


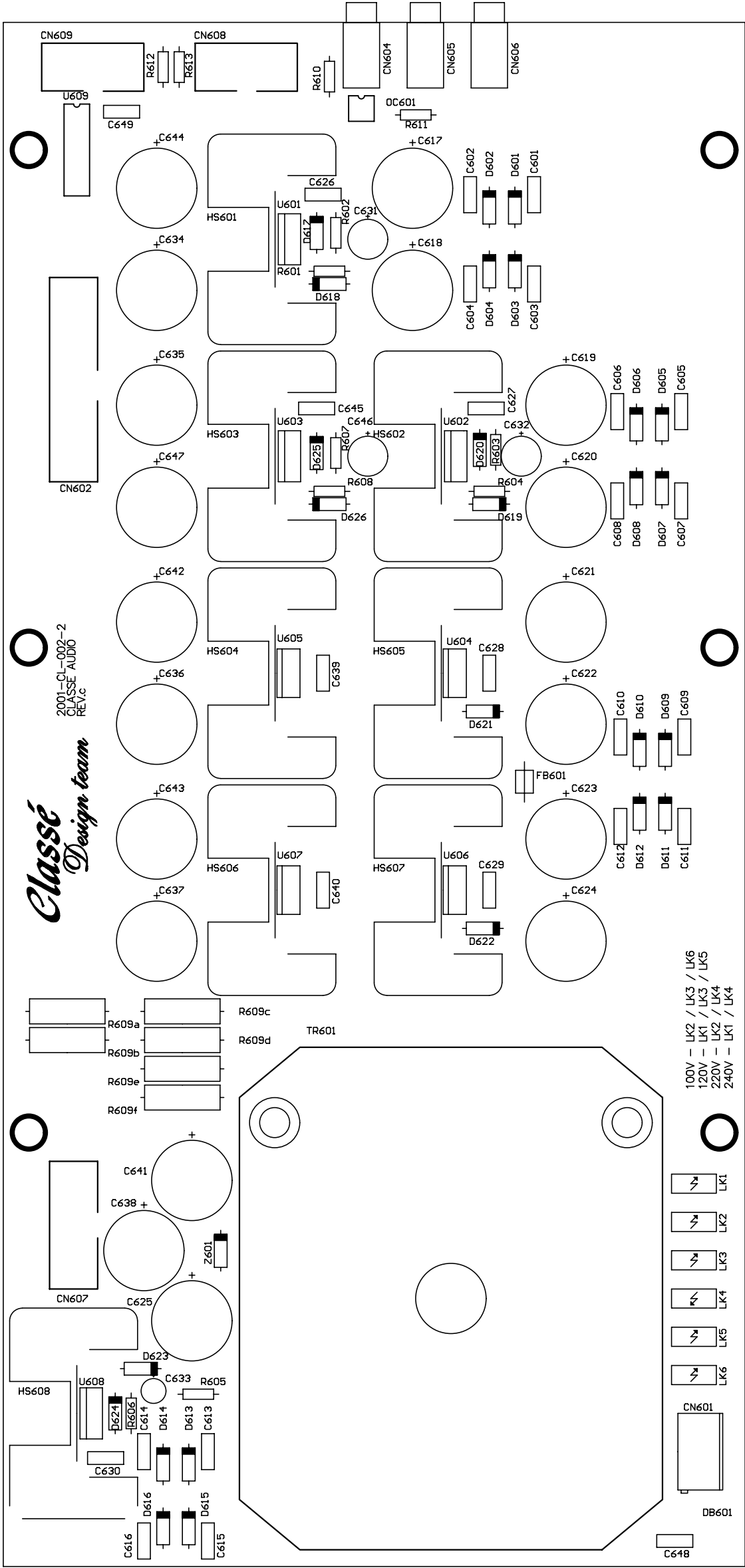
Classé



CDP-10
INTEGRATED CD PLAYER

SERVICE MANUAL
v 1.0



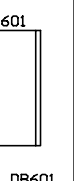
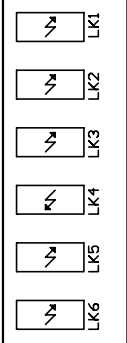


