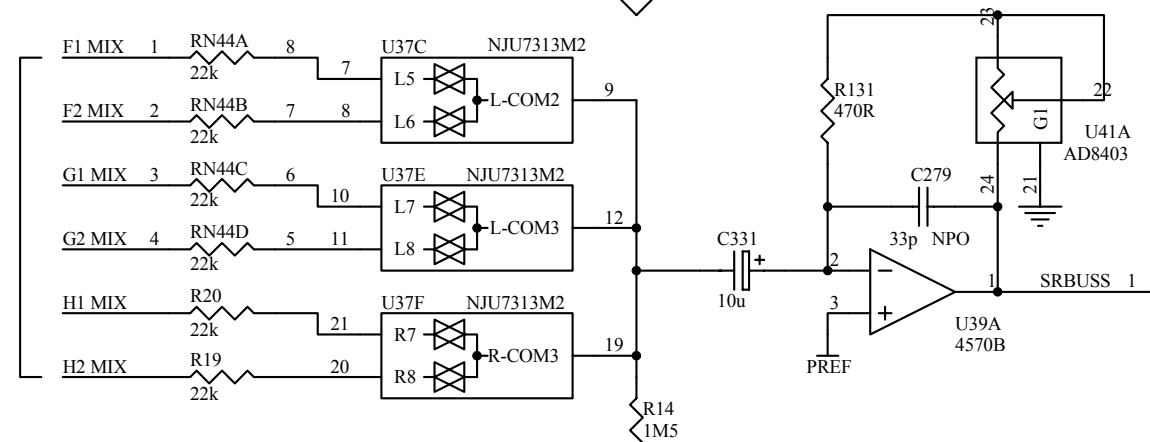
From VMON Inputs (Highs)



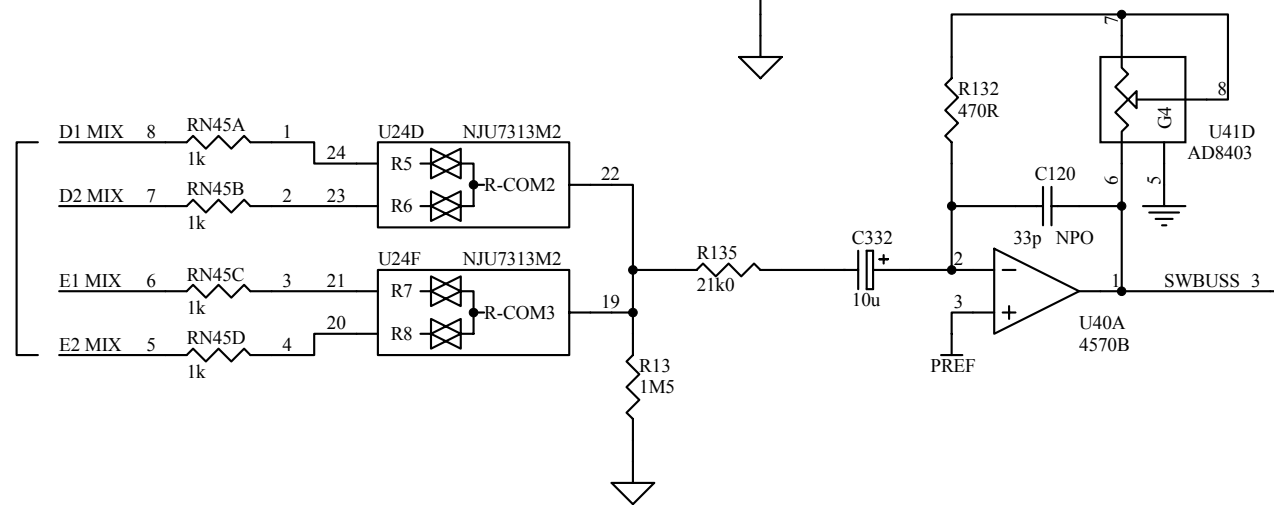
From VMON Inputs (Lows)



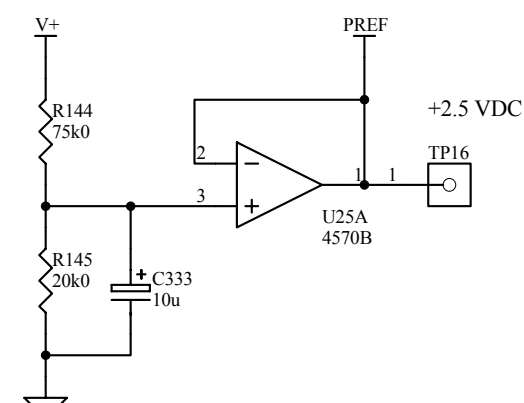
From VMON Inputs (Surrounds)



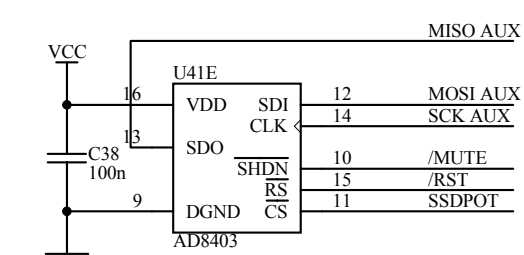
From VMON Inputs (Subs)



