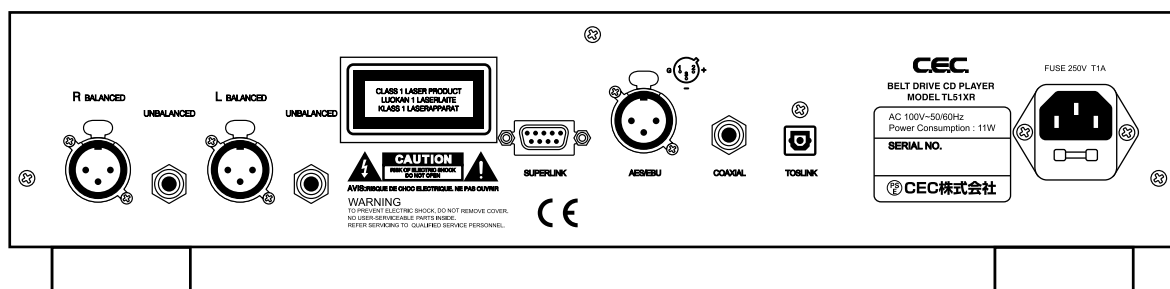
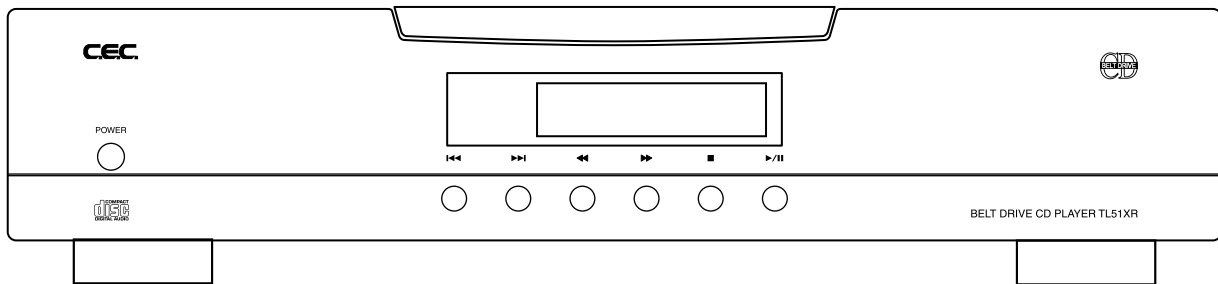
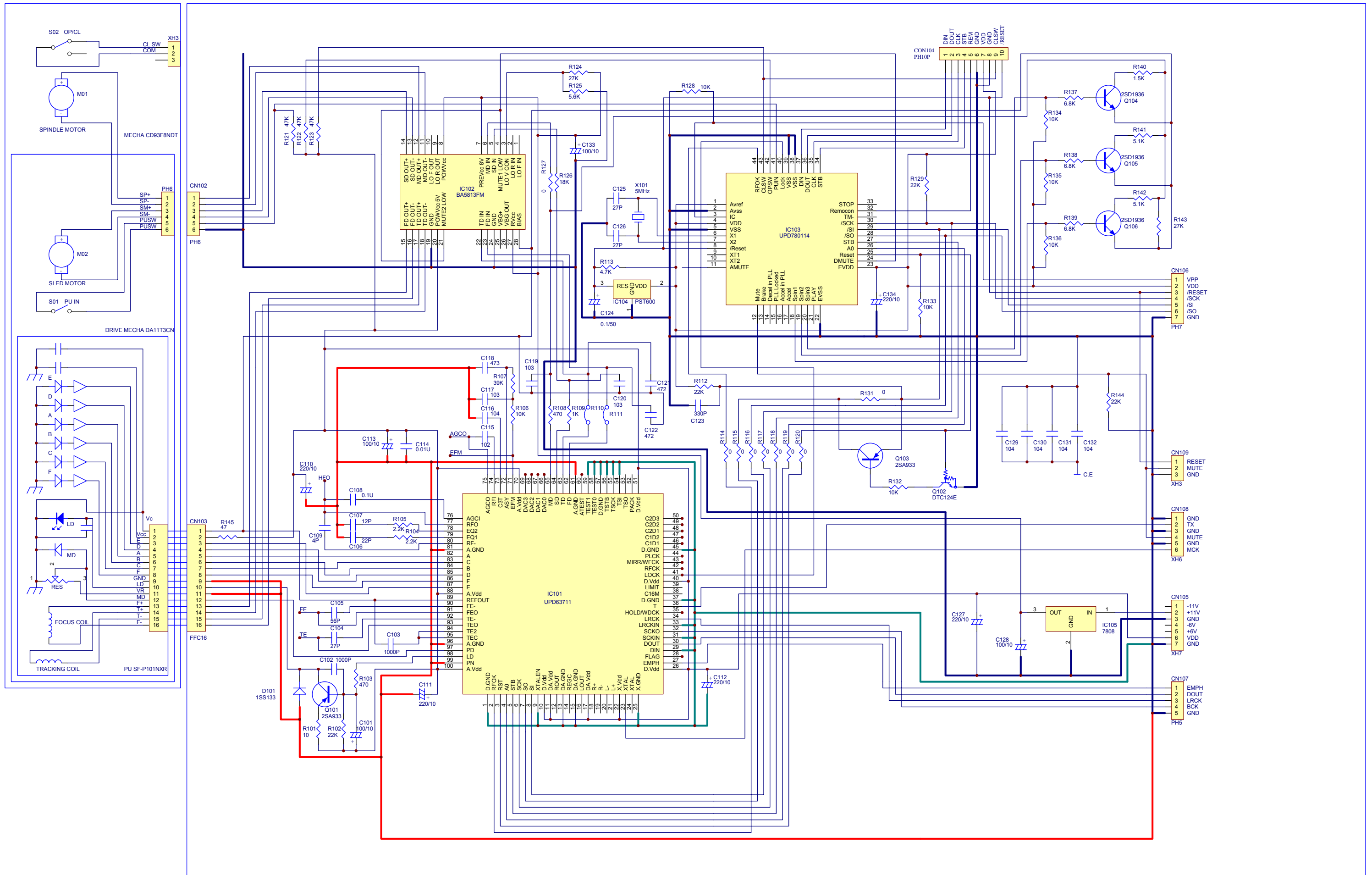