Classé
Design team

2001-CL-002-2
CLASSE AUDIO
REV.C

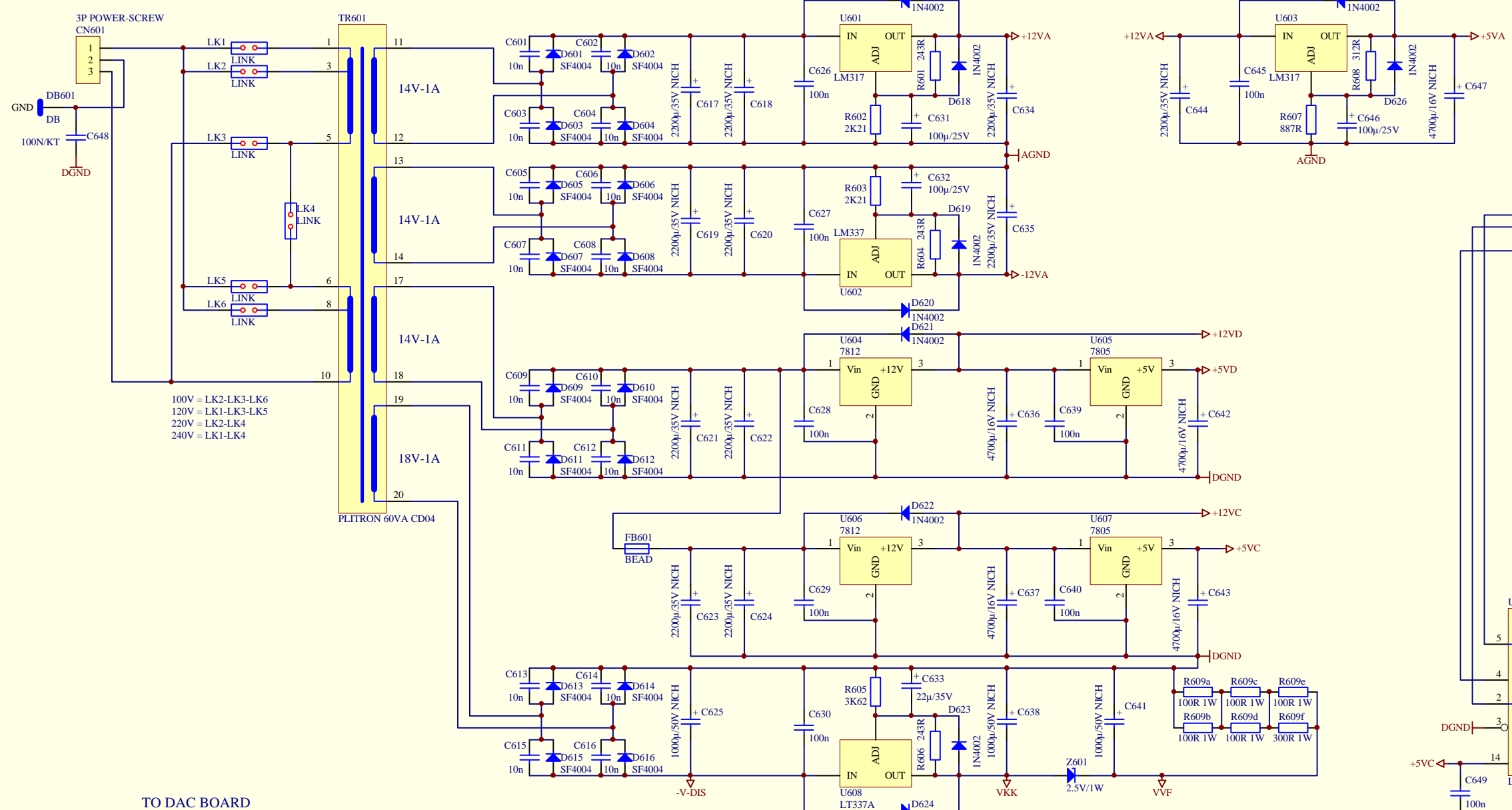
SILK SCREEN

100V - LK2 / LK3 / LK6
120V - LK1 / LK3 / LK5
220V - LK2 / LK4
240V - LK1 / LK4

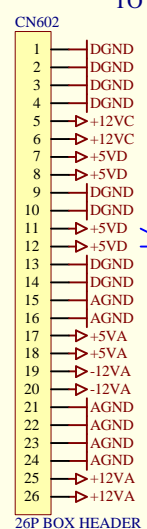


DB601

C648

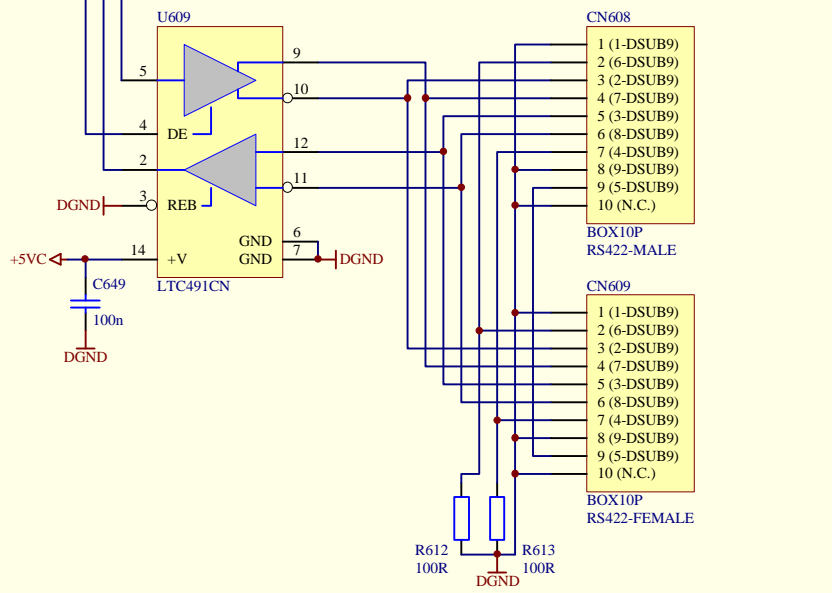
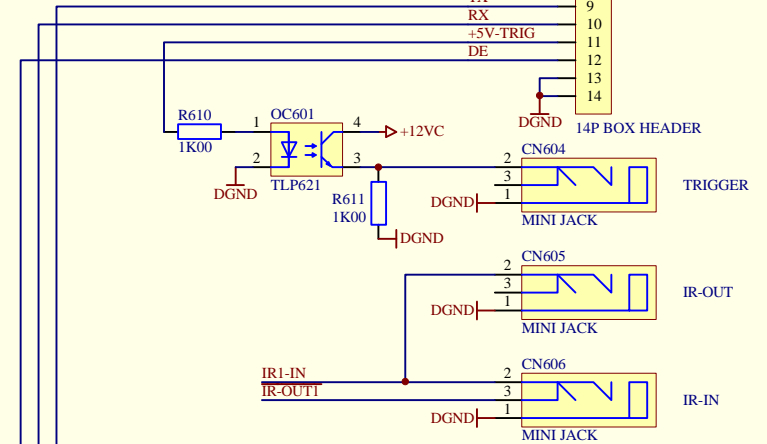
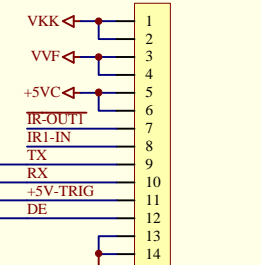


100V = LK2-LK3-LK6
 120V = LK1-LK3-LK5
 220V = LK2-LK4
 240V = LK1-LK4



TO OUTPUT MUTE RELAIS

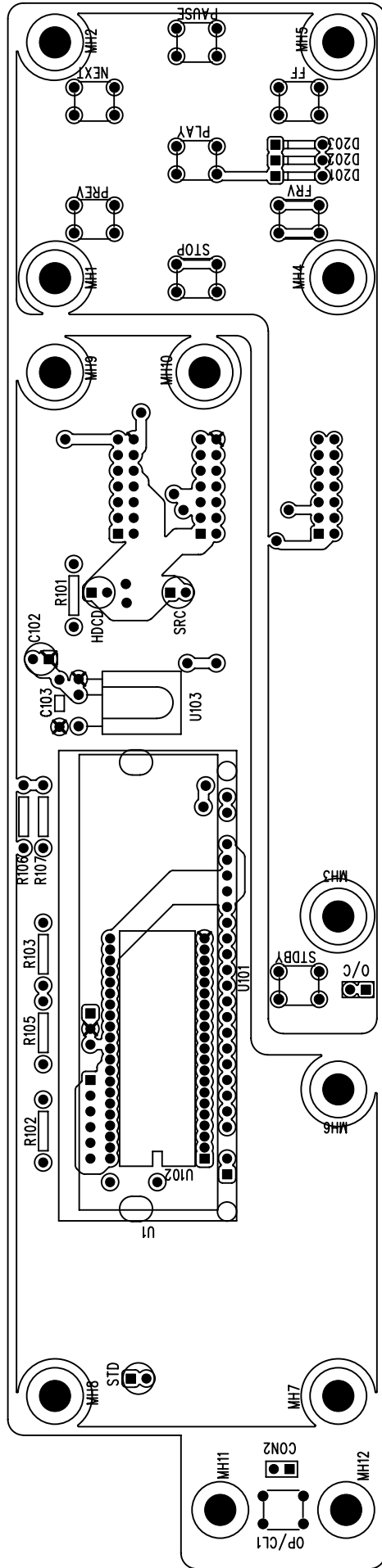
TO CONTROL BOARD



Classé Classé Audio Inc.
 5070 François Cusson
 Lachine, Québec, Canada
 H8T 1B3

Title: **Classe CD 0.4 Supply board**

Size	Number	Revision
Tabloid	2001-CL-002-2	May 19-2002 C
Date:	19-May-2002	Sheet 1 of 1
File:	C:\Projects Classe\...\CDP10-SUP.sch	Drawn By: Peter Schut



