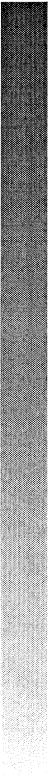



*Classé*

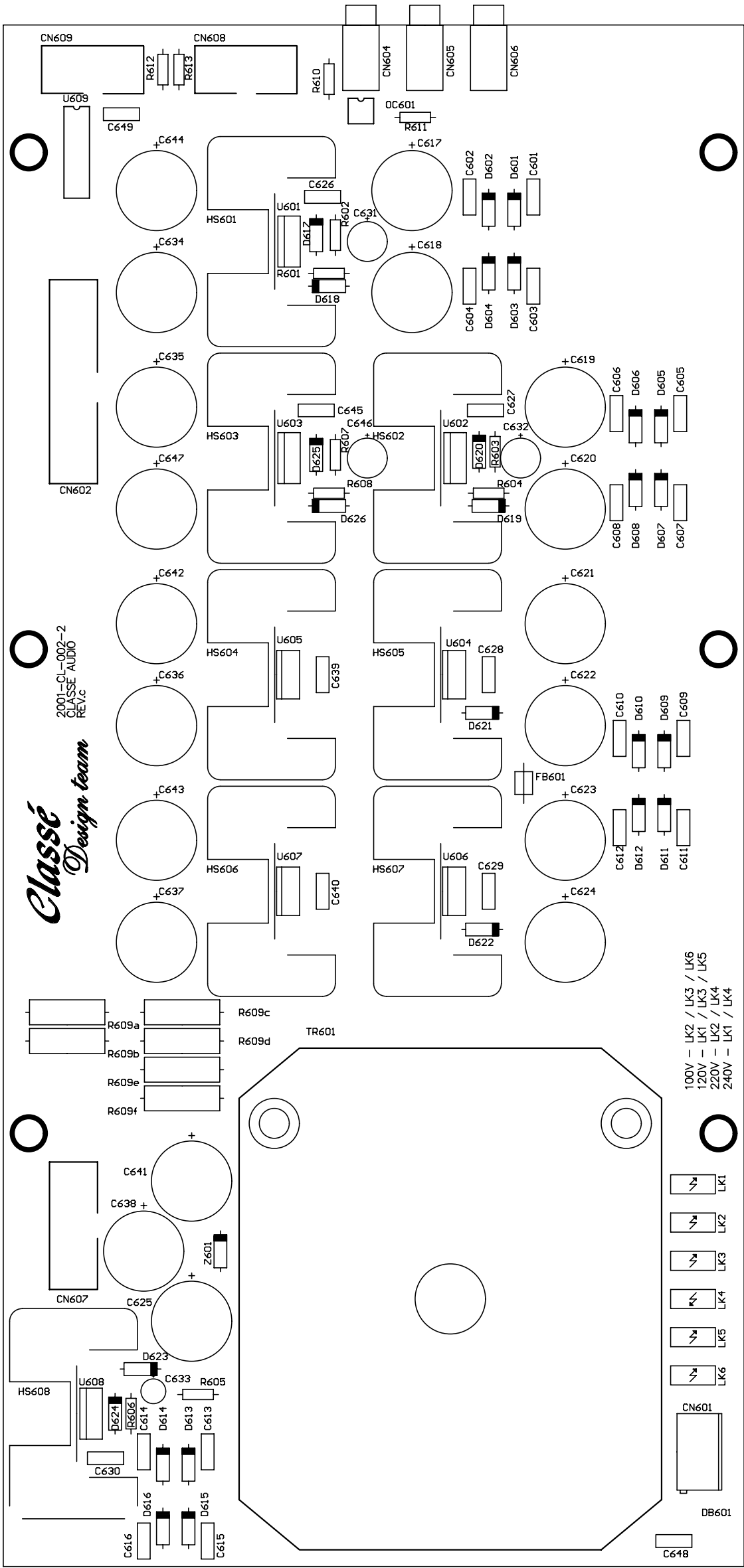


# *CDP-10*

## INTEGRATED CD PLAYER

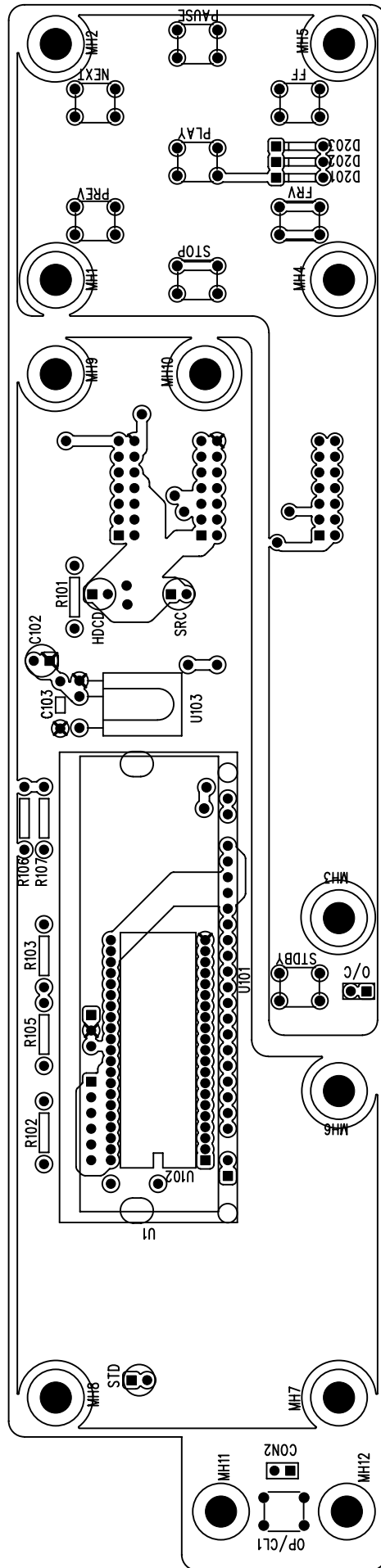
SERVICE MANUAL  
v. 1.0



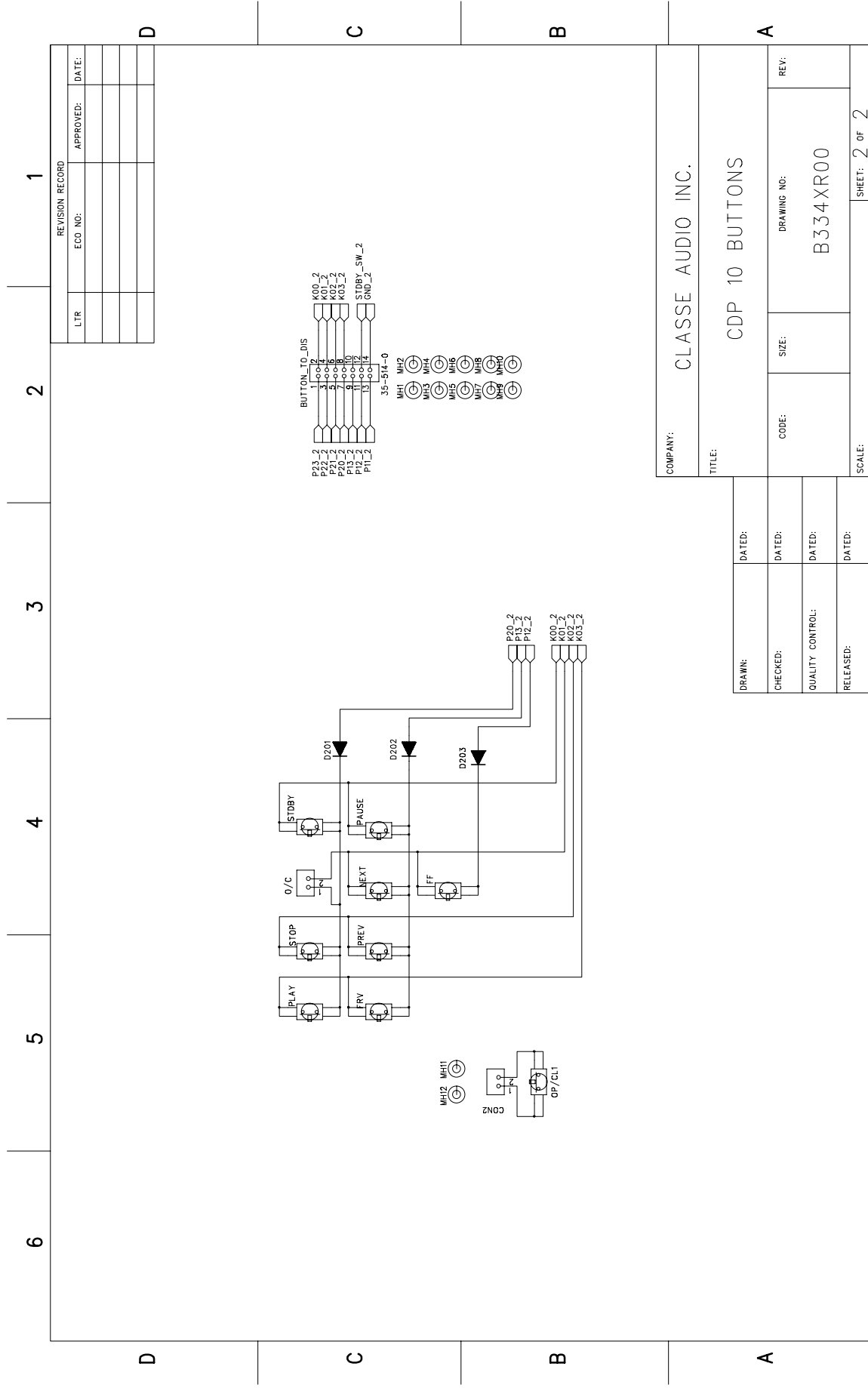