TL51XR

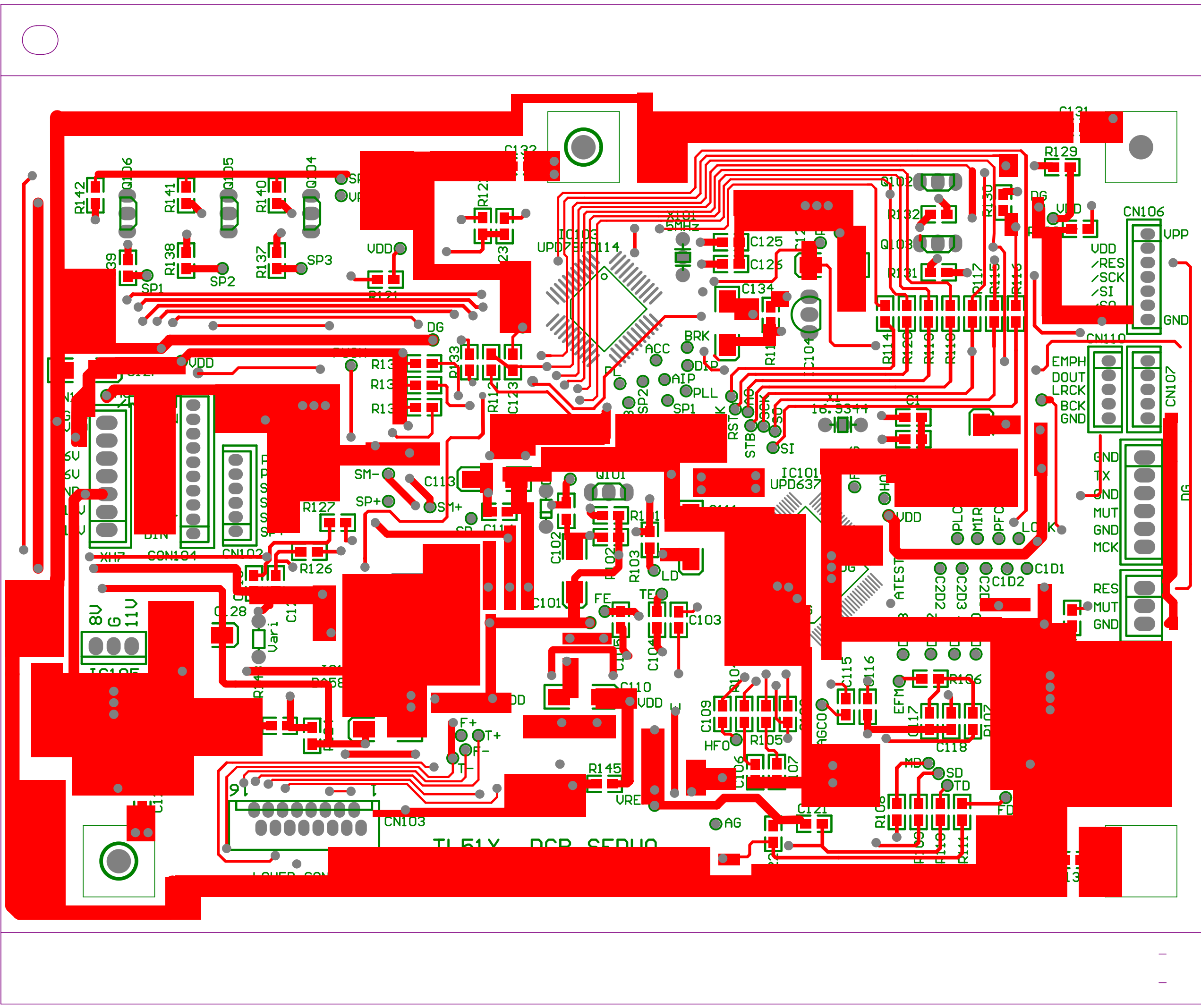
Service Manual

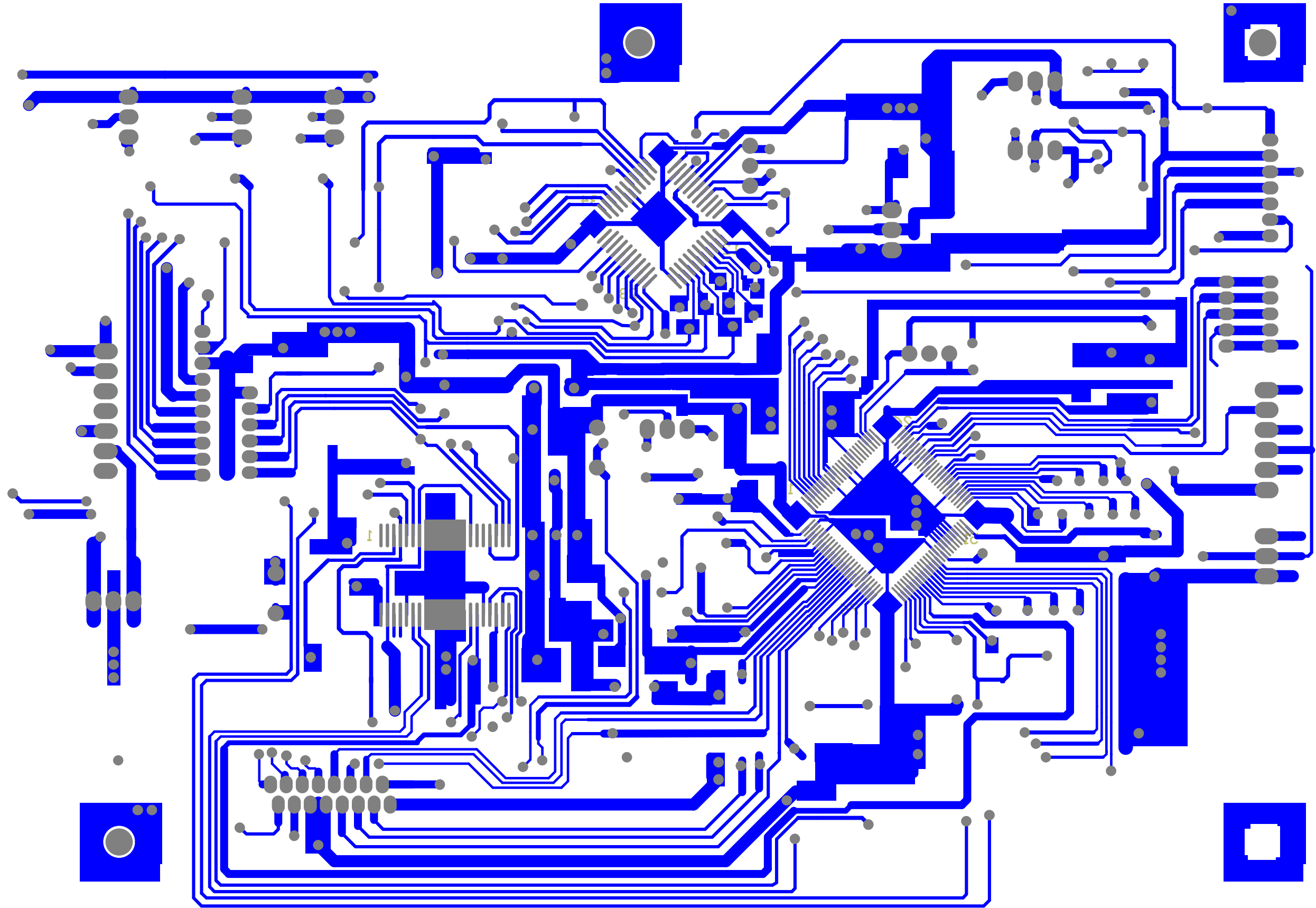


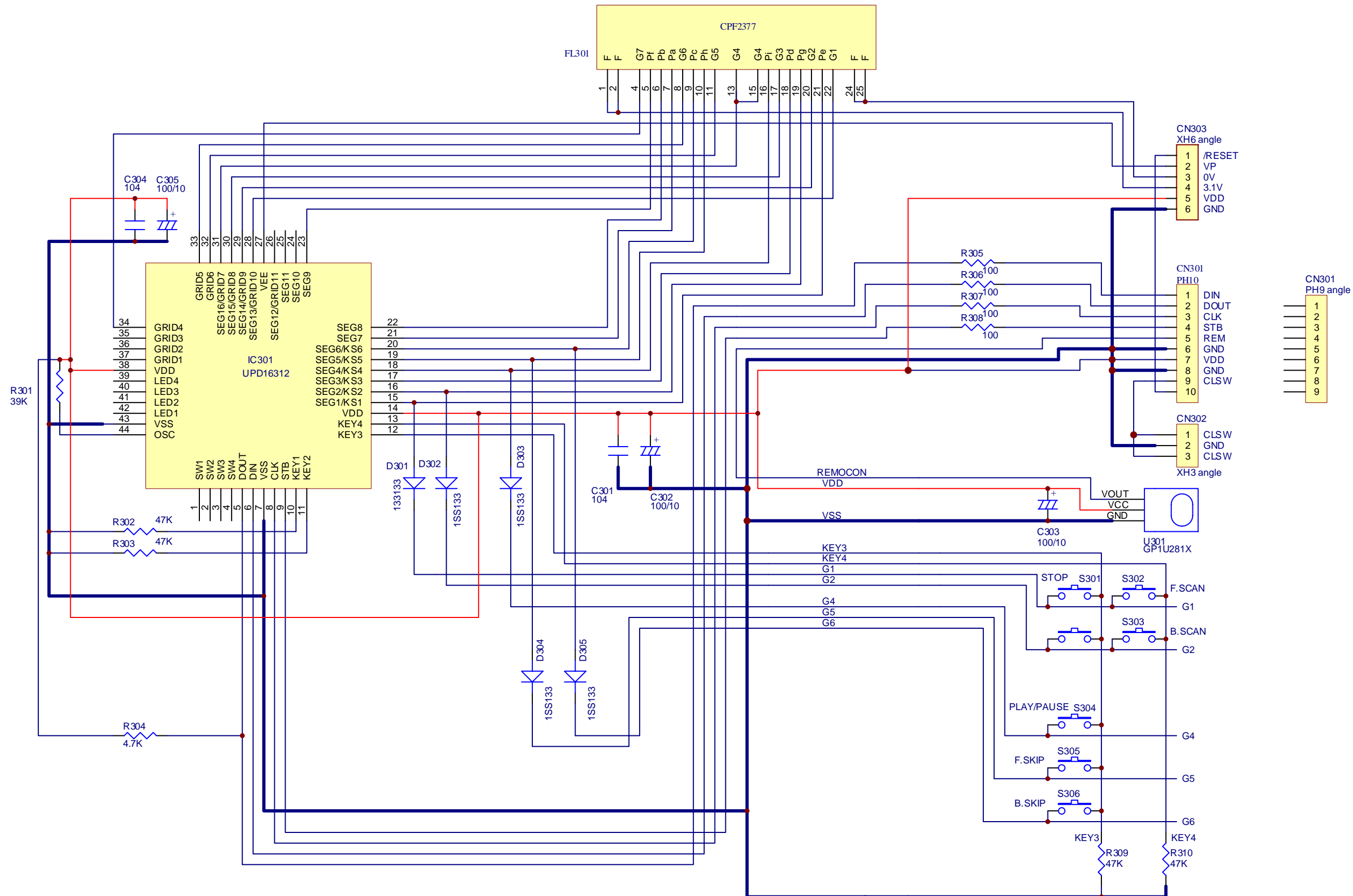
CEC



APPROVALS	CHECKED	DRAWN	Title	
			Servo Circuit for TL-51X	
		03.05.30	Size	Revision
		S. IN	A2	05-060600-01
			Date:	24-Apr-2006
			File:	D:\F My Documents\Protel dd TL51X\TL51X.Dwg