6

5

4

3

2

1

D

C

B

A

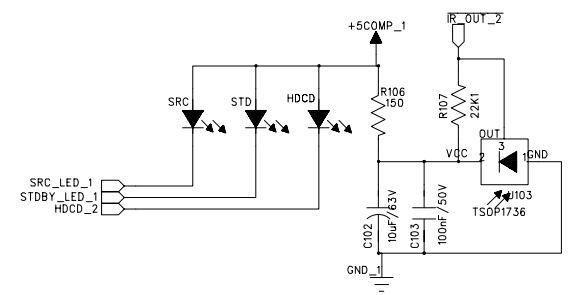
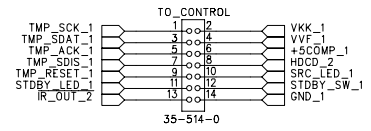
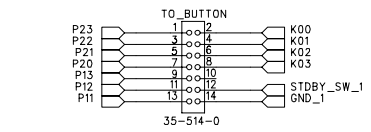
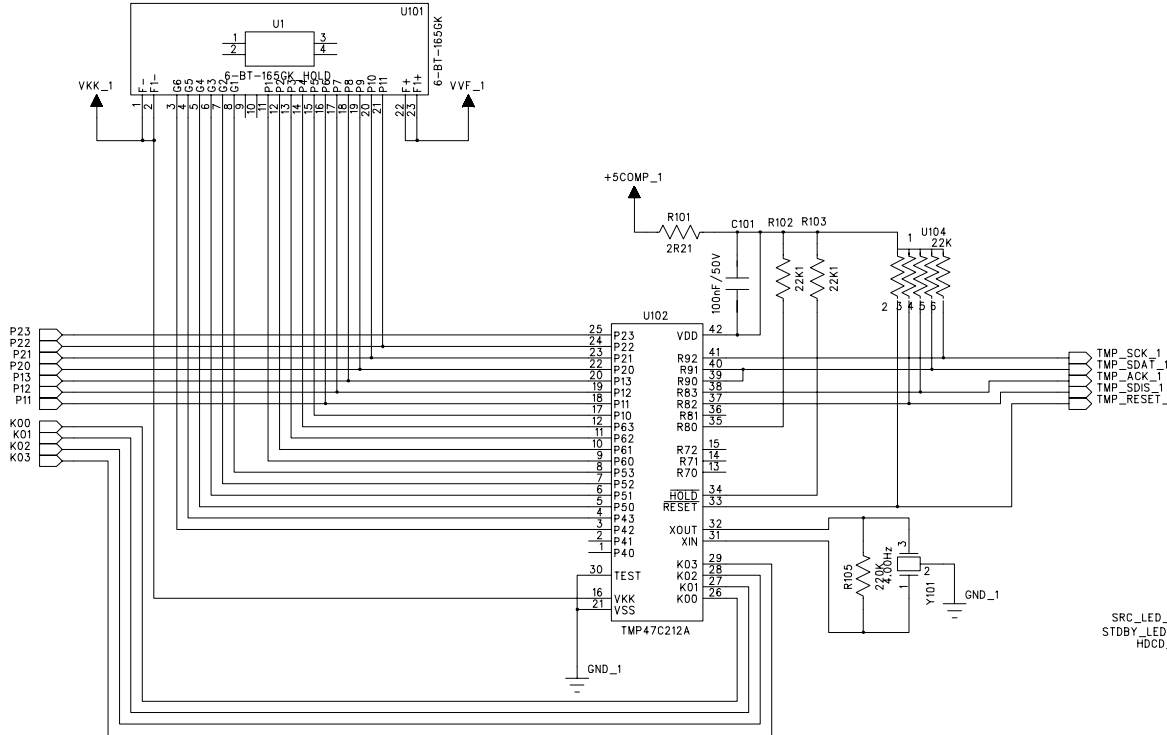
D

C

B

A

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



COMPANY: CLASSE AUDIO INC.

TITLE: CDP10 DISPLAY

DRAWN:	DATED:
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

CODE:	SIZE:	DRAWING NO:	REV:
		B334XR00	

SCALE: SHEET: 1 OF 2

6

5

4

3

2

1

D

C

B

A

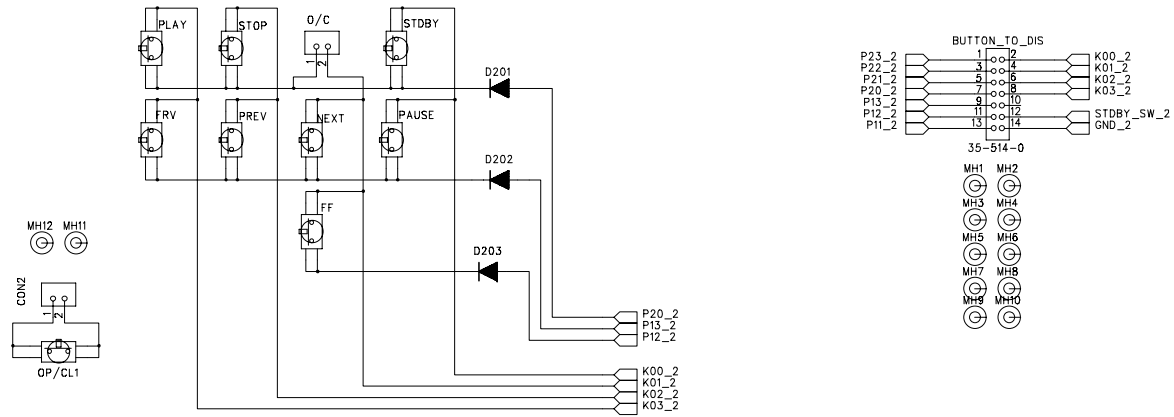
D

C

B

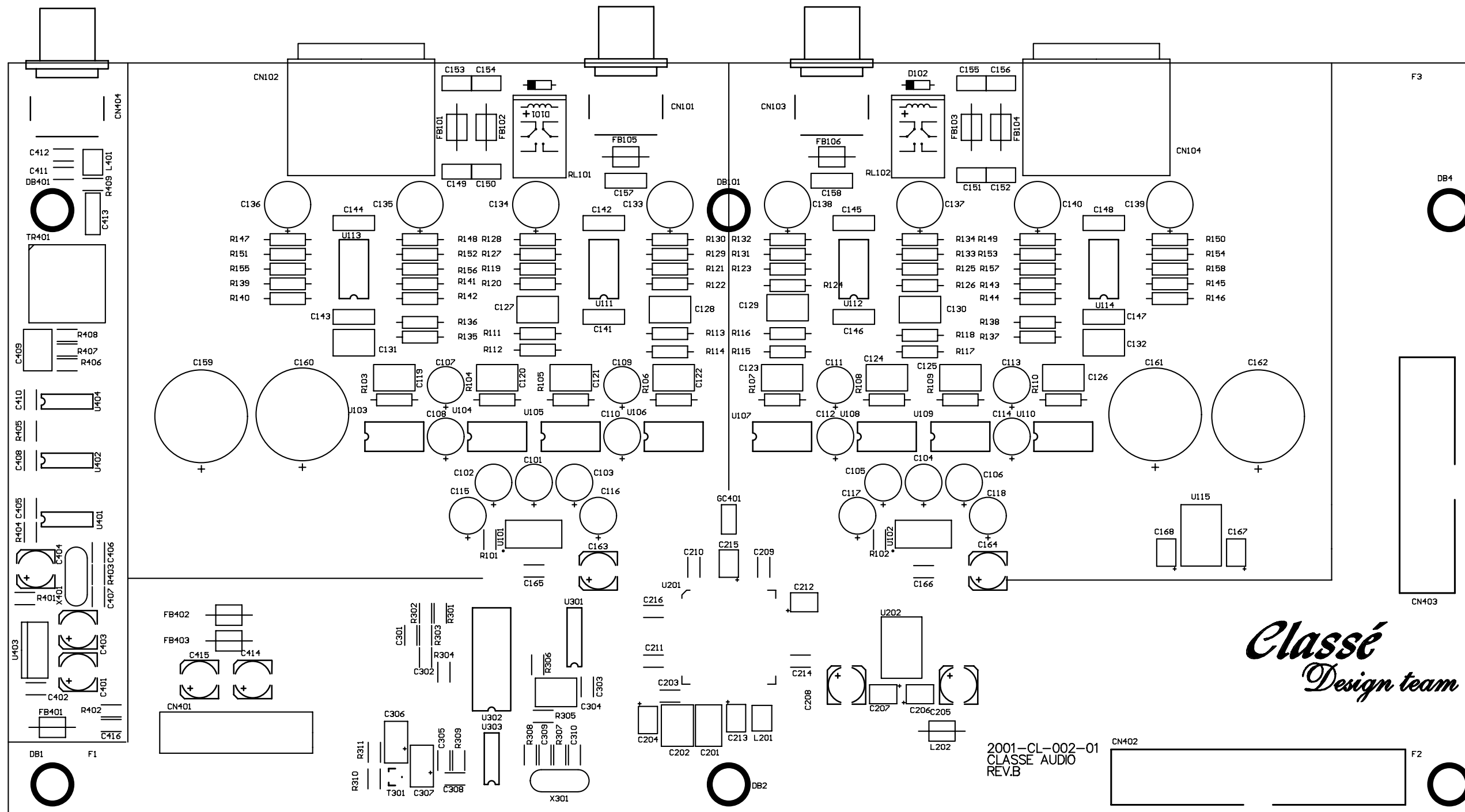
A

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



COMPANY:				CLASSE AUDIO INC.			
TITLE:				CDP 10 BUTTONS			
CODE:	SIZE:	DRAWING NO:		REV:			
		B334XR00					
SCALE:						SHEET: 2 OF 2	

DRAWN:	DATED:
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:



SILK SCREEN

Classé
Design team

2001-CL-002-01
CLASSE AUDIO
REV.B

CN402

F2

F3

F1

DB2

DB4

CN404

CN101

CN103

CN104

CN403

CN102

C153 C154

C155 C156

C149 C150

C157 C158

C151 C152

C136

C144 C135

C134

C142 C133

C128

C138 C145

C137

C140 C148 C139

R147

R151

R155

R139

R140

R148 R128

R152 R127

R156 R119

R141 R120

R142

R136

R135

R111

R112

R130

R132

R129

R131

R121

R123

R122

R134 R149

R133 R153

R125 R157

R126 R143

R144

R138

R118 R137

R117

R150

R154

R158

R145

R146

C143

C131

C107

C119

C120

C121

C109

C122

C159 C160

R103

R104

R105

R106

R107

R108

R109

R110

R111

R112

C161 C162

C102

C103

C115

C116

R101

R102

R103

R104

R105

R106

R107

R108

R109

R110

C168

C167

C412
C411
DB401
TR401
C413
R409
L401

C409
R408
R407
R406

C410
U404

C408
R405
U402

R404
C405
U401

R401
C404
C107
R403
C106

U403
C403
C101

C402
R402
C416

DB1

FB402
FB403
C415
C414

CN401

R310
R311
T301
C307
C308
C306
C305
R309
R308

C301
R302
R303
R304
C302

U301
U302
U303
R306
R305
R307
R309
C310
C303
C304

U201
C210
C215
C209

GC401
C216
C211
C203

C204
C202
C201
C213
L201

C208
C214
C207
C206
C205

L202

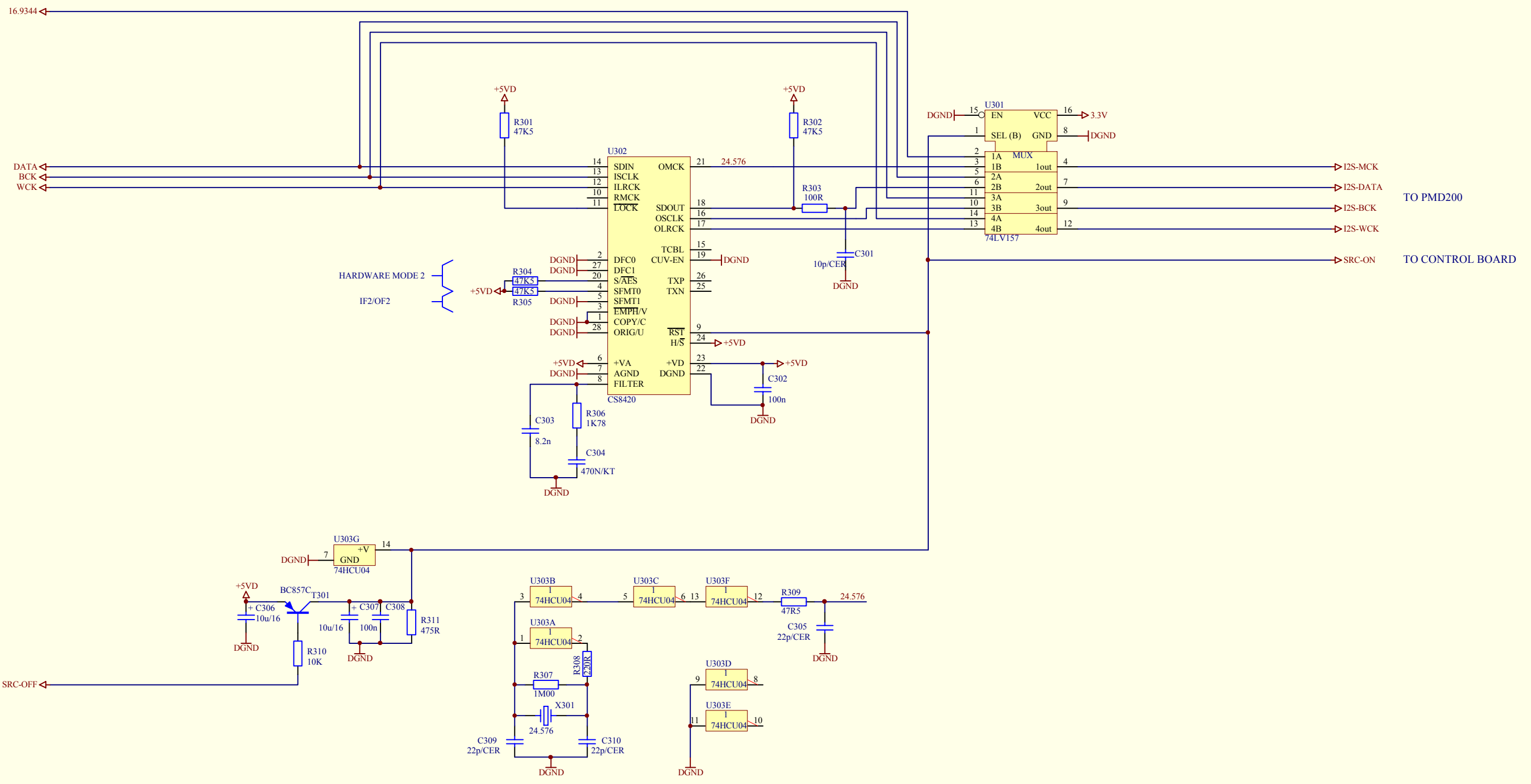
DB2

U202
C207
C206
C205

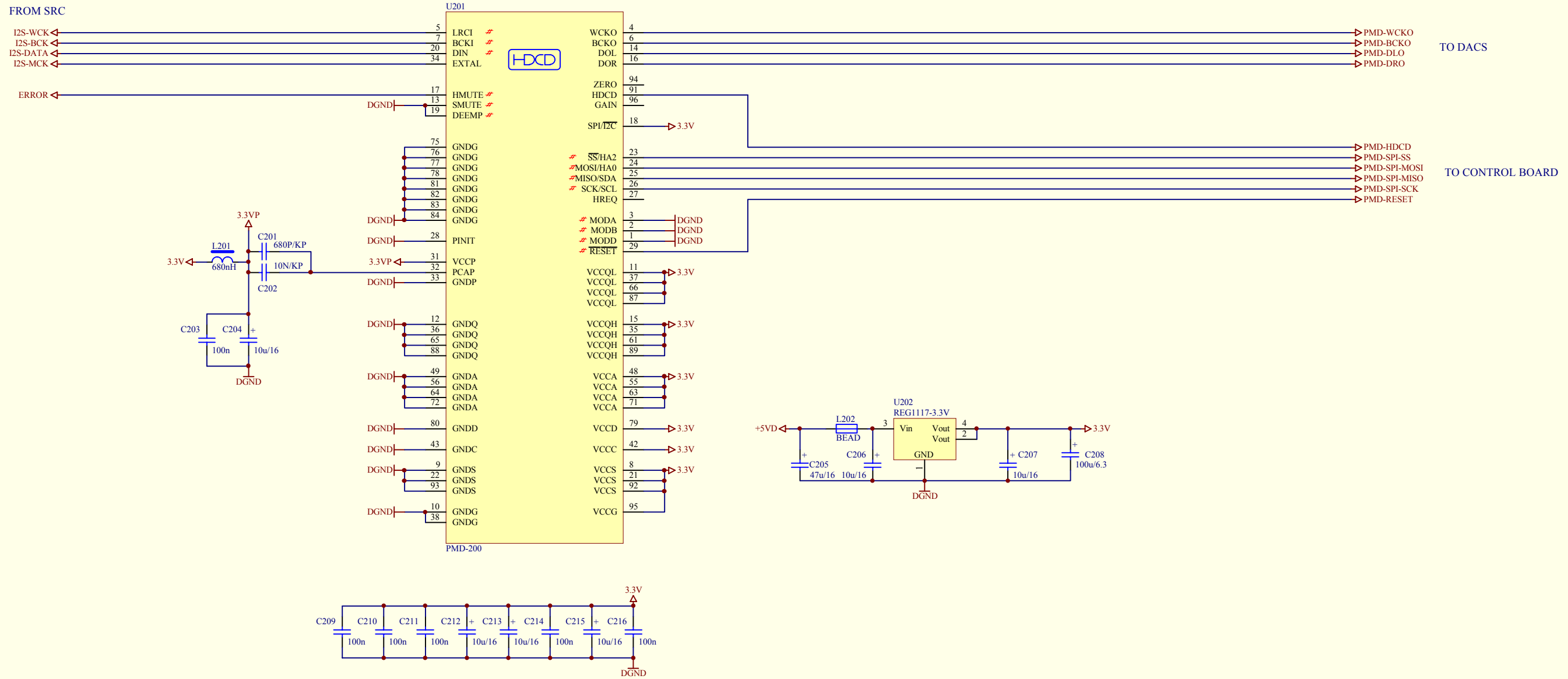
L202

DB4

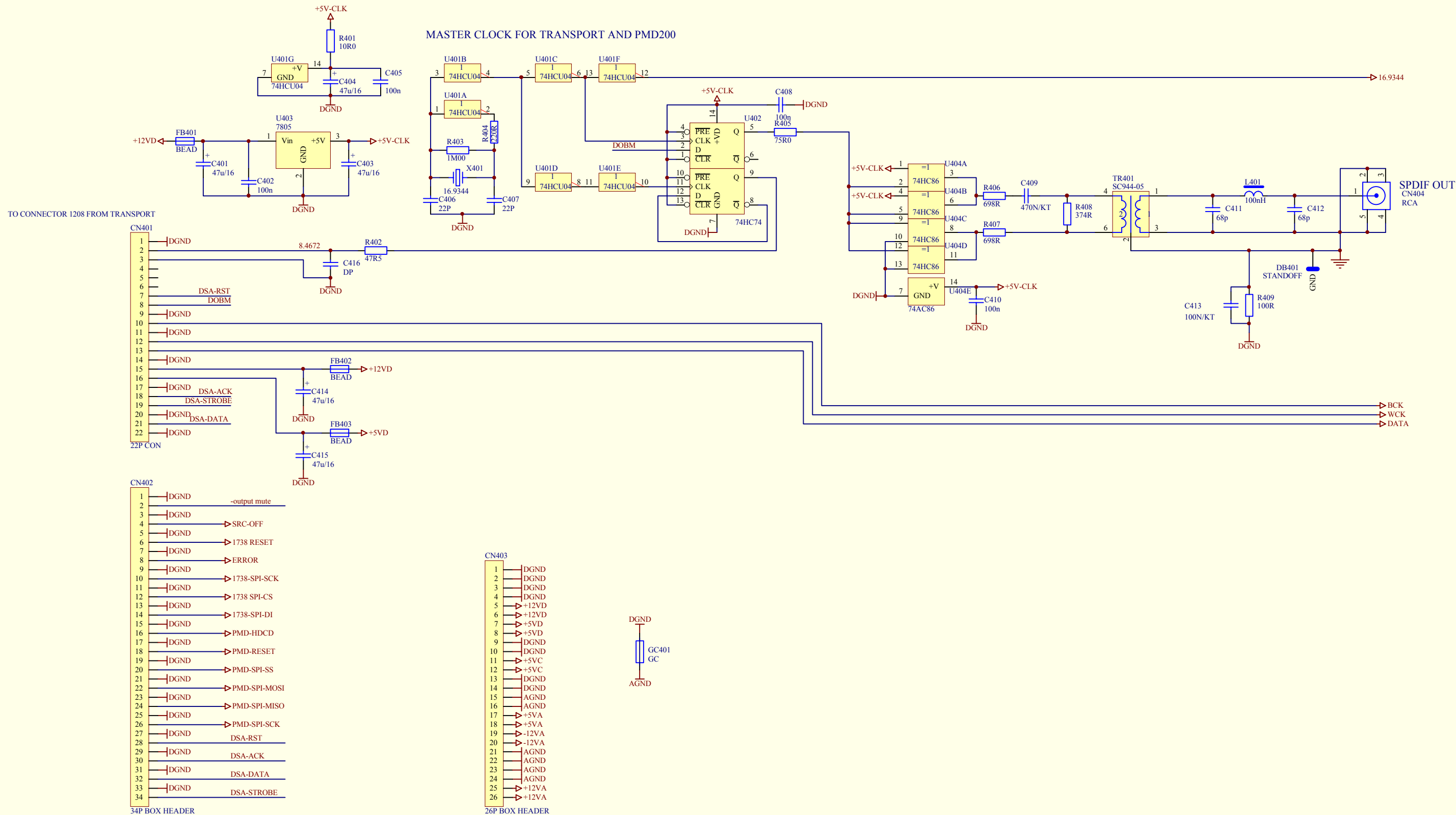
F3



		Classé Audio Inc, 5070 François Cusson Lachine, Québec, Canada H8T 1B3	
		Title Classe CDP10 DAC board UPSAMPLING	
Size	Number	Revision	May 19-2002
Tabloid	2001-CL-002-1	C	
Date:	19-May-2002	Sheet 2 of 4	
File:	C:\Projects Classe\CDP10-DAC_SRC.SCH	Drawn By:	Peter Schut



		Classé Audio Inc, 5070 François Cusson Lachine, Québec, Canada H8T 1B3	
		Title Classe CDP10 DAC board PMD-200	
Size Tabloid	Number 2001-CL-002-1	Revision May 19-2002 C	
Date: 19-May-2002		Sheet 3 of 4	
File: C:\Projects Classe\CDP10-DAC_PMD.Sch		Drawn By: Peter Schut	



