

All components mount on the front-side of the Display-PCB, except for J1D, J2D, J3D, which are mounted on the backside. The PCB backside is mostly covered by a groundplane, to minimize digital EMI (radiation)

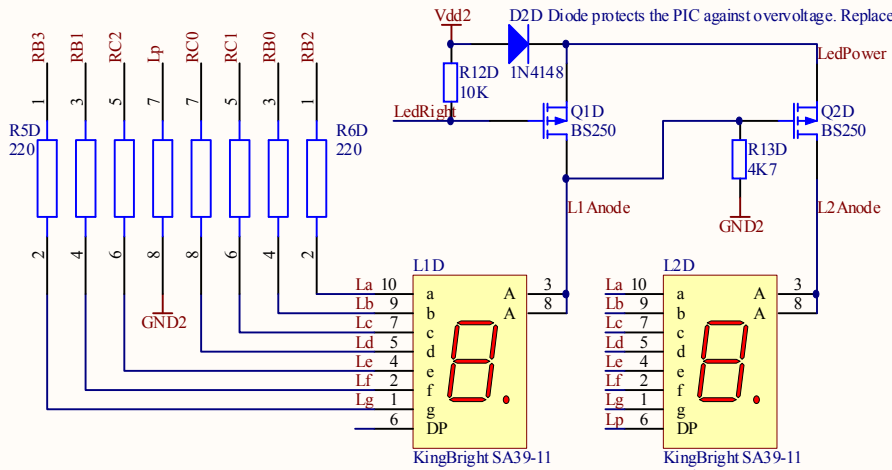
USB B-type connector for updating firmware, or developer debug
USB can provide power for reprogramming with amplifier switched off
(Note: USB power gives Vdd=4.3, which is still fine for MCP1702)

10u caps are radial, H=7mm, D=4mm, pitch=1.5mm, low-ESR types
Resistors are MELF 0207

ICSP / Debug Header
ICSP can provide power for reprogramming with amplifier switched off
(Note: Ok because MCP1702 can withstand reverse power)

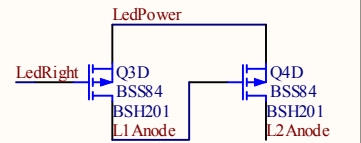
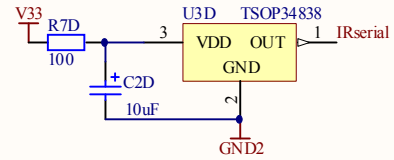
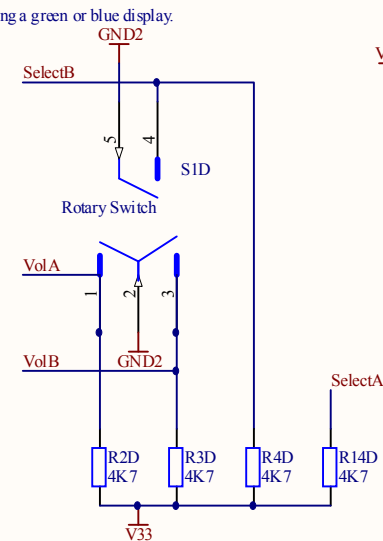
I2C output control signals to relay board
Pin 3 provides the +5V power to this display board during normal operation

Note: RB[4:7] and RC[6:7] are 5V tolerant, only RB and RC are high-current



The 220-ohm resistors are combined by 4 in an 8-pin SIL footprint
e.g. Bourns 4608X-102-221
or BI Technologies L83C221

KingBright SA39-11
or Liteon LTS4801
or Avago HDSP 315 series CA



Q3D/Q4D are alternative to Q1D/Q2D (different footprint)

Title		
RelaiXed2 preamp - Display Board		
Size	Number	Revision
A4	Copyright Jos van Eijndhoven	1.0
Date:	8/4/2011	Sheet of
File:	E:\RELAI XED2\AltiumSheetDisplay.SchDoc	Drawn By: Jos van Eijndhoven

Display PCB July 2011