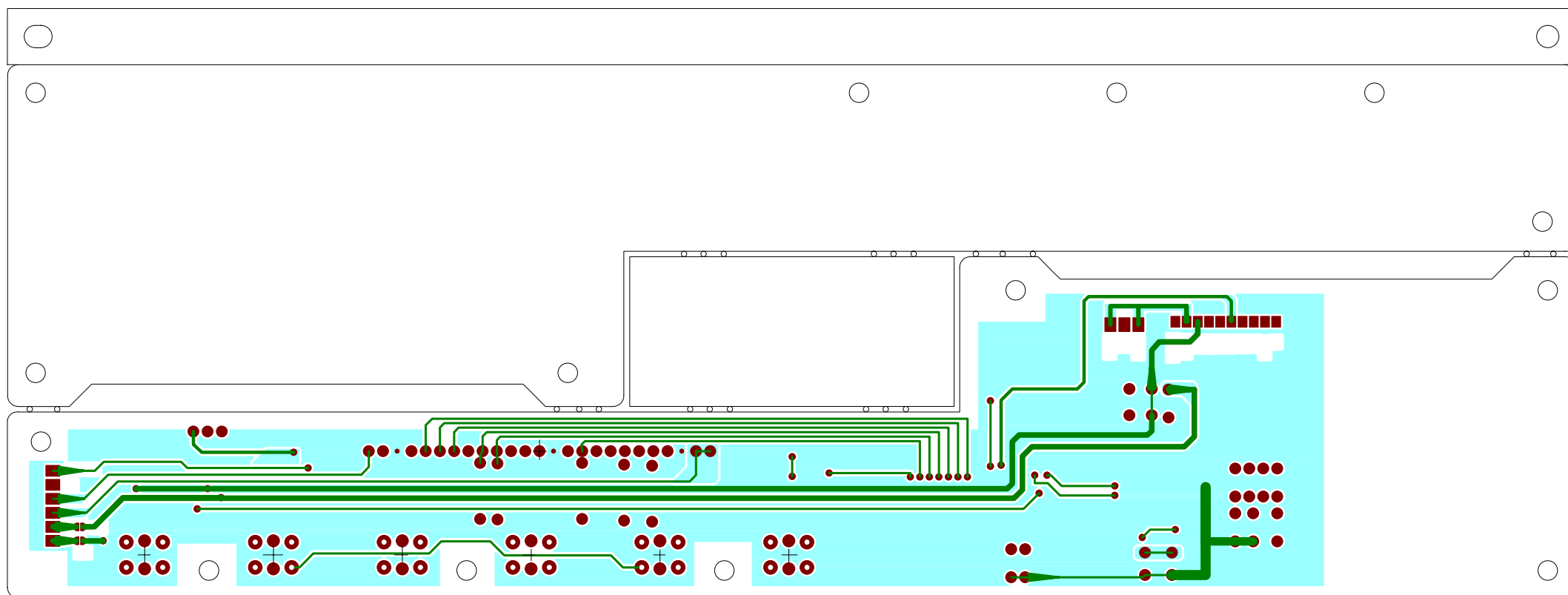


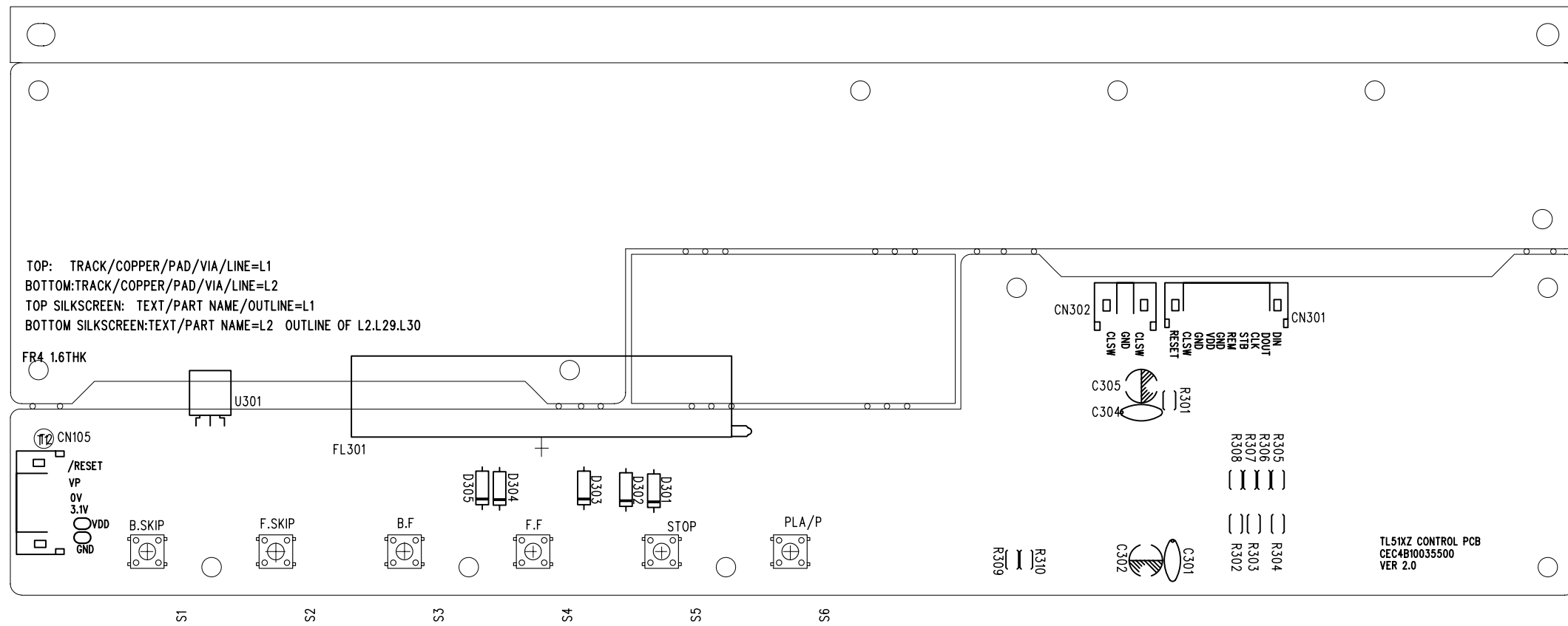


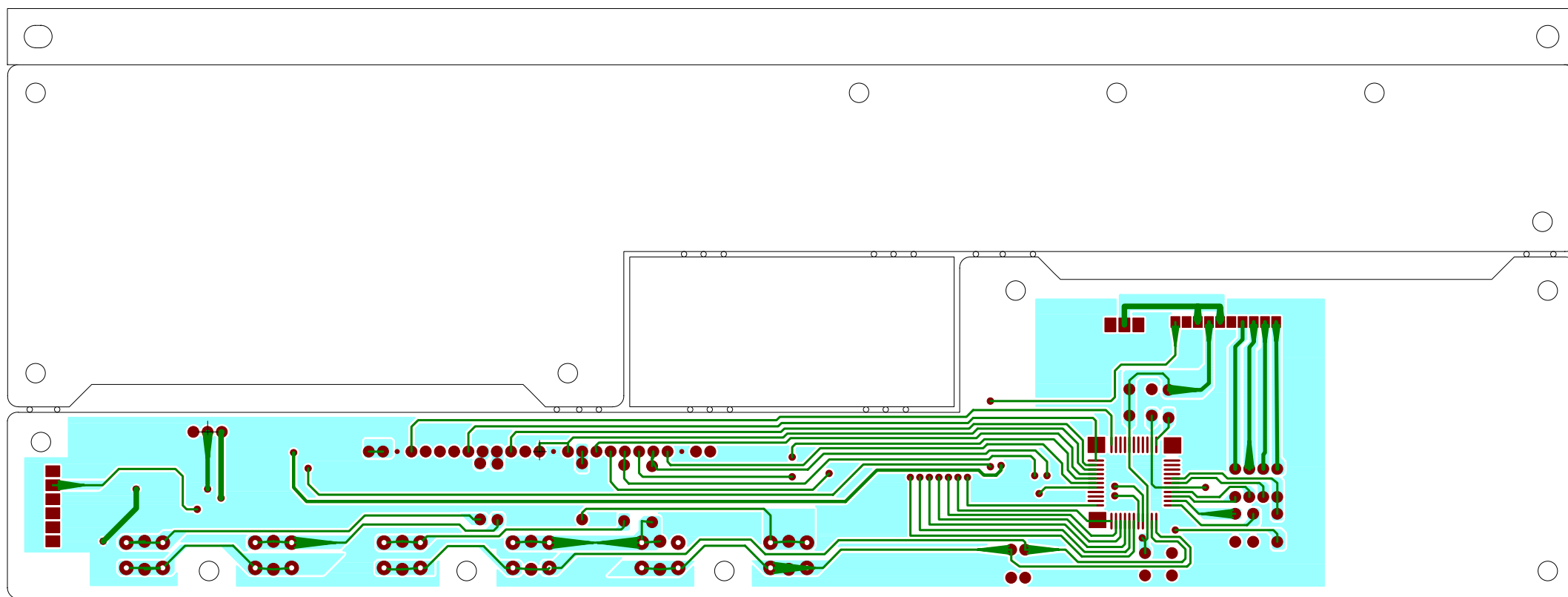


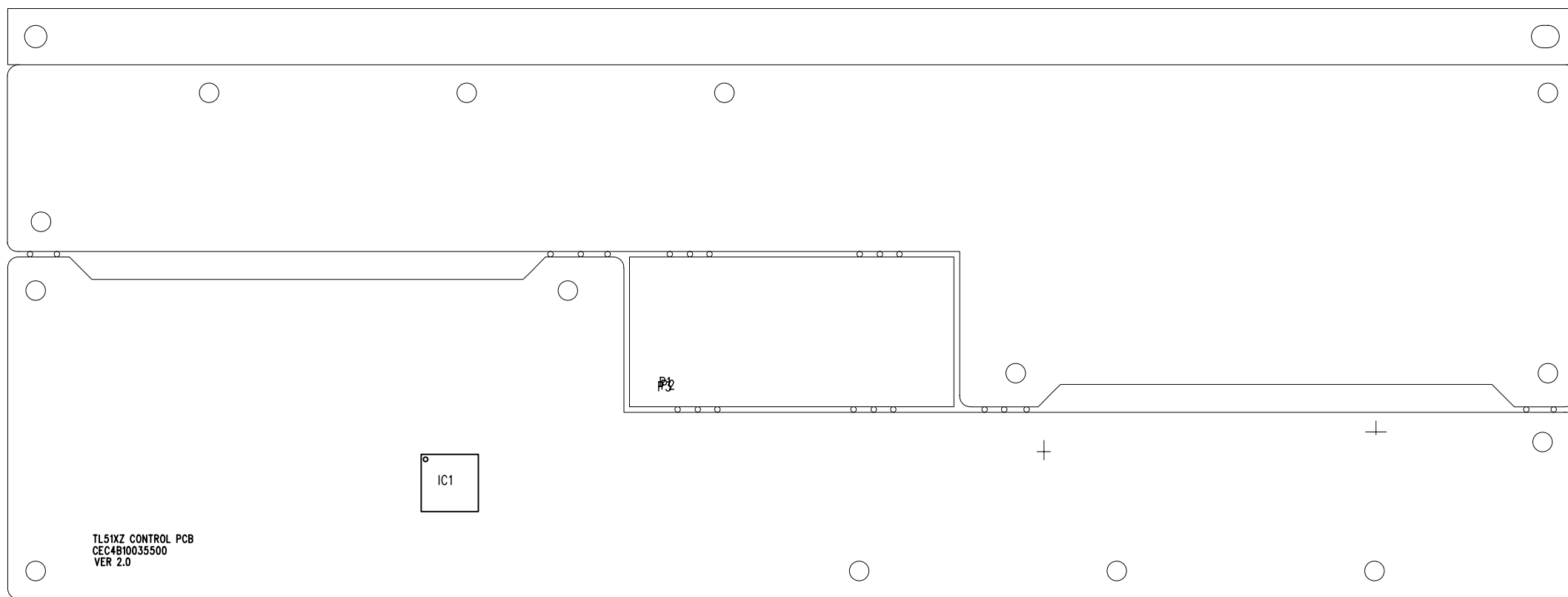
△			
△			

APPROVALS	CHECKED	DRAWN	Title	
			Control Circuit for TL-51X	
		'03.06.3	Size	Revision
		S.J. JIN	A3	05-060600-03
			Date: 2005/07/28	Sheet 1 of 1
			File: C:\Documents and Settings\TL51-cp	Drawn By:



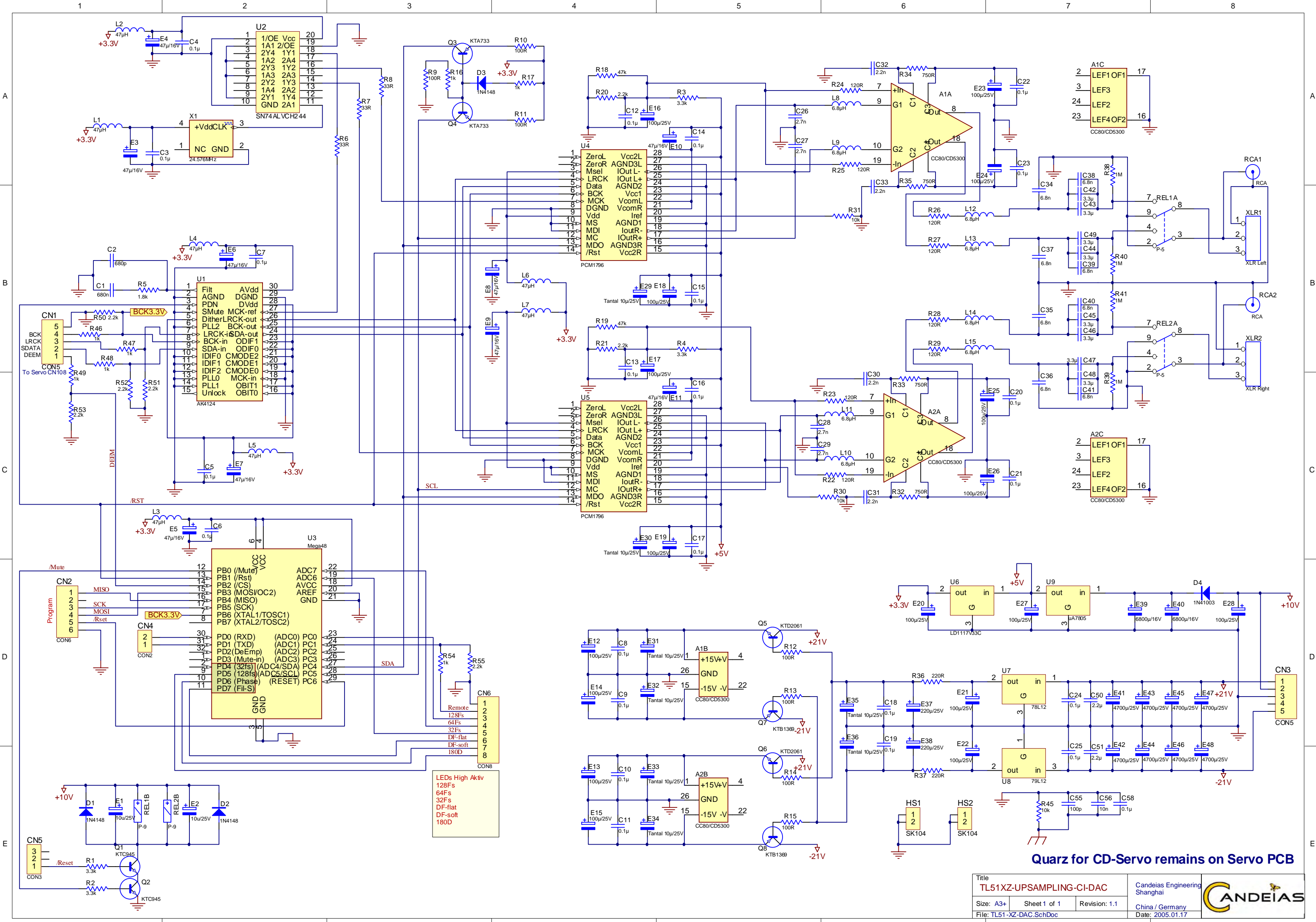






DAC/ANALOG

VERSION 1.1

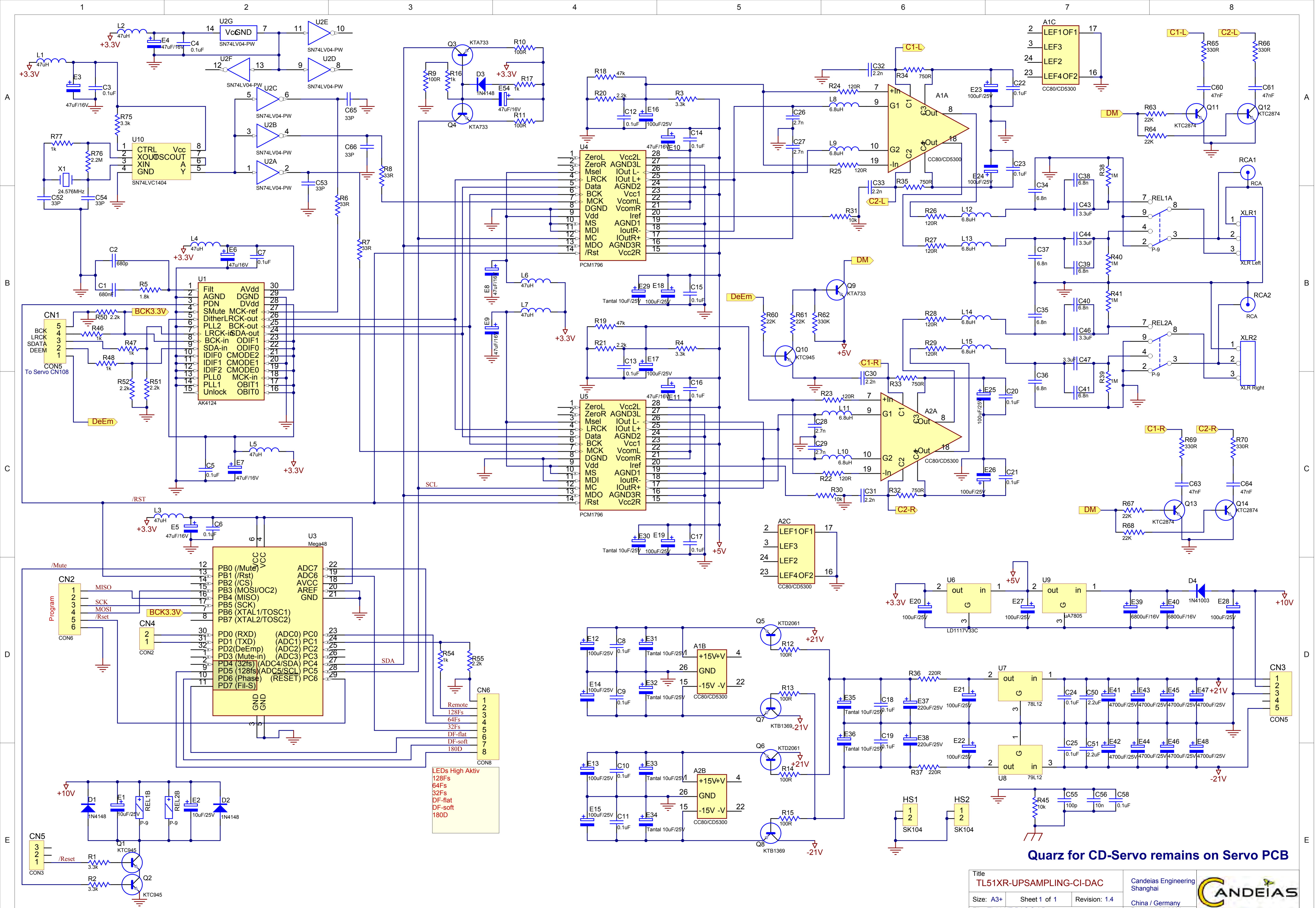


Quarz for CD-Servo remains on Servo PCB

Title		Candeias Engineering Shanghai	
TL51XZ-UPSAMPLING-CI-DAC		China / Germany	
Size: A3+	Sheet 1 of 1	Revision: 1.1	Date: 2005.01.17
File: TL51-XZ-DAC.SchDoc			