CDP10-DAC_CON.SCH

D/A CONVERSION AND OUTPUT STAGE

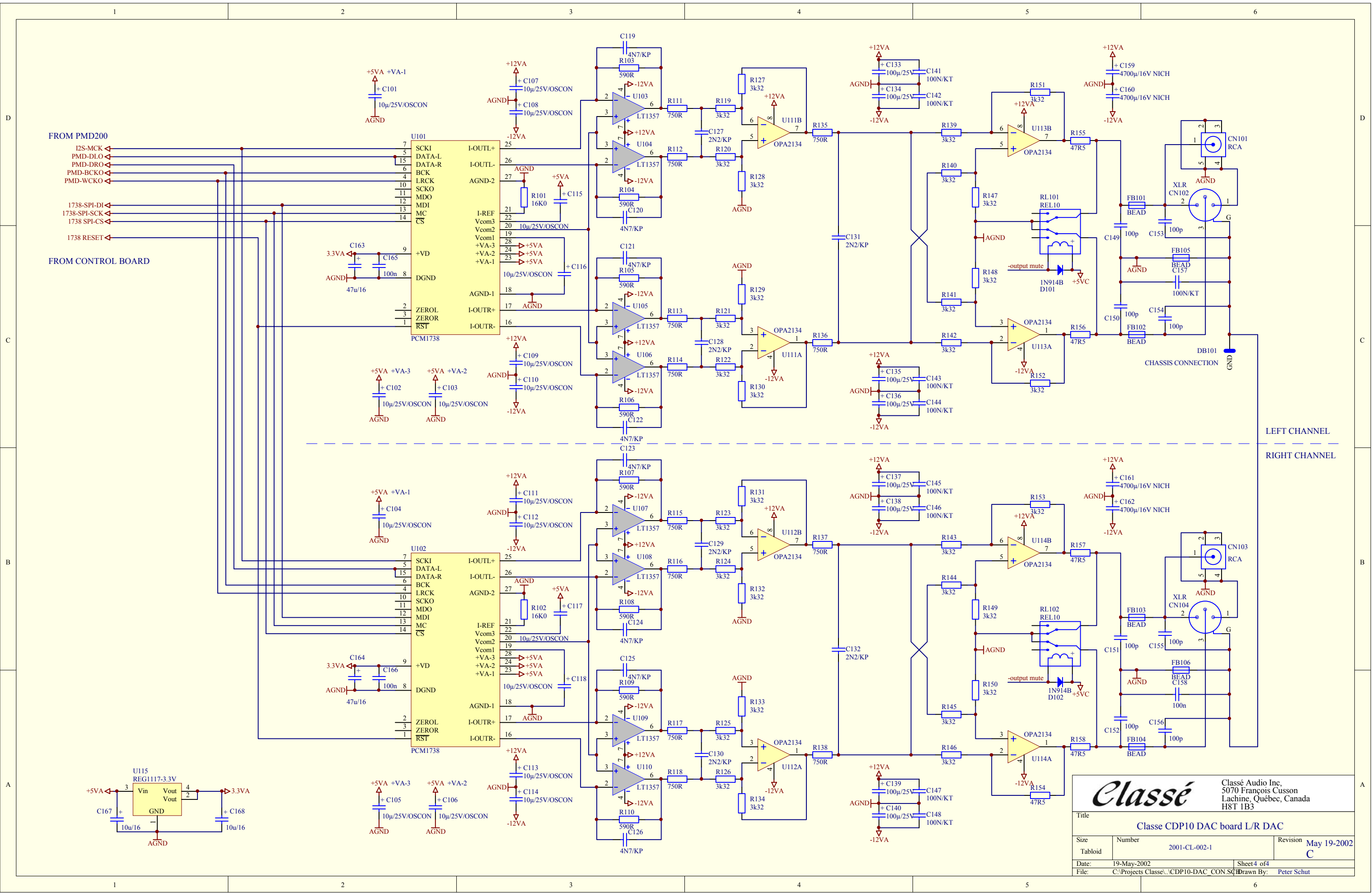
CDP10-DAC_PMD.SCH

HDCD FILTER

CDP10-DAC_SRC.SCH

UPSAMPLER AND DATA SWITCH

		Classé Audio Inc, 5070 François Cusson Lachine, Québec, Canada H8T 1B3	
		Classe CDP10 DAC board digital input	
Title	Number 2001-CL-002-1		Revision May 19-2002 C
Date: 19-May-2002	Sheet 1 of 4		File: C:\Projects Classe\CDP10-DAC_INP.sch
Drawn By: Peter Schut			