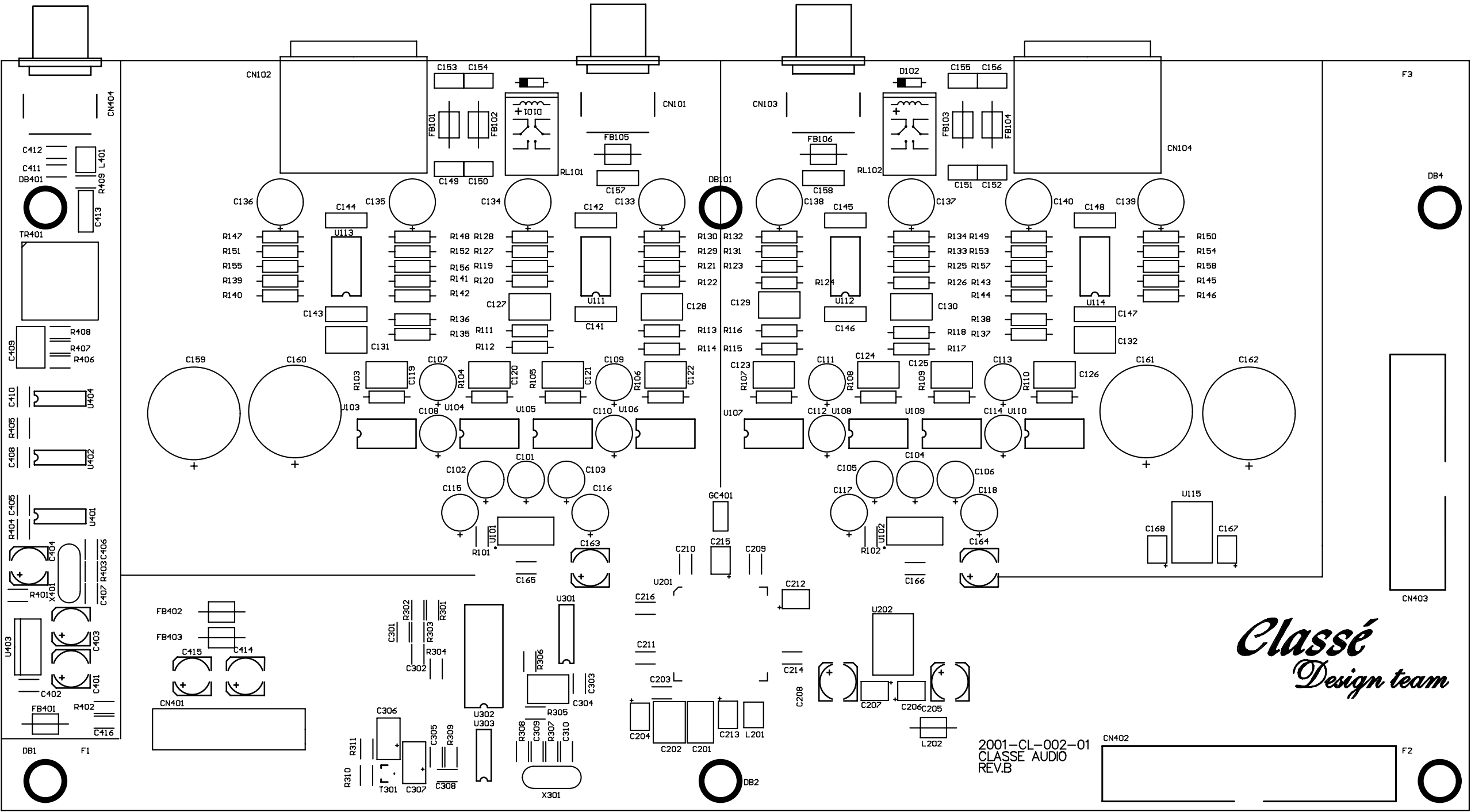
SILK SCREEN











SILK SCREEN

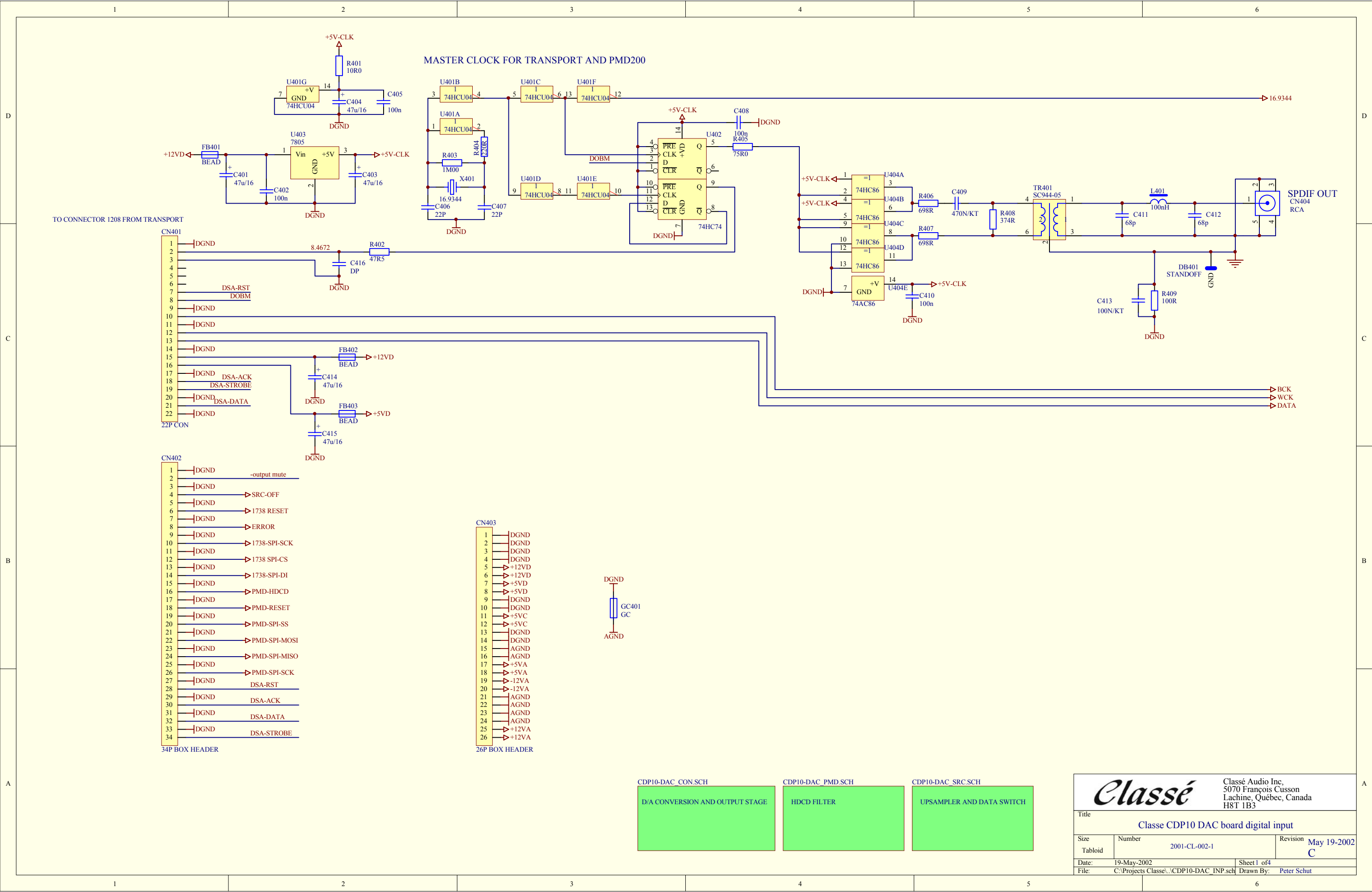
*Classé*  
*Design team*

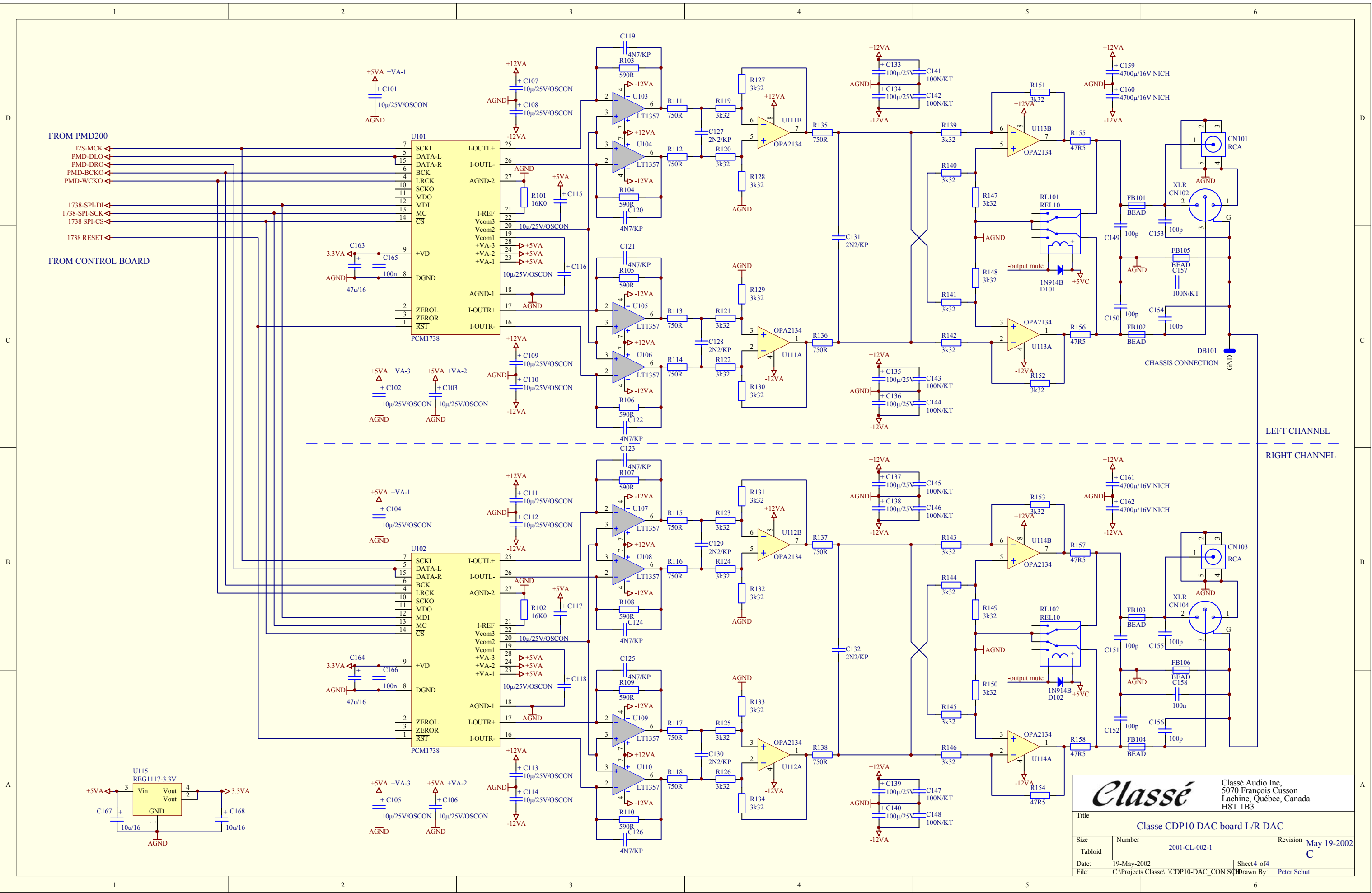
2001-CL-002-01  
CLASSE AUDIO  
REV.B