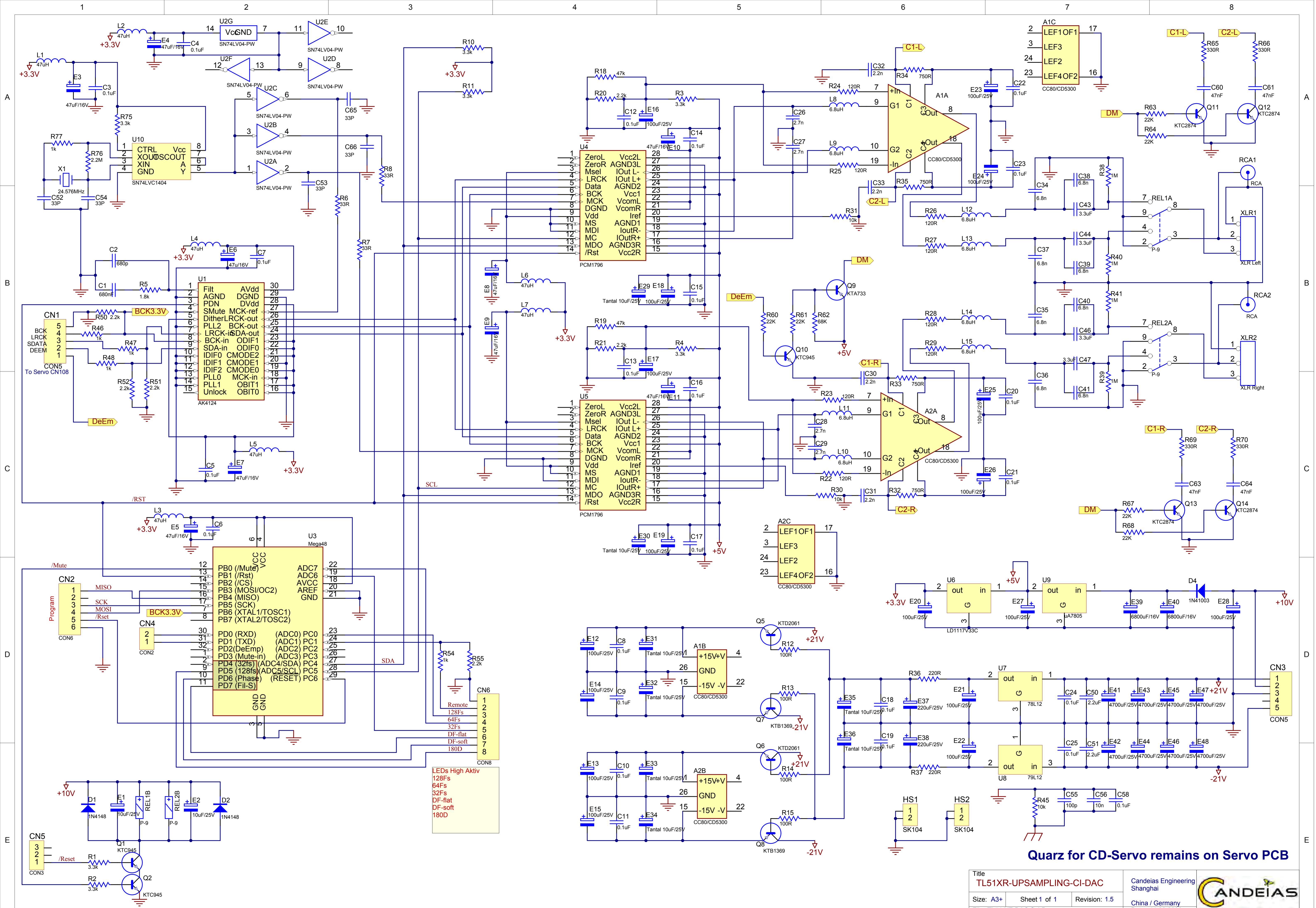
DAC/ANALOG VERSION 1.4



Quarz for CD-Servo remains on Servo PCB

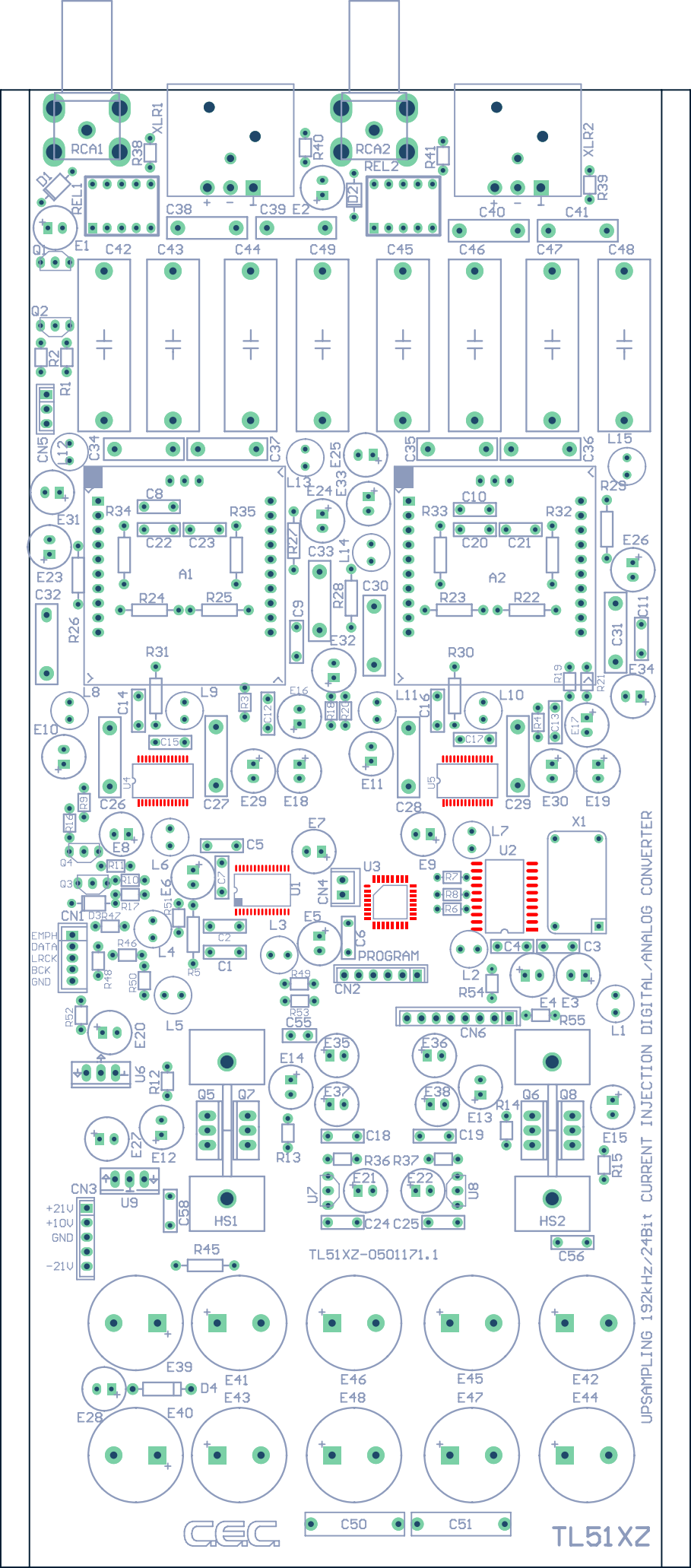
Title TL51XR-UPSAMPLING-CI-DAC		Candeias Engineering Shanghai		
Size: A3+	Sheet 1 of 1	Revision: 1.4	China / Germany	
File: TL51-XZ-DAC.SchDoc		Date: 11.08.2006		