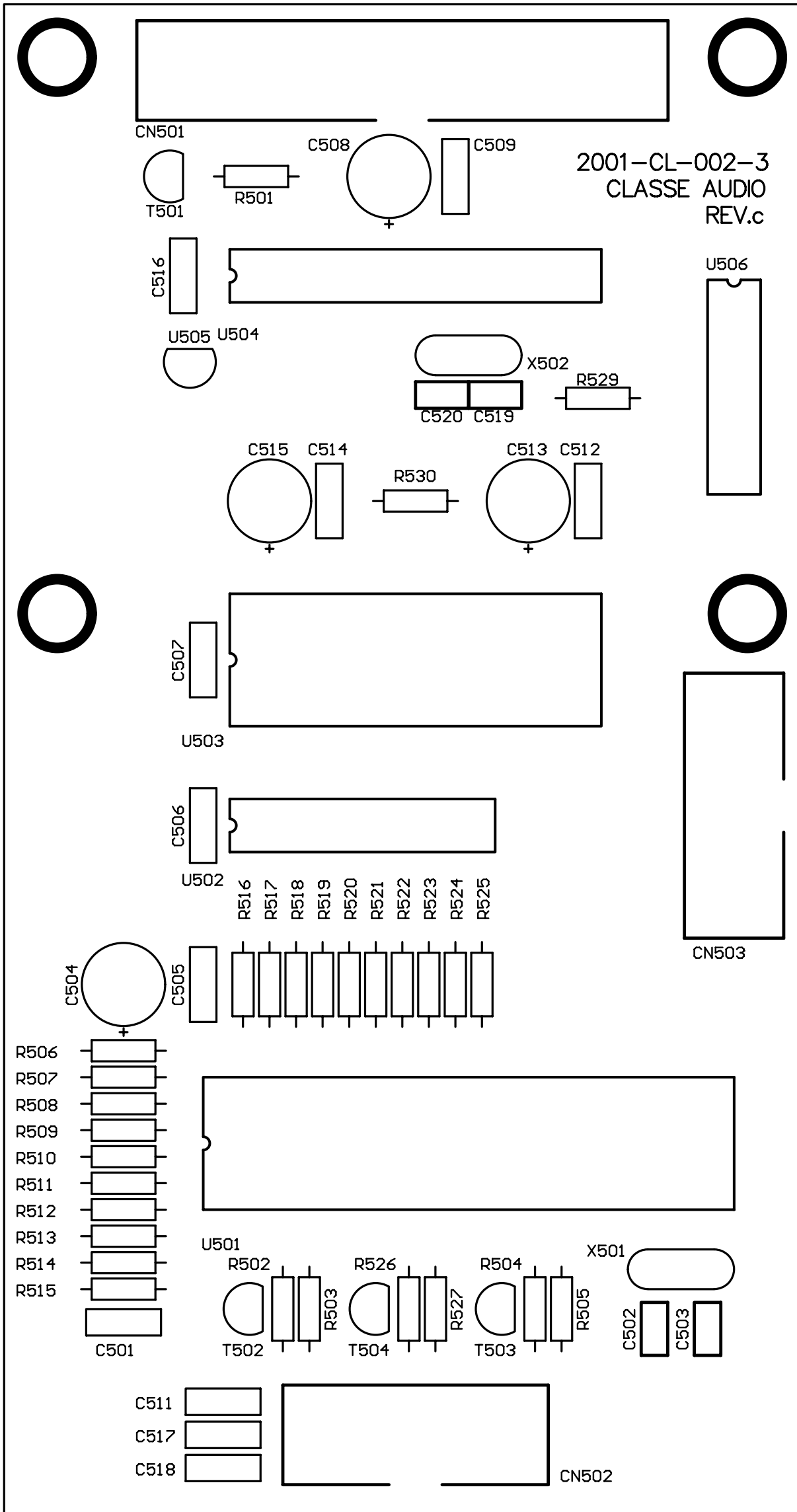


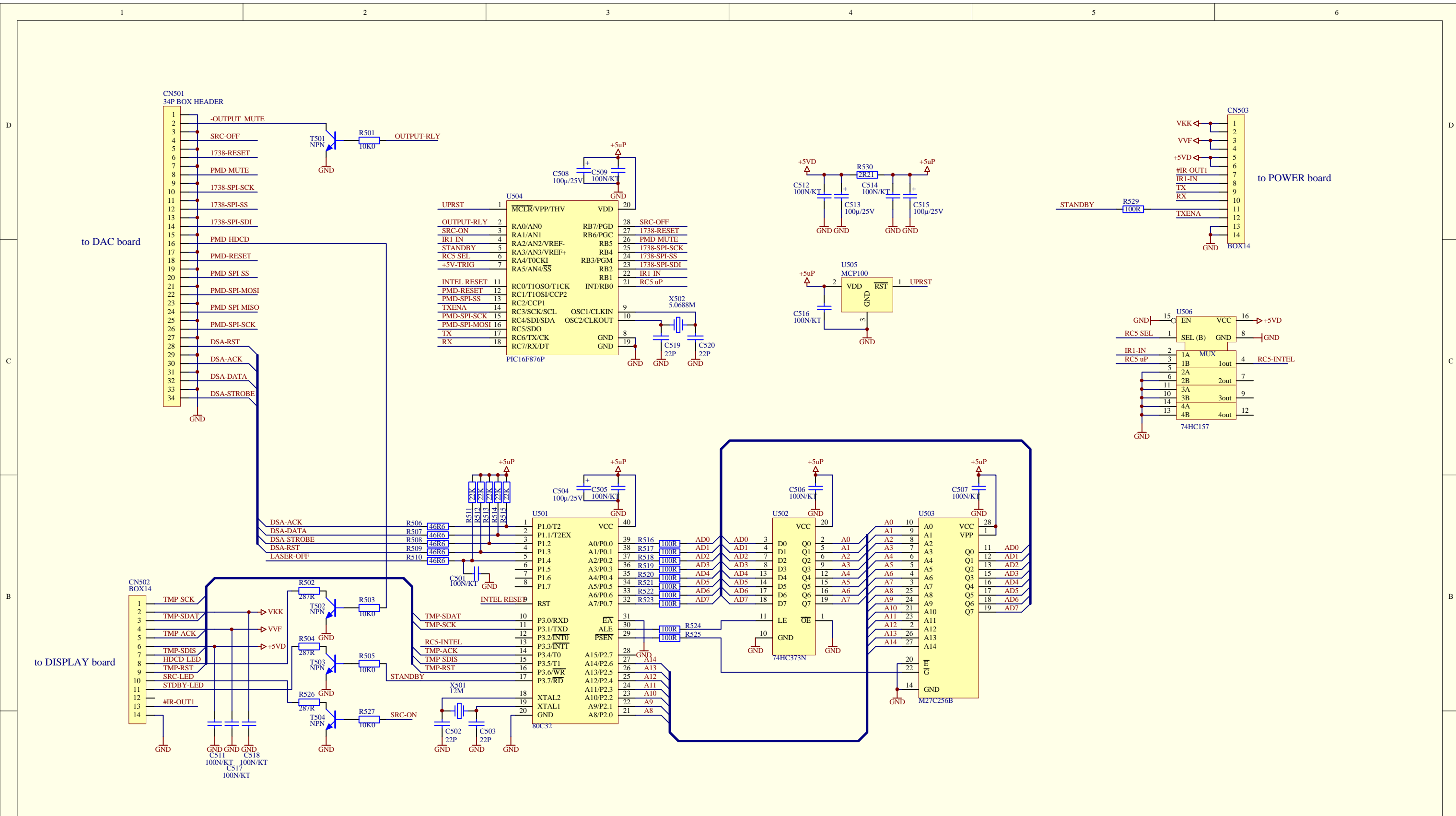
LEFT CHANNEL
RIGHT CHANNEL

Classé Classé Audio Inc,
5070 François Cusson
Lachine, Québec, Canada
H8T 1B3

Title		Classe CDP10 DAC board L/R DAC	
Size	Number	Revision	May 19-2002
Tabloid	2001-CL-002-1	C	
Date:	19-May-2002	Sheet4 of4	
File:	C:\Projects Classé\CDP10-DAC_CON.SCH	Drawn By:	Peter Schut

SILK SCREEN





		Classé Audio Inc. 5070 François Cusson Lachine, Québec, Canada H8T 1B3	
		Title Classe CD 0.4 CONTROL PCB	
Size	Number	Revision	May 19-2002
Tabloid	2001-CL-002-3	C	
Date:	19-May-2002	Sheet 1 of 1	
File:	C:\Projects Classe\...\CDP10-CONTROL.sch	Drawn By:	Peter Schut

TEST PROCEDURES CDP-10

Power Supply

-Visual check all parts for: solder bridges, missing components or component orientation.

-Check voltages:

- A- D601→ +19v
- D603→ +9v
- D618→ +12v
- D625→ +5v
- B- D607→ -19v
- D605→ -9v
- D620→ -12v
- C- D609→ +19v
- D611→ +9v
- D621→ +12v
- D622→ +12v

- D- D616→ -24v
- D614→ -12v
- D623→ -20v
- Z601→ -18v
- E- U605→ Output +5v
- U607→ Output +5v
- F- R611→ +12v (Trig)

-Check IR: IN and OUT

-Check trigger: +12v

Display PCB

-Visual check all parts for: solder bridges, missing components or component orientation.

-Switch on unit.

-Insert HDCC test disc.

-Press switch buttons if all are working according of their functions.

-Check remote control.

-LED (HDCC) must light during play 2nd track.

-LED (standby) must light when press standby button.