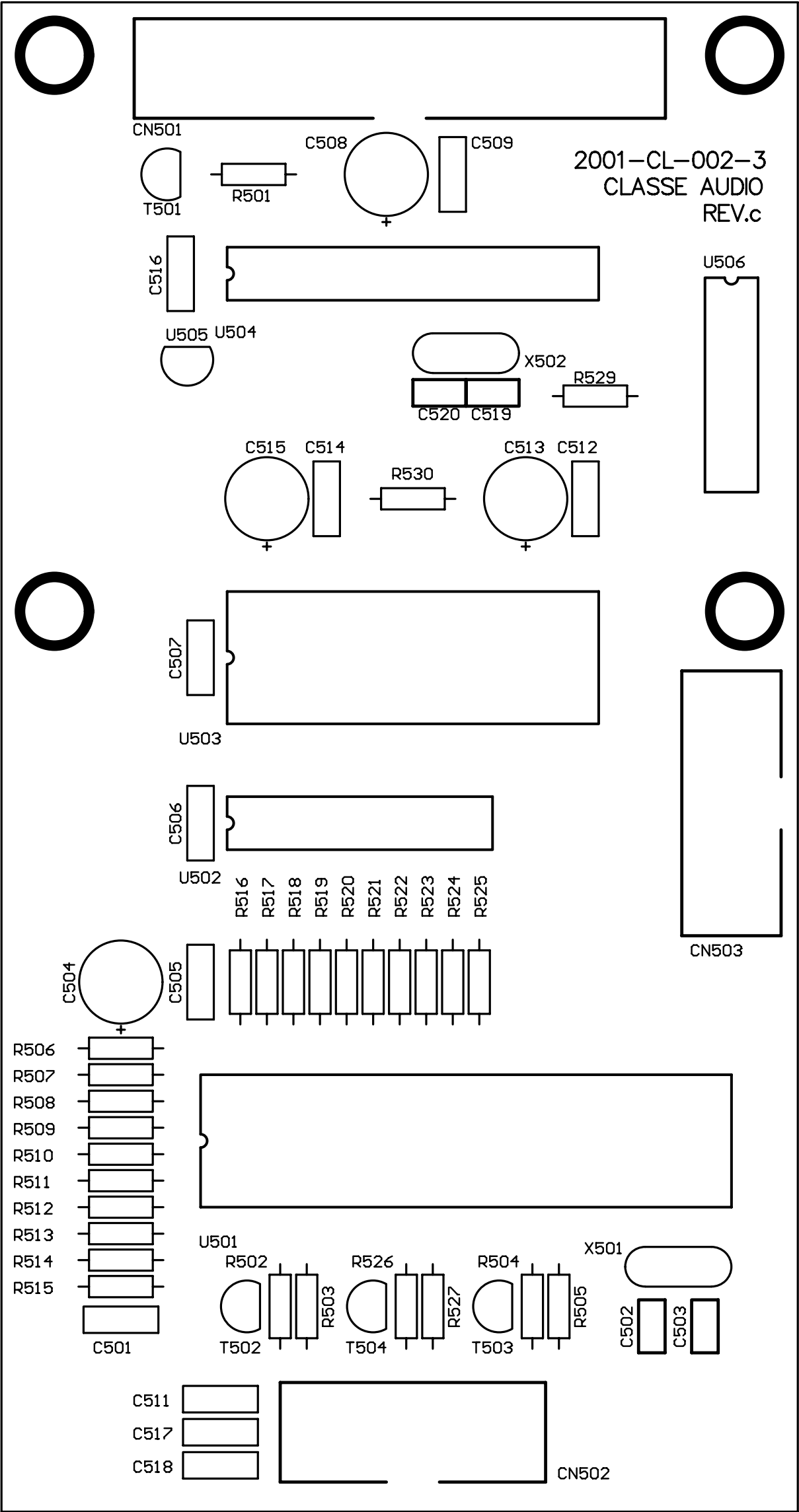




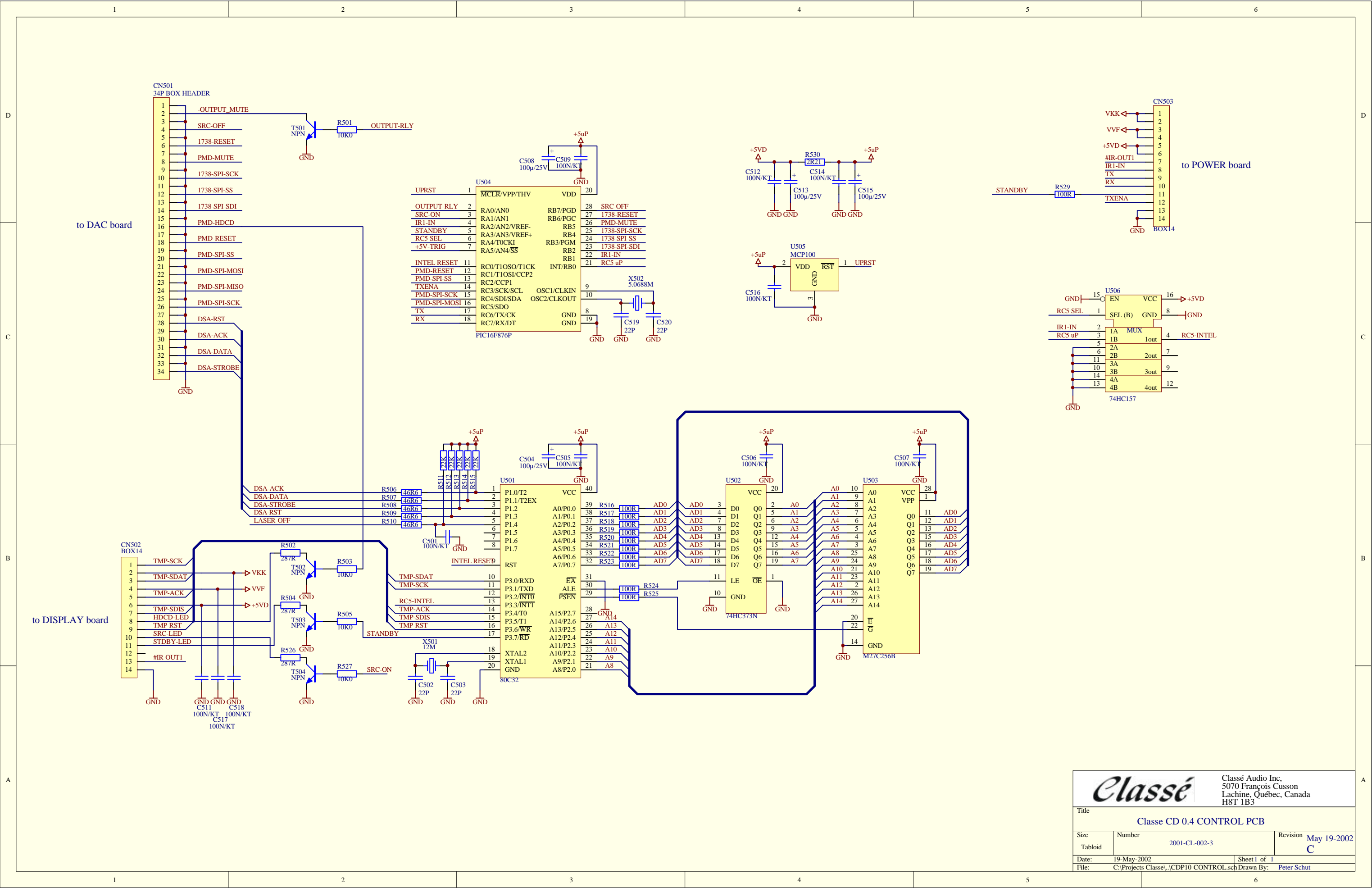
*Classé*

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

Title Classe CDP10 DAC board L/R DAC		
Size Tabloid	Number 2001-CL-002-1	Revision May 19-2002 C
Date: 19-May-2002	Sheet 4 of 4	
File: C:\Projects Classé\CDP10-DAC_CON.SCH	Drawn By: Peter Schut	



SILK SCREEN



Classé Audio Inc,  
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Title

Classe CD 0.4 CONTROL PCB

Size

Number

Revision

Tabloid

2001-CL-002-3

May 19-2002  
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 HDCCD test disc.

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

-Check remote control.

-LED (HDCCD) must light during play 2<sup>nd</sup> 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)
	U105 (Pin 1 and 4)	U109 (Pin 1 and 4)
13mV—16mV→short jumper	U103 (Pin 1 and 4)	U107 (Pin 1 and 4)
	U104 (Pin 4 and 8)	U108 (Pin 4 and 8)
	U105 (Pin 1 and 4)	U109 (Pin 1 and 4)
16mV—21mV→short jumper	U103 (Pin 1 and 4)	U107 (Pin 1 and 4)
	U104 (Pin 4 and 8)	U108 (Pin 4 and 8)
	U105 (Pin 1 and 4)	U109 (Pin 1 and 4)
	U106 (Pin 4 and 8)	U110 (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**