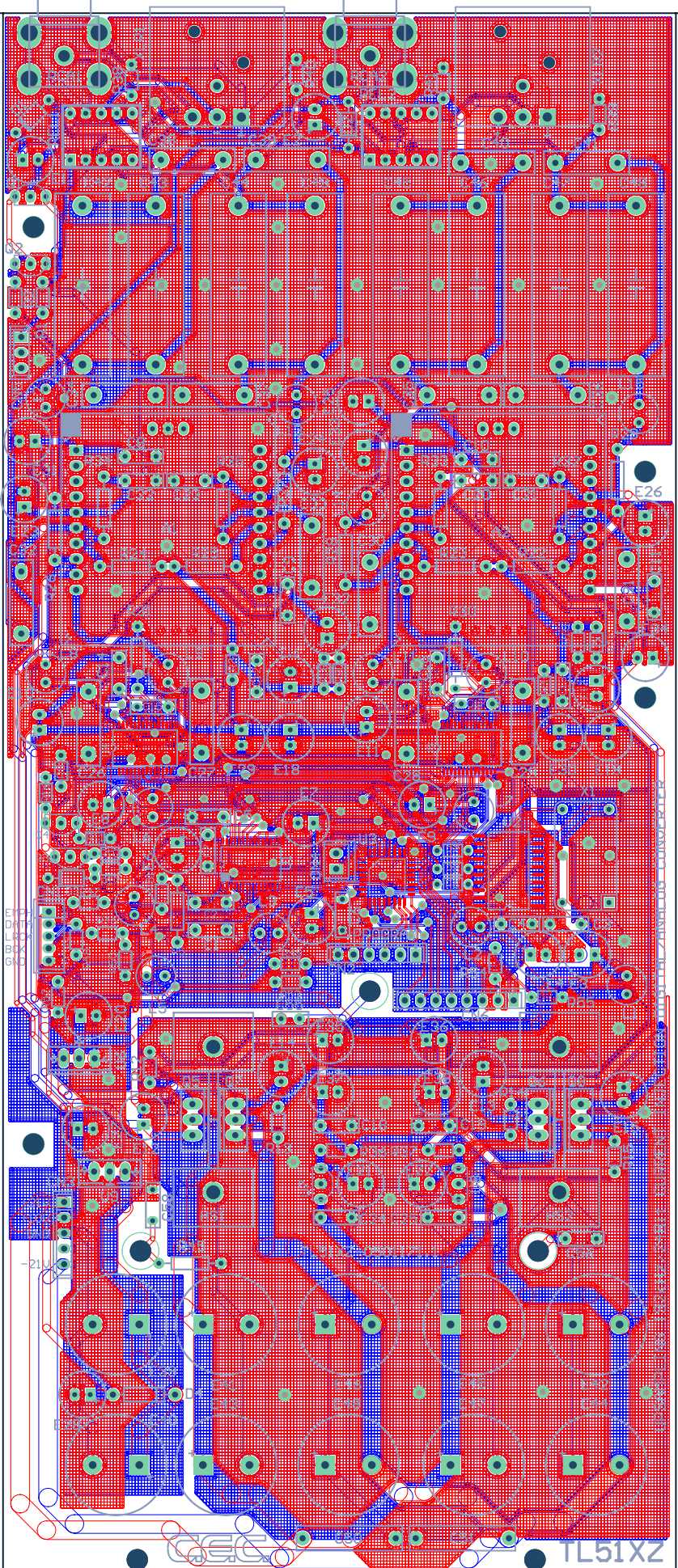
DAC/ANALOG VERSION 1.5



Quarz for CD-Servo remains on Servo PCB

Title TL51XR-UPSAMPLING-CI-DAC		Candeias Engineering Shanghai		
Size: A3+	Sheet 1 of 1	Revision: 1.5	China / Germany	
File: TL51-XZ-DAC.SchDoc		Date: 11.08.2006		