DAC PCB

A-Offset Adjustment:

-Switch on unit

-Connect a DC voltmeter at GC401 (GND) and CN102 (left channel),
 CN104 (right channel).

-Offset should be less than 2mV

-When offset is between:

	LEFT Channel	RIGHT Channel
3mV—7mV→short jumper	U103 (Pin 1 and 4)	U107 (Pin 1 and 4)
8mV—12mV→short jumper	U103 (Pin 1 and 4)	U107 (Pin 1 and 4)
13mV—16mV→short jumper	U103 (Pin 1 and 4)	U109 (Pin 1 and 4)
	U105 (Pin 1 and 4)	U107 (Pin 1 and 4)
	U103 (Pin 1 and 4)	U108 (Pin 4 and 8)
	U104 (Pin 4 and 8)	U109 (Pin 1 and 4)
	U105 (Pin 1 and 4)	U107 (Pin 1 and 4)
16mV—21mV→short jumper	U103 (Pin 1 and 4)	U108 (Pin 4 and 8)
	U104 (Pin 4 and 8)	U109 (Pin 1 and 4)
	U105 (Pin 1 and 4)	U110 (Pin 4 and 8)
	U106 (Pin 4 and 8)	

B-Audio Precision Test:

-Outputs THD+N

(1 kHz) Analog Balance: Reading→0.0030% Level 3.985v.

Analog Coaxial: Reading→0.0032% Level 1.984v.

Digital: Reading→0.0017% Level 3.034v.

(20 kHz) Analog Balance: Reading→0.0035% Level 3.450v.

Analog Coaxial: Reading→0.0038% Level 1.885v.

Digital: Reading→0.0200% Level 3.014v.

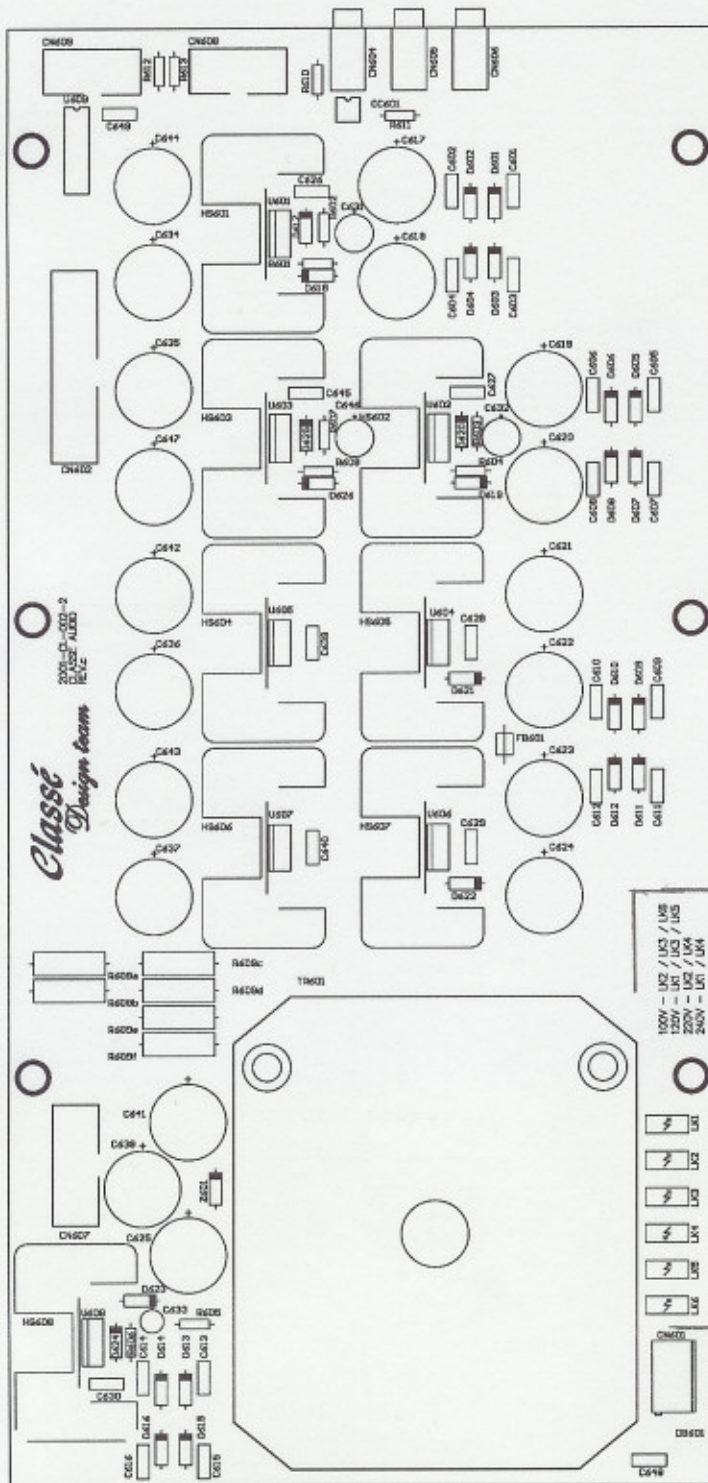
CDP-10 Initialization

The initialization process of the Premium 10500 has been developed, so that the application can play back most of the discs available on the market. Indeed, the re-tries are necessary to check for CDs, CD-Rs, CD-RWs and HDCDs. It is also useful in case of slightly damaged discs or discs which are at the limit of the Red Book specifications.