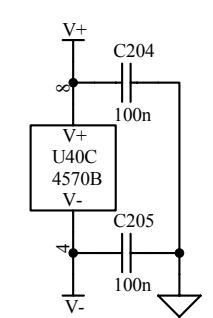
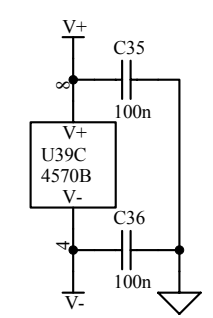
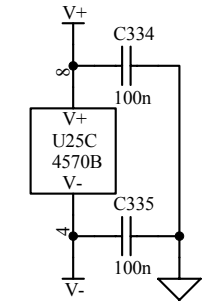
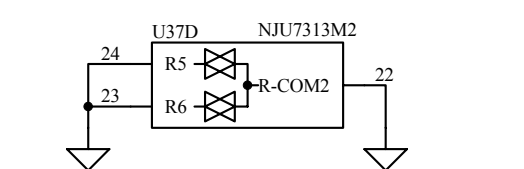
To Monitor Selector



To / From Glue



From uC



THAT Corporation 45 Sumner Street
Milford, MA 508-478-9200

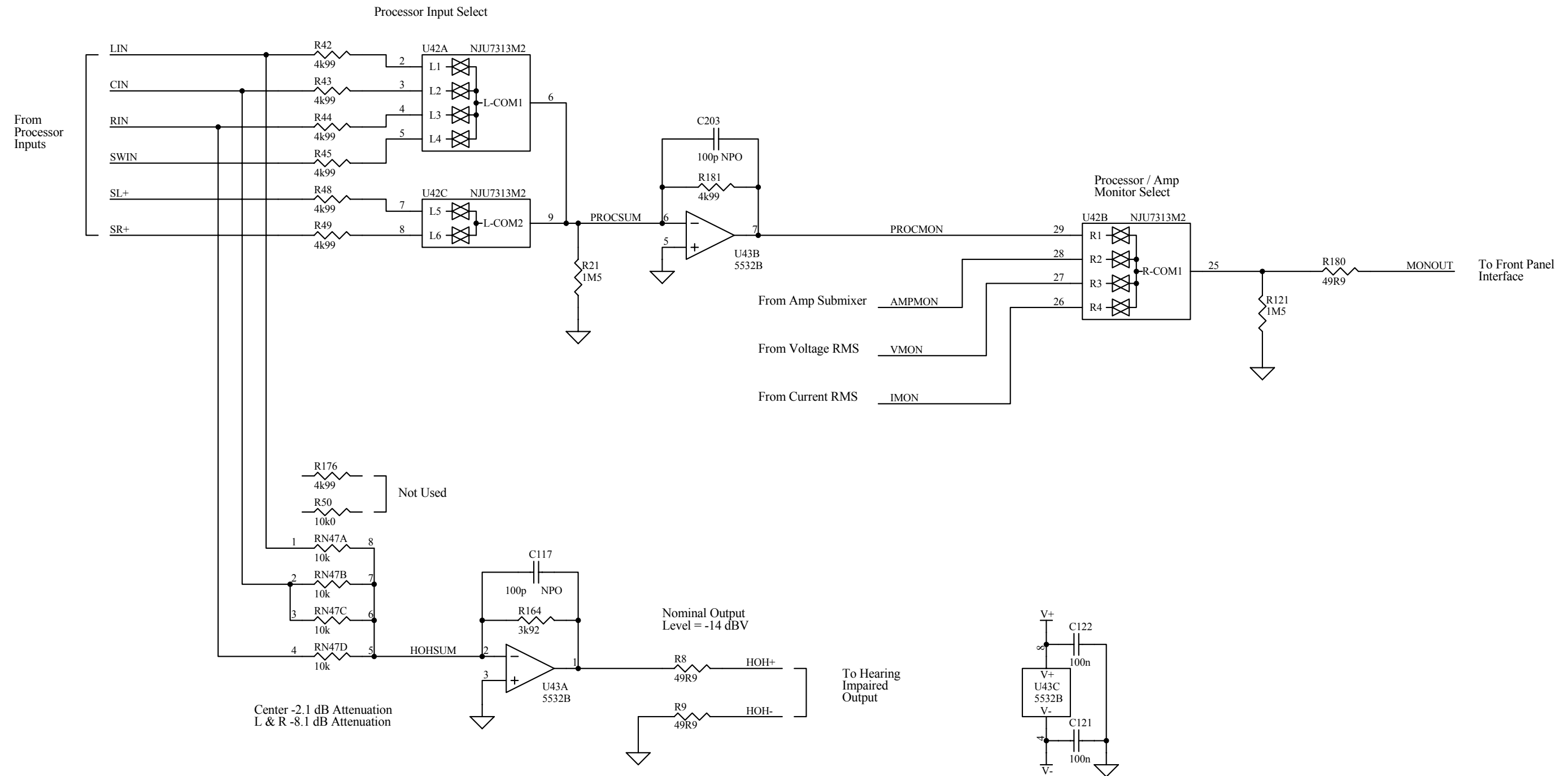
Title: DCM-1 Rear Panel PCB
Amp Monitor Select & Submix

Checked:	Date:
Proj. Eng.:	Date:
Chf. Eng.:	Date:
Production:	Date:

Size: B	Drawing Number: PC-000093-00	Revision: A
Date: 28-Jun-2002	Drawn by: A. ARANDA	Sheet 12 of 17
File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-1204.SCH		

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved

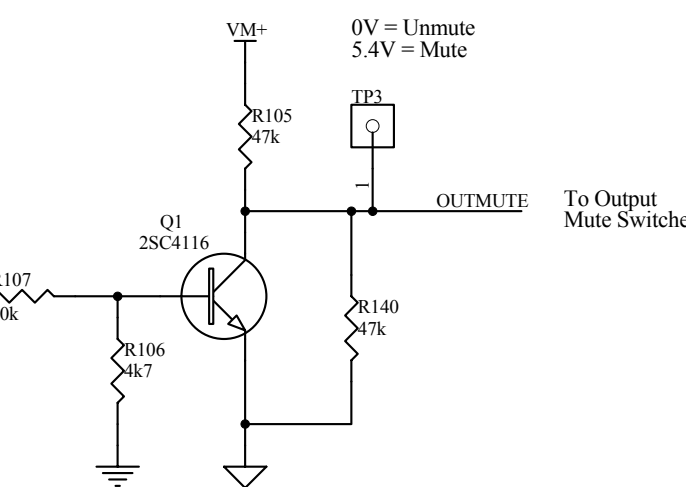
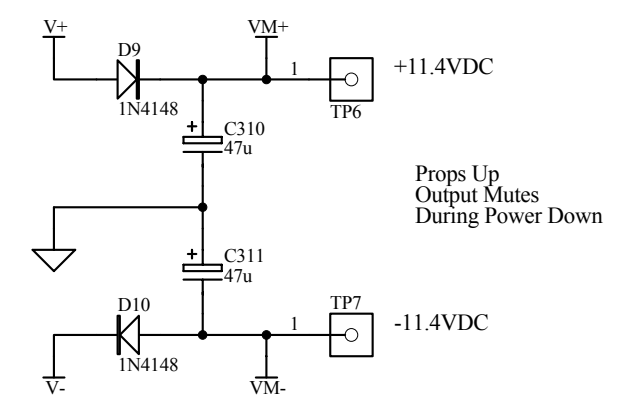
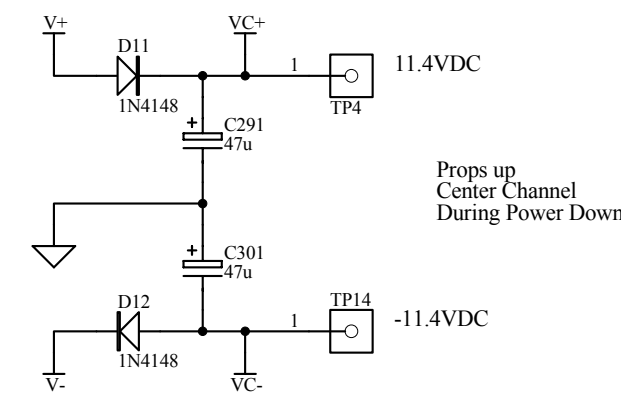
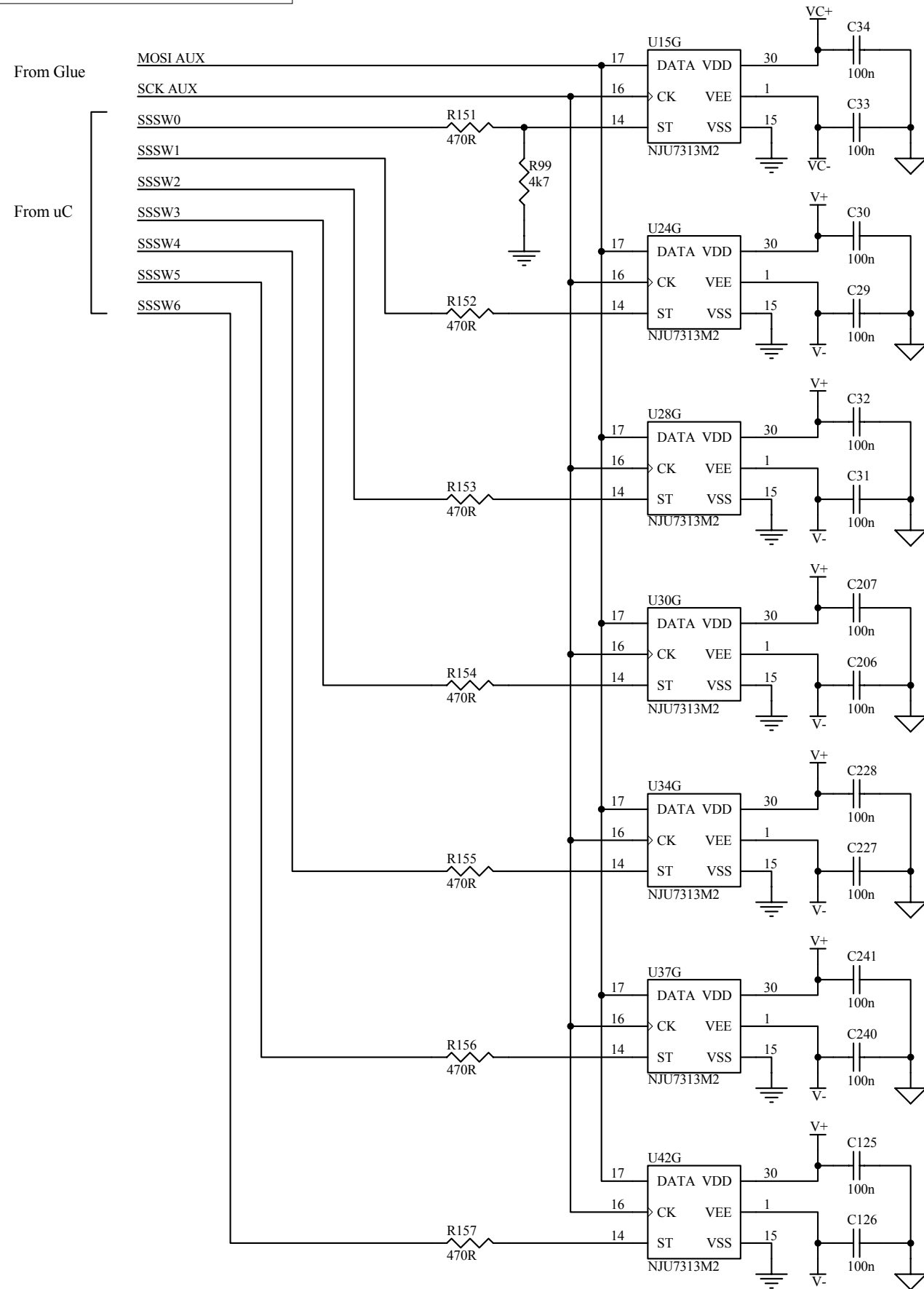


