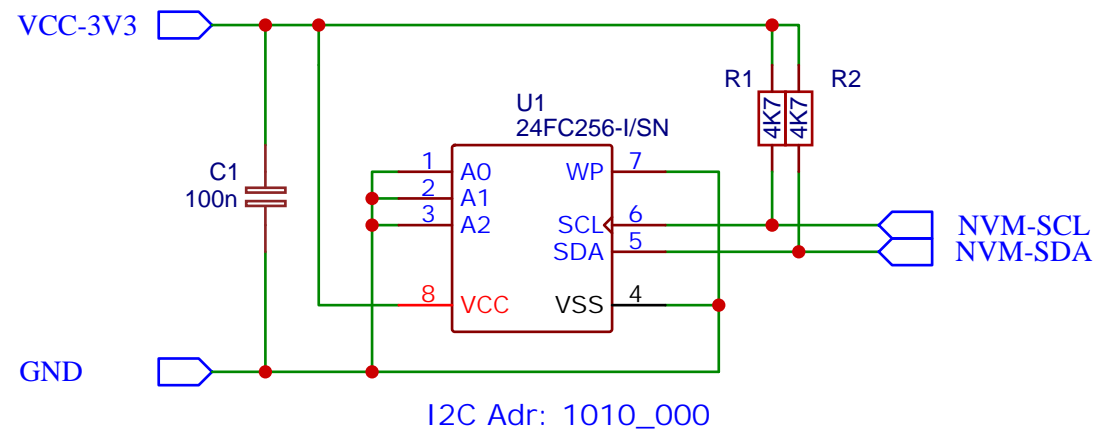
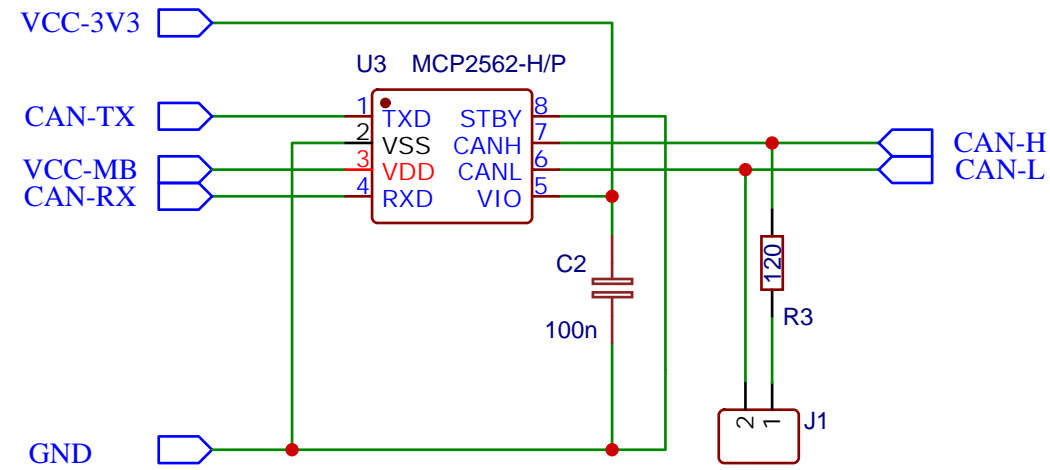