Although the process may be a bit longer than expected (by the way the speed can not be changed), it allows to play back most of the discs. Else, we would have had complaints because some discs (CD-RW or damaged discs) would not be accepted by the application. Thus, the current process (number of re-tries, speed, time, ...) is a good compromise for a CD application in order to accept most of the discs, while keeping a good playability level (both are related during play back, hence it is important to have this process at initialization for disc acceptance).

As reported, dumping material is usually sufficient to reduce the noise at initialization. However, the mechanical design of the chassis has sometimes more influence on the amplification or reduction of the initialization noise (note that the re-tries are repeated only when no disc has been inserted ...).

CDP-10 SUPPLY BOARD

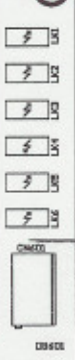


SILK SCREEN

2002-01-01-2
CLASSIC AUDIO
REVZ

Classic Design team

100V - U12 / U13 / U18
150V - U17 / U19 / U15
200V - U14 / U16
250V - U1 / U4



For VOLTAGE
SETTINGS

SET JUMPERS
AS PER INDICATION



Classé Audio Inc
5070 Francois Cusson
Lachine, Quebec, Canada
H8T 1B3
Tel: (514) 636-6384
Fax: (514) 636-1428

TECHNICAL BULLETIN

CDP-10 SOFTWARE UPDATE

OVERVIEW

We have received and confirmed reports of two CDP-10 drawer-related issues that require your prompt attention.

The first is a minor, occasional hesitation while opening the drawer of the CDP-10. It occurs only when you open the drawer without letting the disc first come to a complete stop. It does not happen unless you open the drawer while the laser is near the middle or outer edge of the disc---playing higher track numbers, in other words. It appears to be repeatable with all the CDP-10s, but if you wait even a fraction of a second longer before opening the drawer, you might never see it.

The second is potentially more serious. If the standby button is pressed twice while the drawer is closing, the motor may continue to receive power even after the drawer has closed. The result is the motor will eventually burn out.

We have isolated the problems to software controlling the Philips drive and issued a new EPROM V1.6, for units in the field and made the necessary changes in all current production CDP-10s.

Neither problem has any relation to performance. And while the problems only occur under unusual circumstances, the potential for a motor failure leads us to request that you install new EPROMS in all display and customer units as soon as possible.

We are providing EPROMS, a pulling tool and installation instructions, TSD0001, to all dealers and distributors who have taken delivery of at least one CDP-10.

Retrieve Serial Numbers:	1510001-004	1510193-212
	1510005-096	1510214
	1510098-101	1510229
	1510103-105	
	1510107-169	
	1510171-177	
	1510183	
	1510189-191	



Classé Audio Inc
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Lachine, Quebec, Canada
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TECHNICAL BULLETIN

CDP-10 SOFTWARE UPDATE

OVERVIEW

Software v1.7 supersedes v1.6 and should be installed in units having version v1.6 or lower. It is recommended that software in all customer and demonstration units be updated as soon as possible.

We are providing EPROMS and installation instructions, TSD0002, to all dealers and distributors who have taken delivery of at least one CDP-10.

Contact Classé if you are holding any CDP-10s in A-stock inventory.

Retrieve Serial Numbers:	1510001, 004	1510234-250
	1510005-105	1510254-257
	1510107-149	1510259-260
	1510151-158	
	1510160-190	
	1510192-221	
	1510223-228	
	1510230-232	



Classé Audio Inc
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H8T 1B3
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TECHNICAL SERVICE DOCUMENT

CDP-10 SOFTWARE UPDATE

KIT

The upgrade kit consists of one EPROM (28 pin IC) and one IC extractor tool.

PROCEDURE

CDP-10 EPROM REPLACEMENT PROCEDURE

- It is preferable to perform this upgrade at a static controlled workstation. ESD handling precautions should be observed.
- 1- Ensure that the AC power cord is disconnected.
 - 2- Remove unit cover by first removing all eight Phillips head screws then simply lifting the cover.
 - 3- Locate EPROM as indicated in figure 1. The component identifier is "U503."
 - 4- Remove the old EPROM from the socket by placing the supplied IC extractor's hooks under each end of the EPROM, squeezing gently, and pulling the EPROM straight up while holding the chassis firmly on your work table.
 - 5- The new version EPROM and the socket both have a "D" shaped notch at one end; these must align to ensure proper pinout connection when inserting the new EPROM.
 - 6- Align the notches of both components and ensure that each pin of the EPROM is positioned to properly insert into the corresponding receptacle of the socket. Be careful not to touch the pins as the EPROM is static sensitive. Press gently and evenly on both ends of the EPROM until it is fully inserted.
 - 7- Replace unit cover and eight Phillips head screws.
 - 8- Power up the CDP-10 and test.

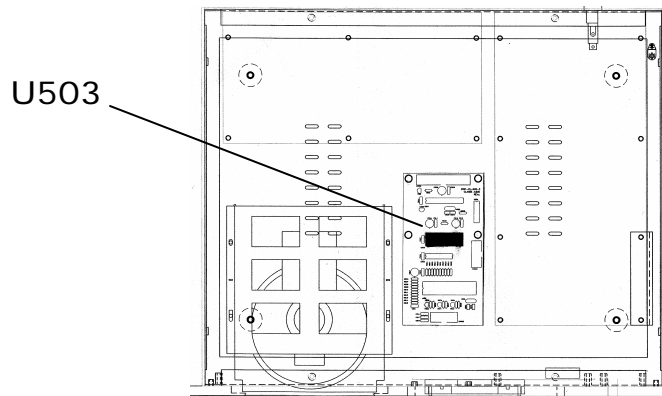


Figure 1.



Classé Audio Inc
5070 Francois Cusson
Lachine, Quebec, Canada
H8T 1B3
Tel: (514) 636-6384
Fax: (514) 636-1428

TECHNICAL SERVICE DOCUMENT

CDP-10 SOFTWARE UPDATE

KIT

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PROCEDURE

CDP-10 EPROM REPLACEMENT PROCEDURE

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 - 7- Replace unit cover and eight Phillips head screws.
 - 8- Power up the CDP-10 and test.

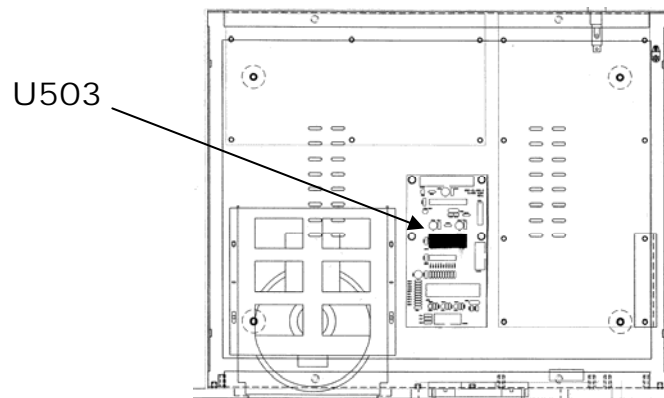


Figure 1.