E26

E27

E28

E29

E30

E31

E32

E33

E34

E35

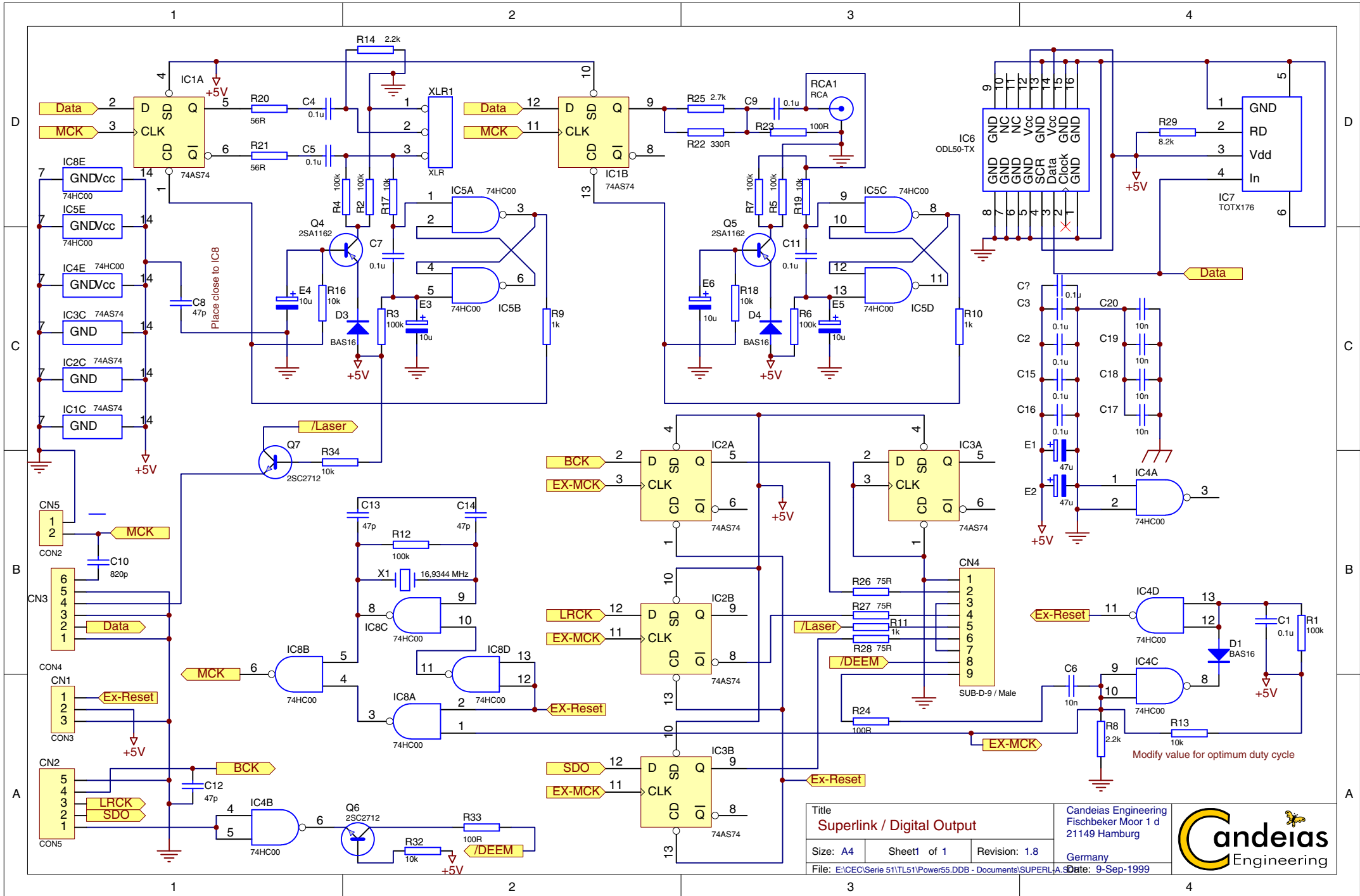
E36

E37

EM
DM
LM
BOX
GND

DIGITAL ZINCU00_CONVERTER

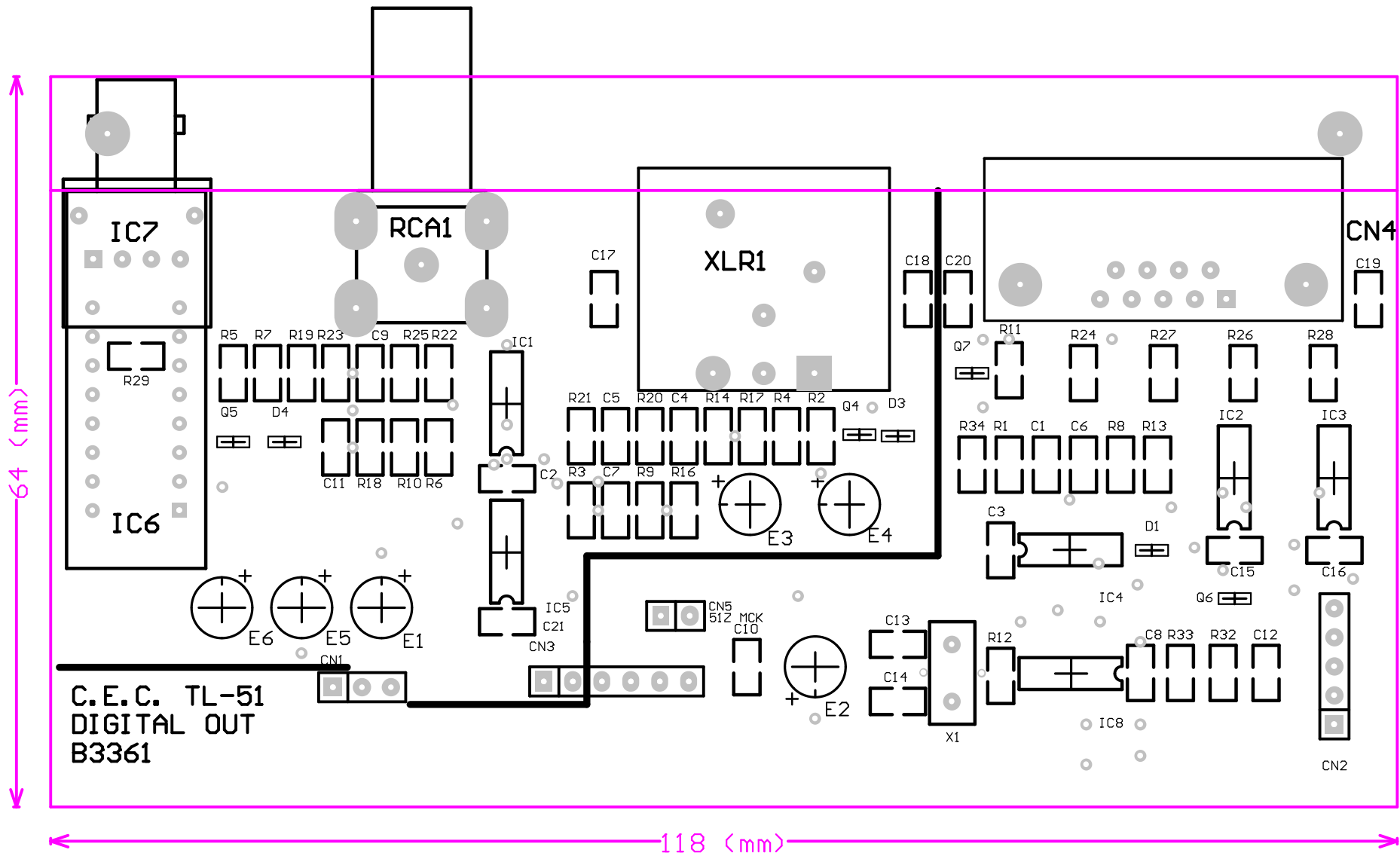
TL51XZ



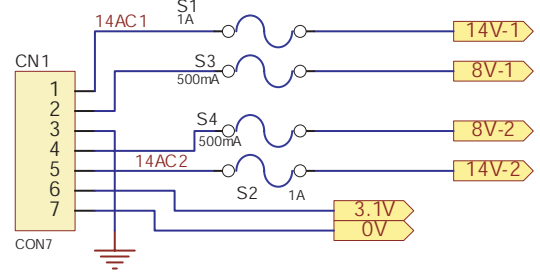
Title Superlink / Digital Output		
Size: A4	Sheet1 of 1	Revision: 1.8
File: E:\CEC\Serie 51\TL51\Power55.DDB - Documents\SUPERLINK.A		

Candeias Engineering
Fischbeker Moor 1 d
21149 Hamburg
Germany
Date: 9-Sep-1999

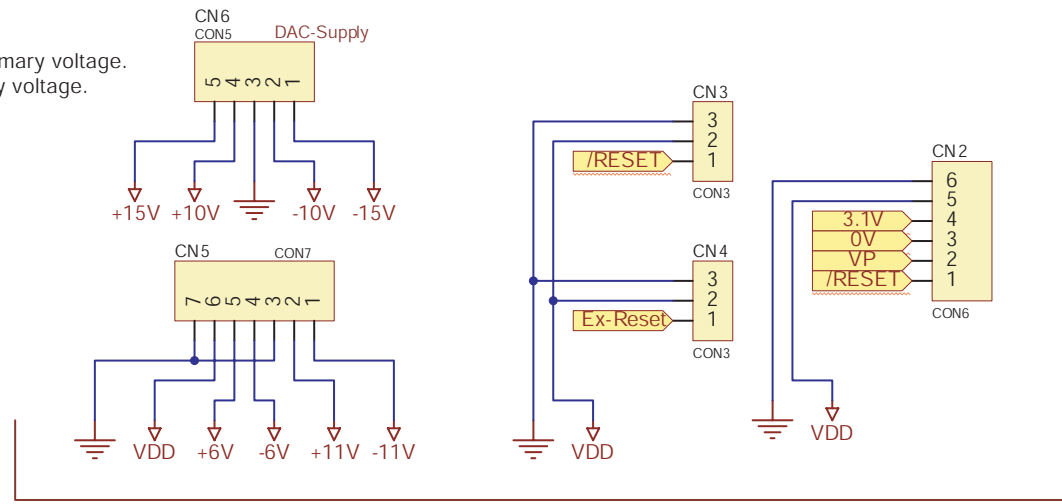




Transformer voltage 14AC should be 14VAC at specified primary voltage.
Transformer voltage 7V should be 8VAC at specified primary voltage.

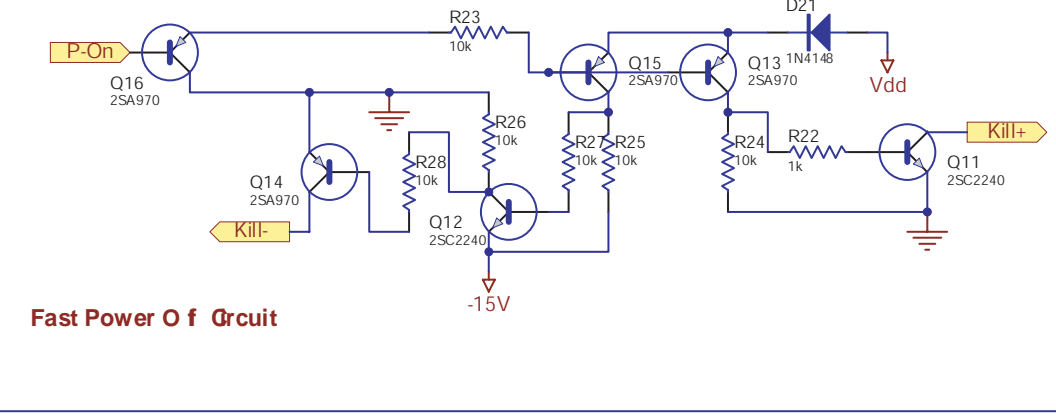
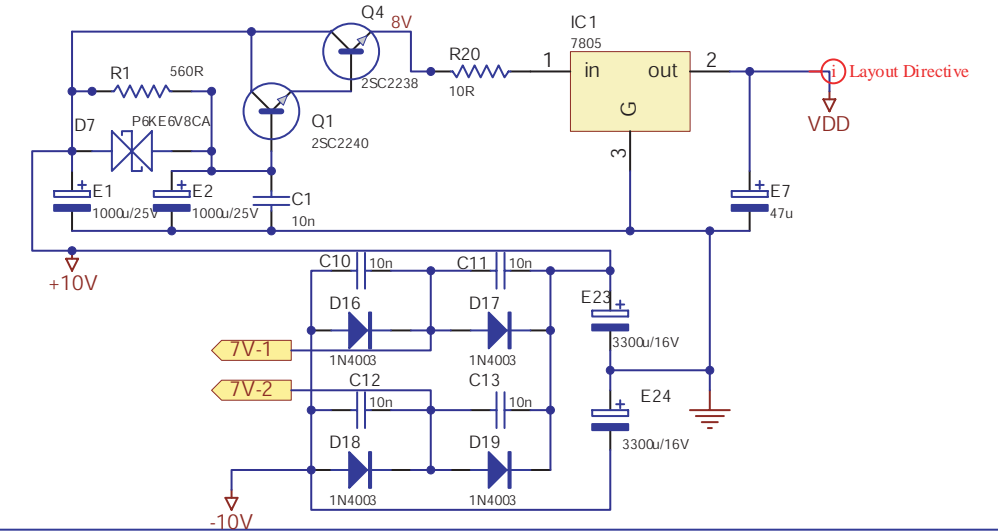