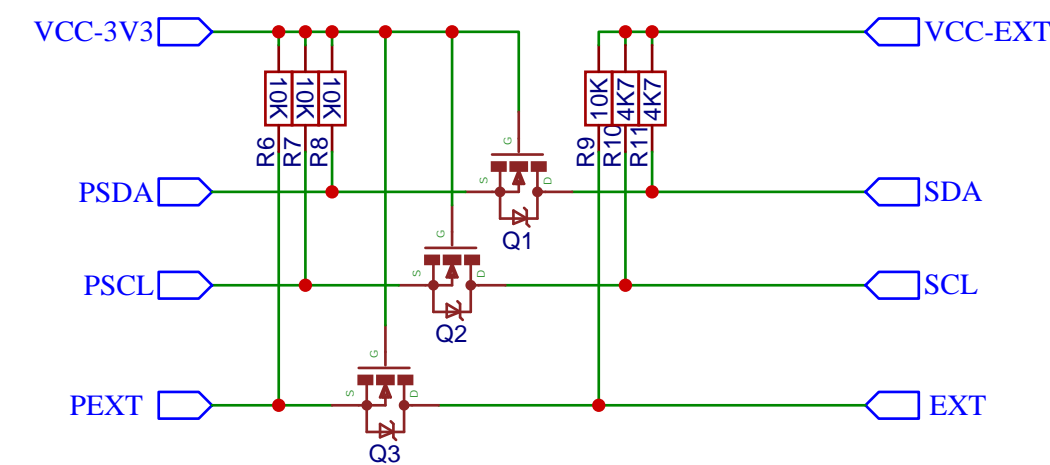
Non-Volatile Memory



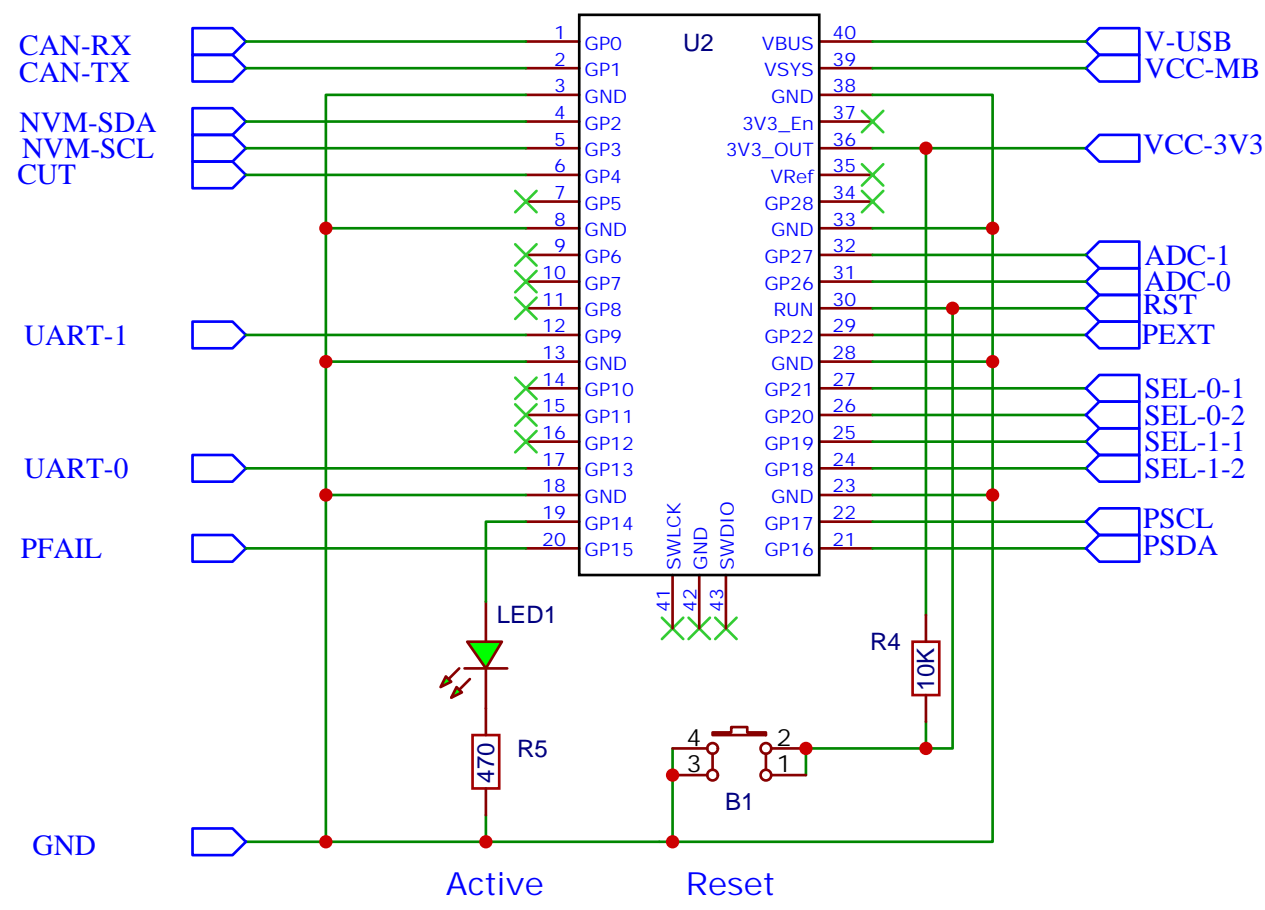
CAN Bus Line Driver



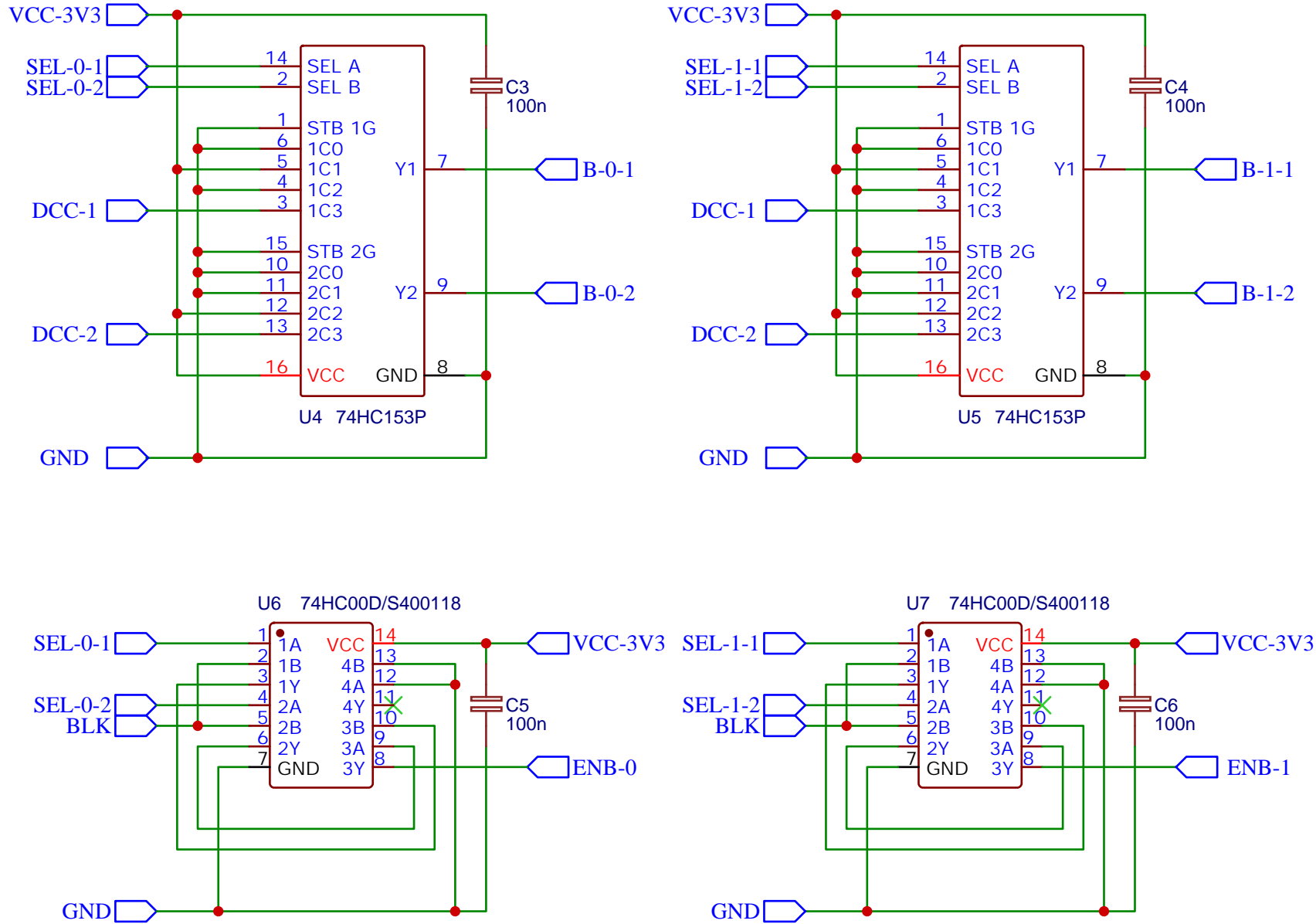