THAT Corporation 45 Sumner Street
Milford, MA 08-478-9200

Checked:	Date:	Title: DCM-1 Rear Panel PCB Processor Monitor Select & Hearing Impaired Mixer
Proj. Eng.:	Date:	
Chf. Eng.:	Date:	Size: B Drawing Number: PC-000093-000 Revision: A
Production:	Date:	Date: 28-Jun-2002 Drawn by: A. ARANDA Sheet 13 of 17 File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-1304.SCH

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved

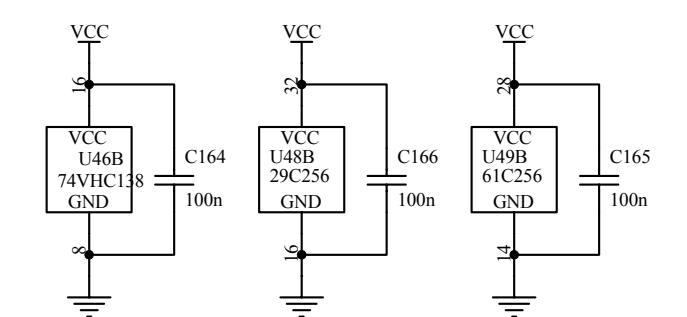
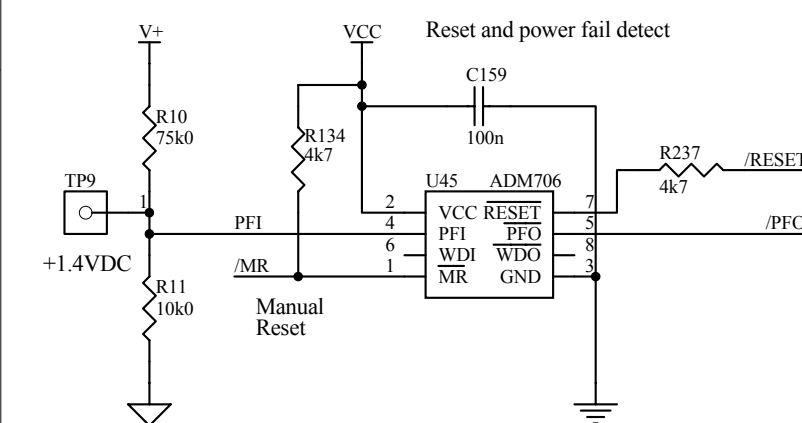
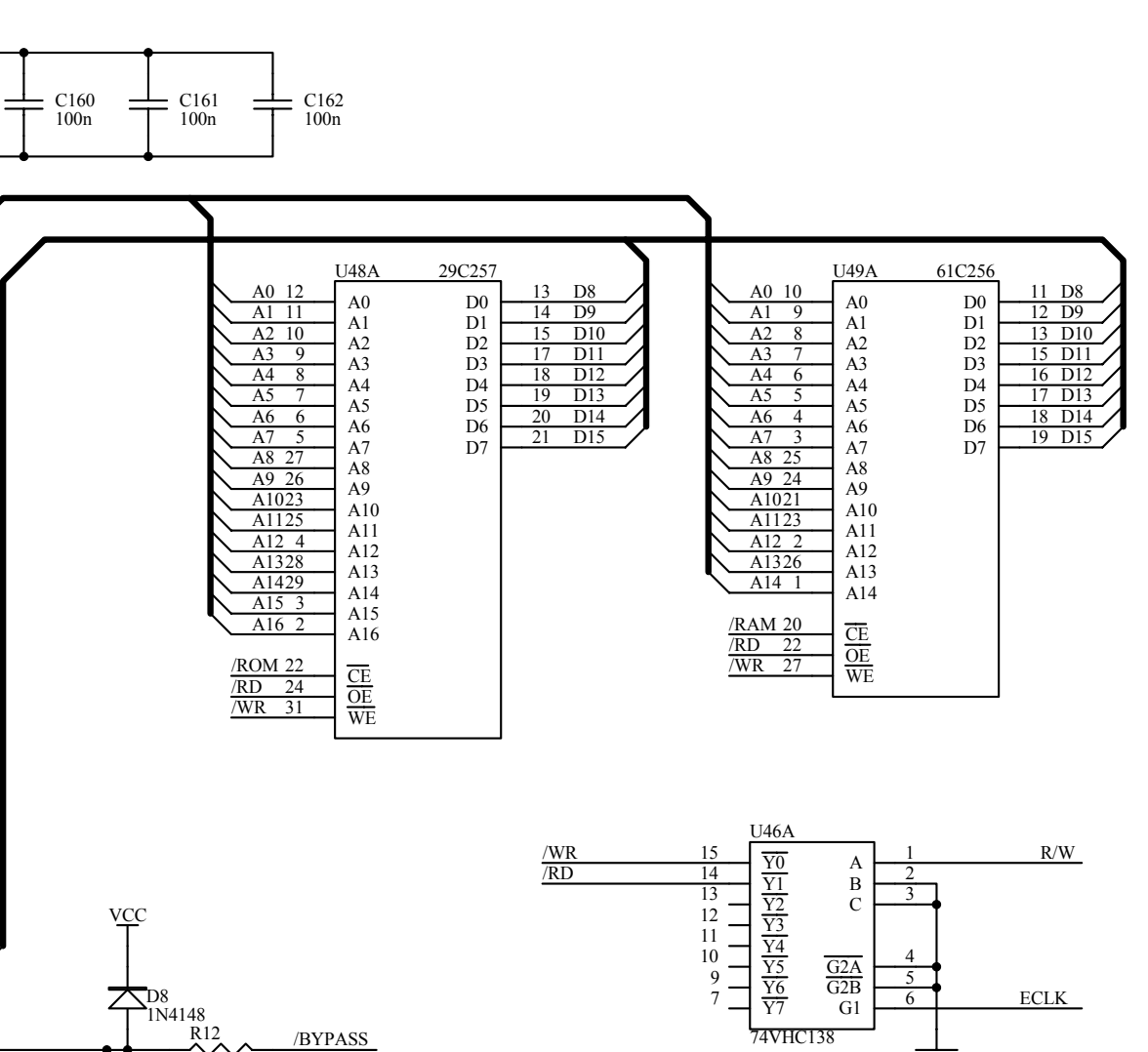
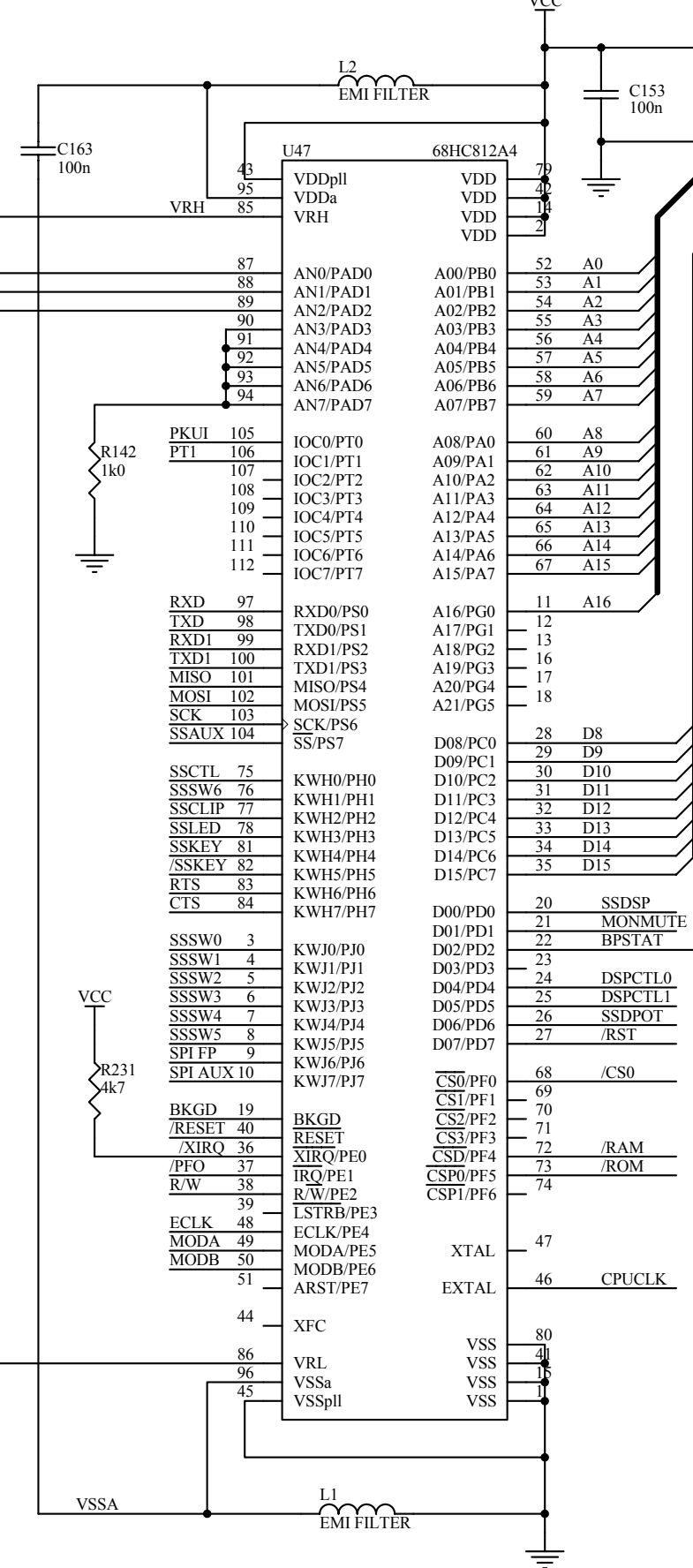
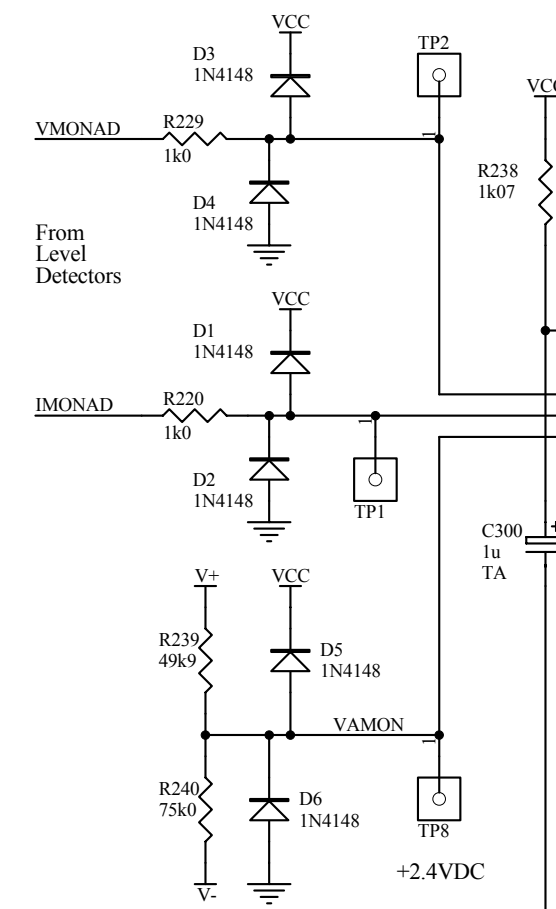
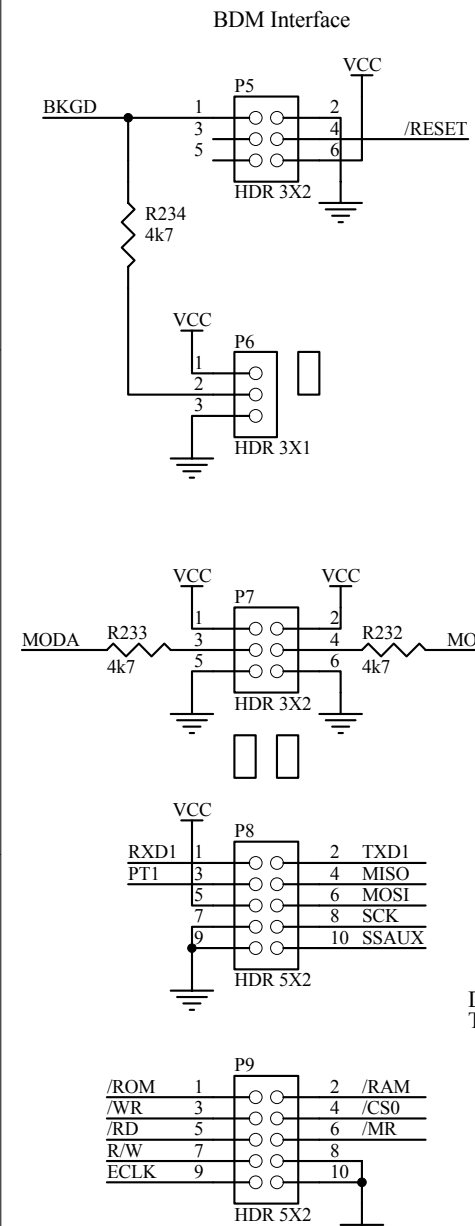