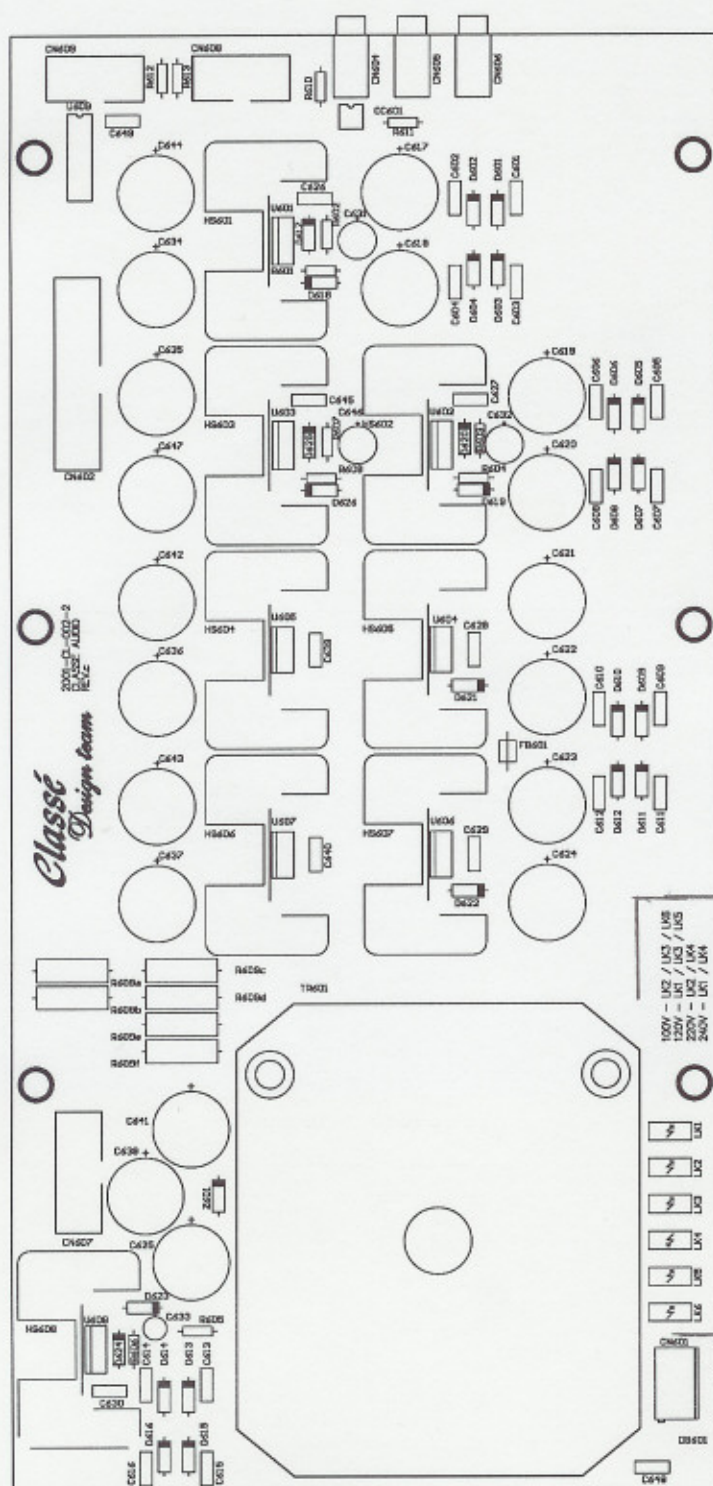
The initialization process of the Premium 10500 has been developed, so that the application can play back most of the discs available on the market. Indeed, the re-tries are necessary to check for CDs, CD-Rs, CD-RWs and HDCDs. It is also useful in case of slightly damaged discs or discs which are at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

For VOLTAGE  
SETTINGS  
---  
SET JUMPERS  
AS PER INDICATION

100V - U42 / U43 / U45  
120V - U41 / U43 / U45  
150V - U42 / U44 / U45  
200V - U41 / U44



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## TECHNICAL BULLETIN

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### CDP-10 SOFTWARE UPDATE

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#### 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	



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## *TECHNICAL BULLETIN*

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### *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	



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## TECHNICAL SERVICE DOCUMENT

### CDP-10 SOFTWARE UPDATE

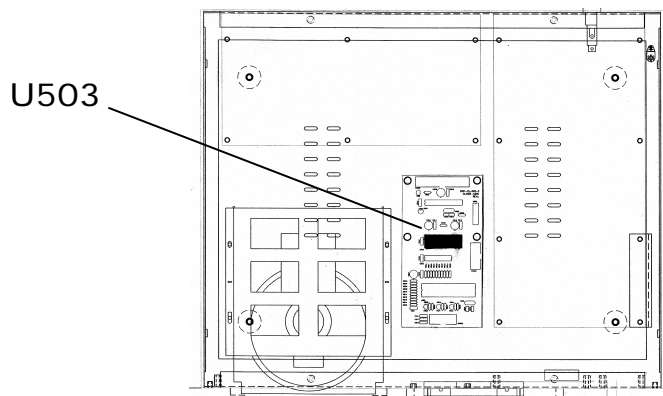
#### KIT

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.**



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## TECHNICAL SERVICE DOCUMENT

### CDP-10 SOFTWARE UPDATE

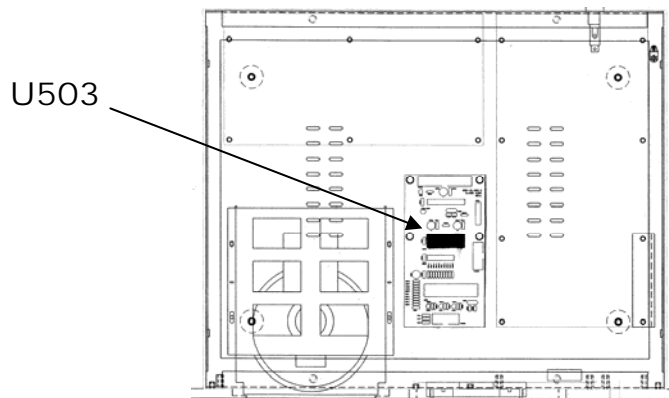
#### KIT

The upgrade kit consists of one EPROM (28 pin IC) software v1.7.

#### PROCEDURE

##### CDP-10 EPROM REPLACEMENT PROCEDURE

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  - 8- Power up the CDP-10 and test.



**Figure 1.**