Secondary Transformer Connector



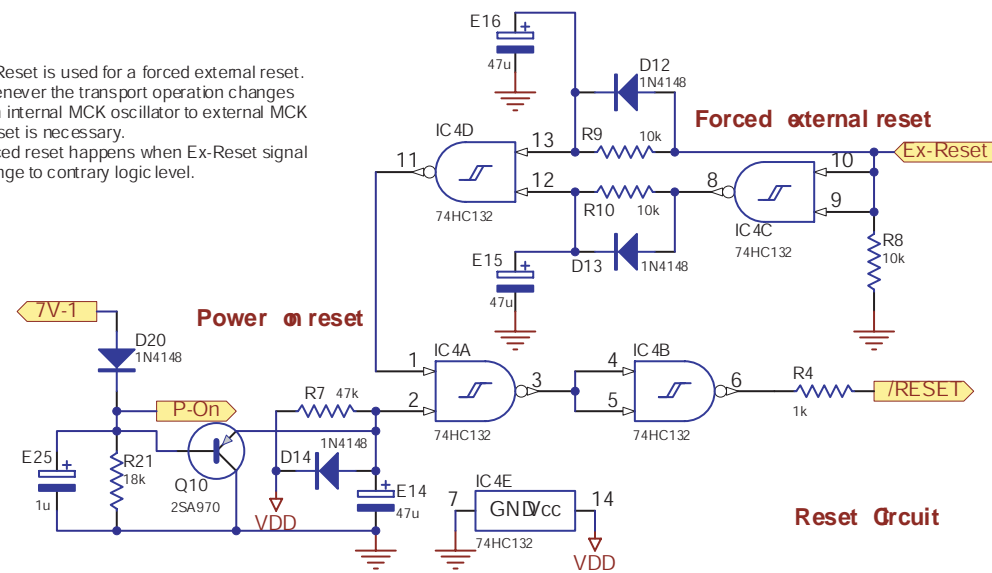
Power Supply Connectors

5V Circuit



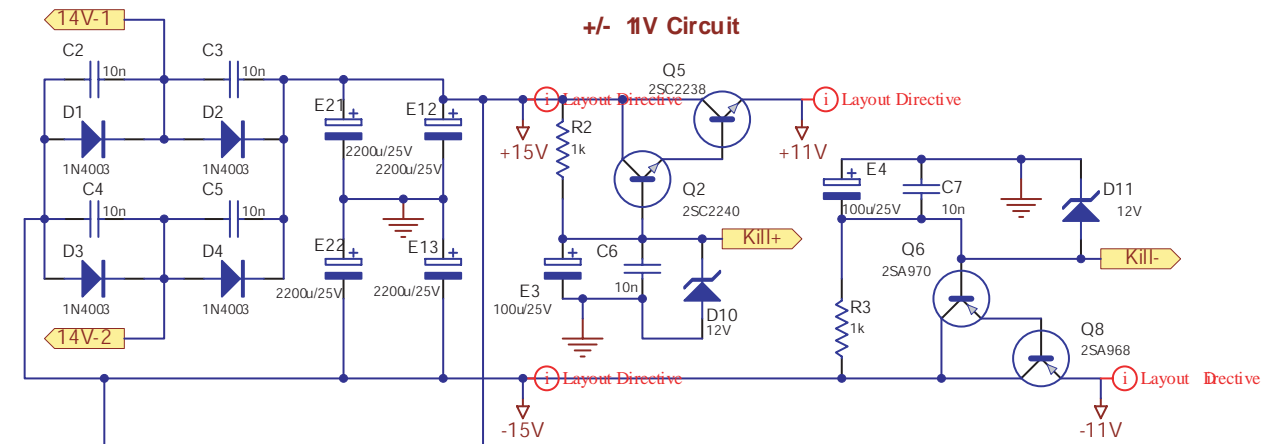
Fast Power Off Circuit

Ex-Reset is used for a forced external reset. Whenever the transport operation changes from internal MCK oscillator to external MCK a reset is necessary. Forced reset happens when Ex-Reset signal change to contrary logic level.

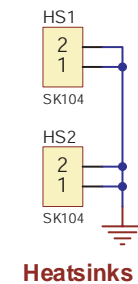
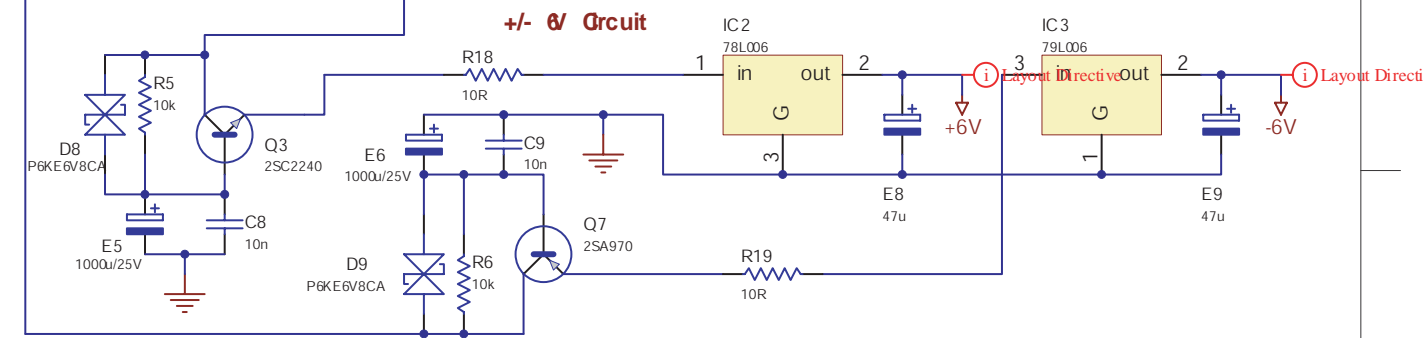


Reset Circuit

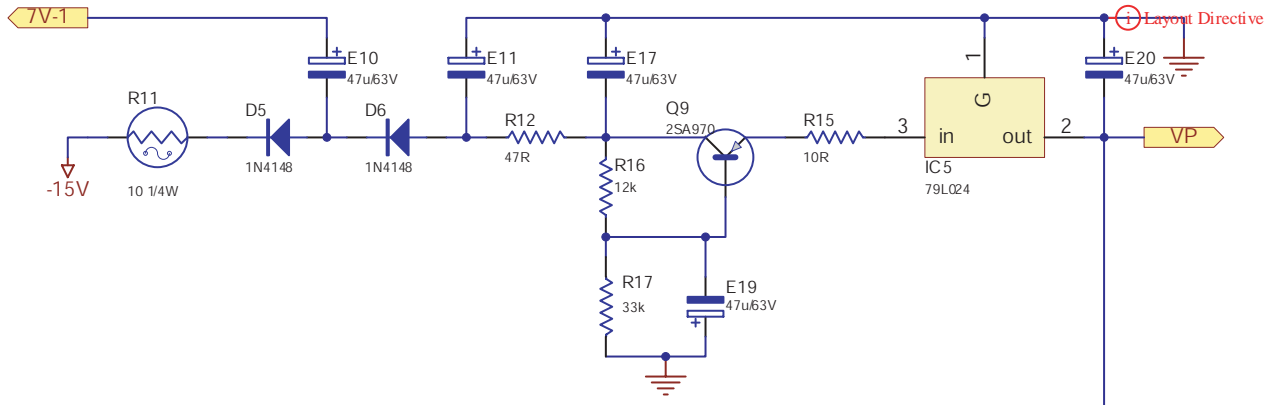
+/- 11V Circuit



+/- 6V Circuit



Heatsinks



Display Supply