Checked: Date:		Title: DCM-1 Rear Panel PCB	
		Analog Switch Control & Supply Prop-ups	
Proj. Eng.: Date:		Size: B	Drawing Number: PC-000093-00
Chf. Eng.: Date:		Date: 28-Jun-2002	Drawn by: A. ARANDA
Production: Date:		Sheet 14 of 17	File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-1404.SCH

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved

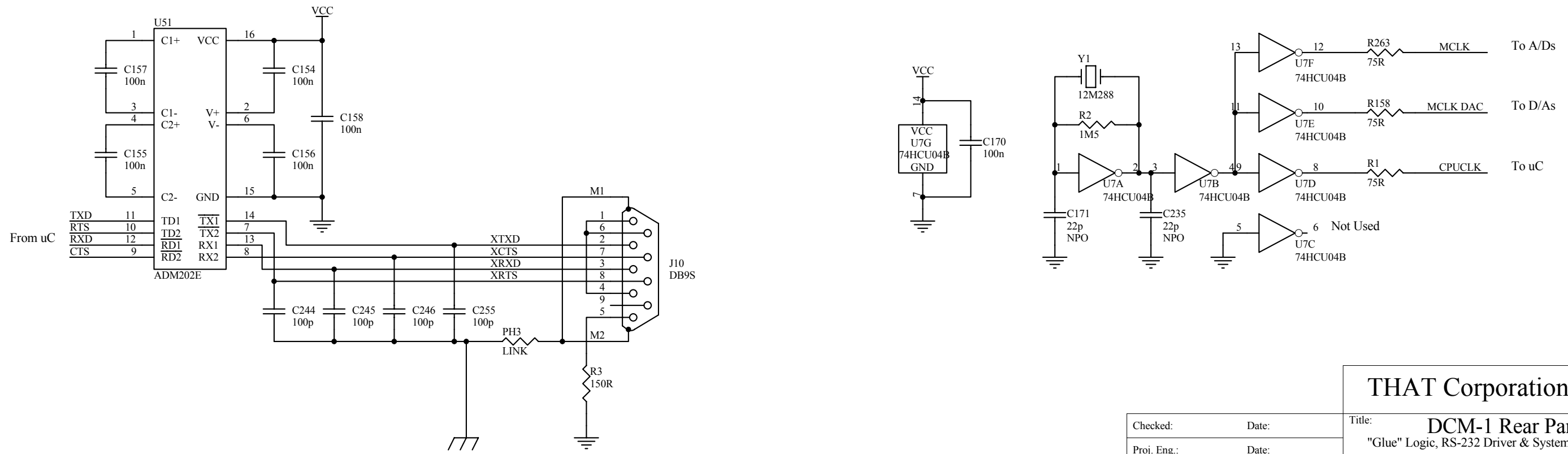
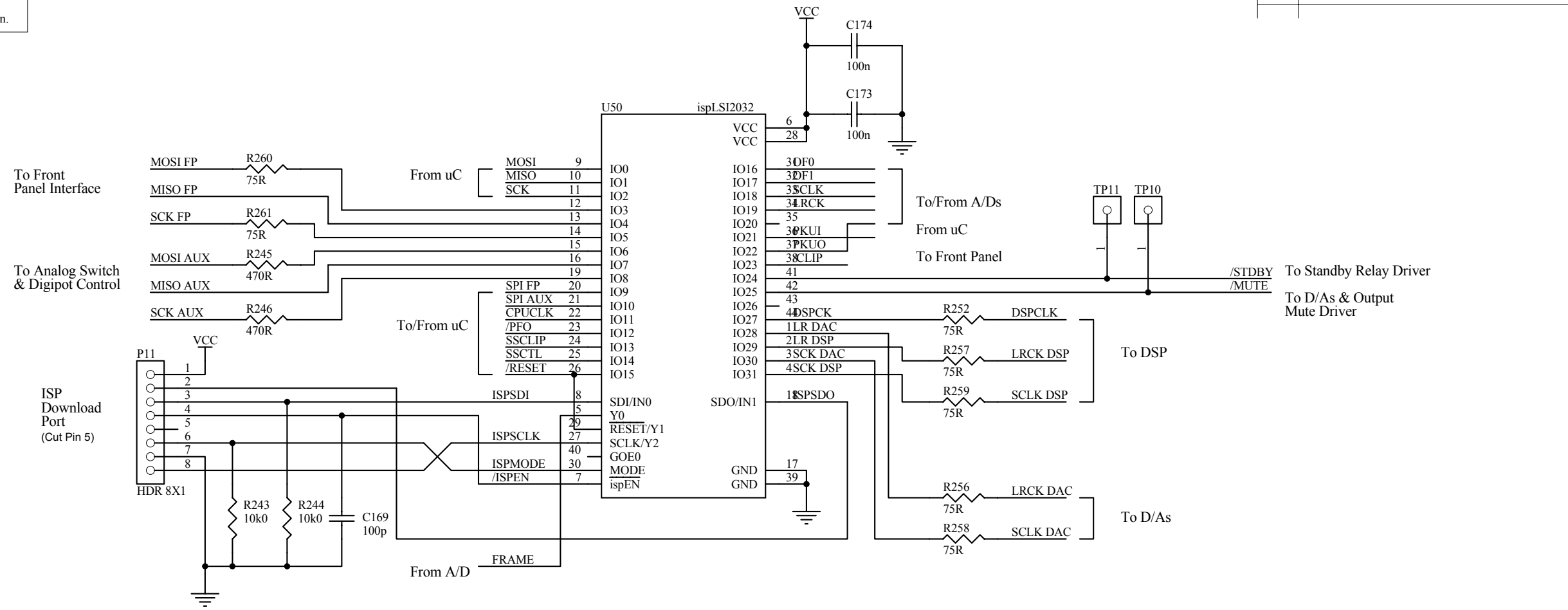
D
C
B
A



Checked:		Date:	Title: DCM-1 Rear Panel PCB Microcontroller & Peripherals	
Proj. Eng.:		Date:	Size: B	Drawing Number: PC-000093-000 A
Chf. Eng.:		Date:	Date: 28-Jun-2002	Drawn by: A. ARANDA
Production:		Date:	File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-1504.SCH	Sheet 15 of 17

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved



THAT Corporation 45 Sumner Street
Milford, MA 01850
508-478-9200

Title: **DCM-1 Rear Panel PCB**
"Glue" Logic, RS-232 Driver & System Clock Oscillator

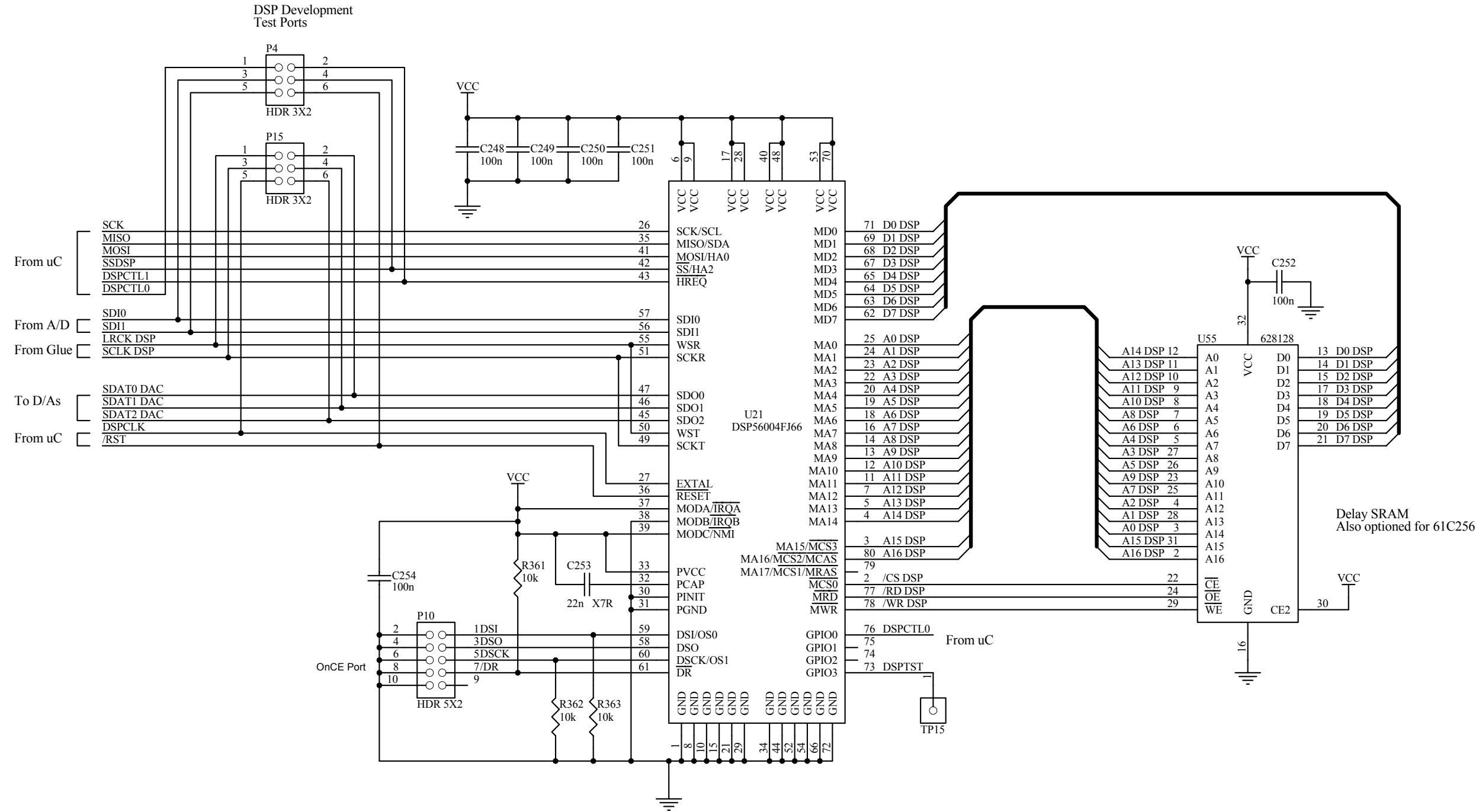
Checked: _____ Date: _____
Proj. Eng.: _____ Date: _____
Chf. Eng.: _____ Date: _____
Production: _____ Date: _____

Size: **B** Drawing Number: **PC-000093-00** Revision: **A**

Date: 28-Jun-2002 Drawn by: A. ARANDA Sheet 16 of 17
File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-1604.SCH

This document and the data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of THAT Corporation.

Rev	Description	Date	Approved



THAT Corporation 45 Sumner Street
Milford, MA
508-478-9200

Title: **DCM-1 Rear Panel PCB**
Digital Signal Processor

Checked:	Date:
Proj. Eng.:	Date:
Chf. Eng.:	Date:
Production:	Date:

Size: B	Drawing Number: PC-000093-00	Revision: A
Date: 28-Jun-2002	Drawn by: A. ARANDA	Sheet 17 of 17
File: C:\AA\PC0093rA\SH0093rA.DDB - Documents\304-1704.SCH		