Level shifters



Main Controller - RASPBERRY Pi Pico



H-Bridge Control Logic

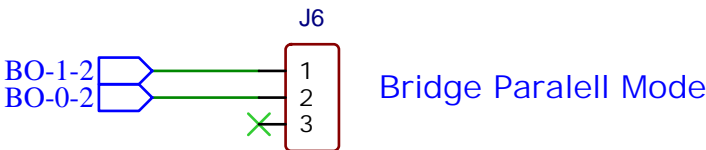
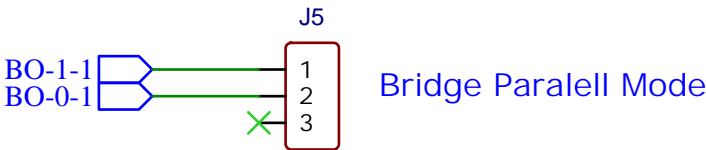
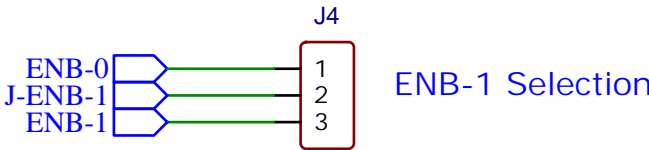
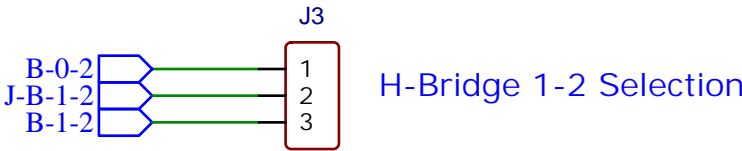
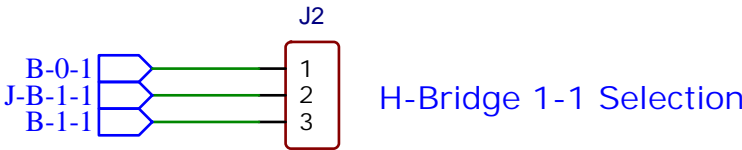


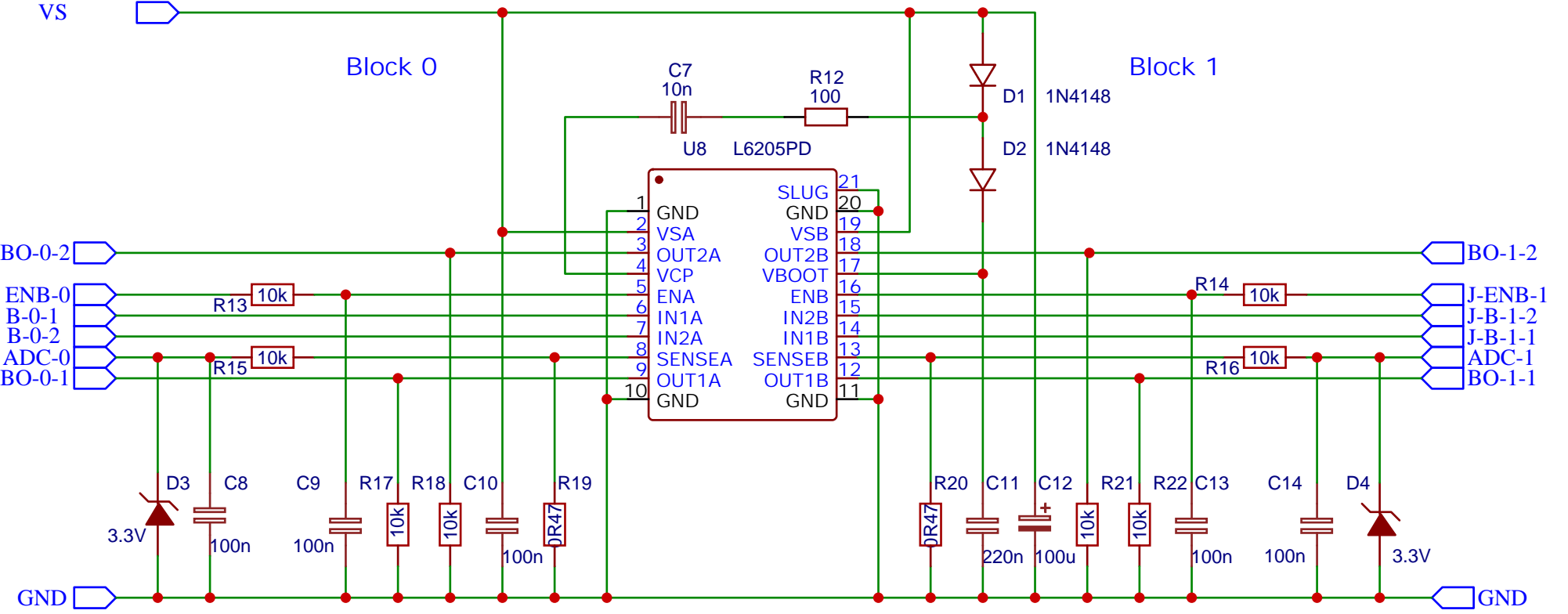
Control Logic Signals:

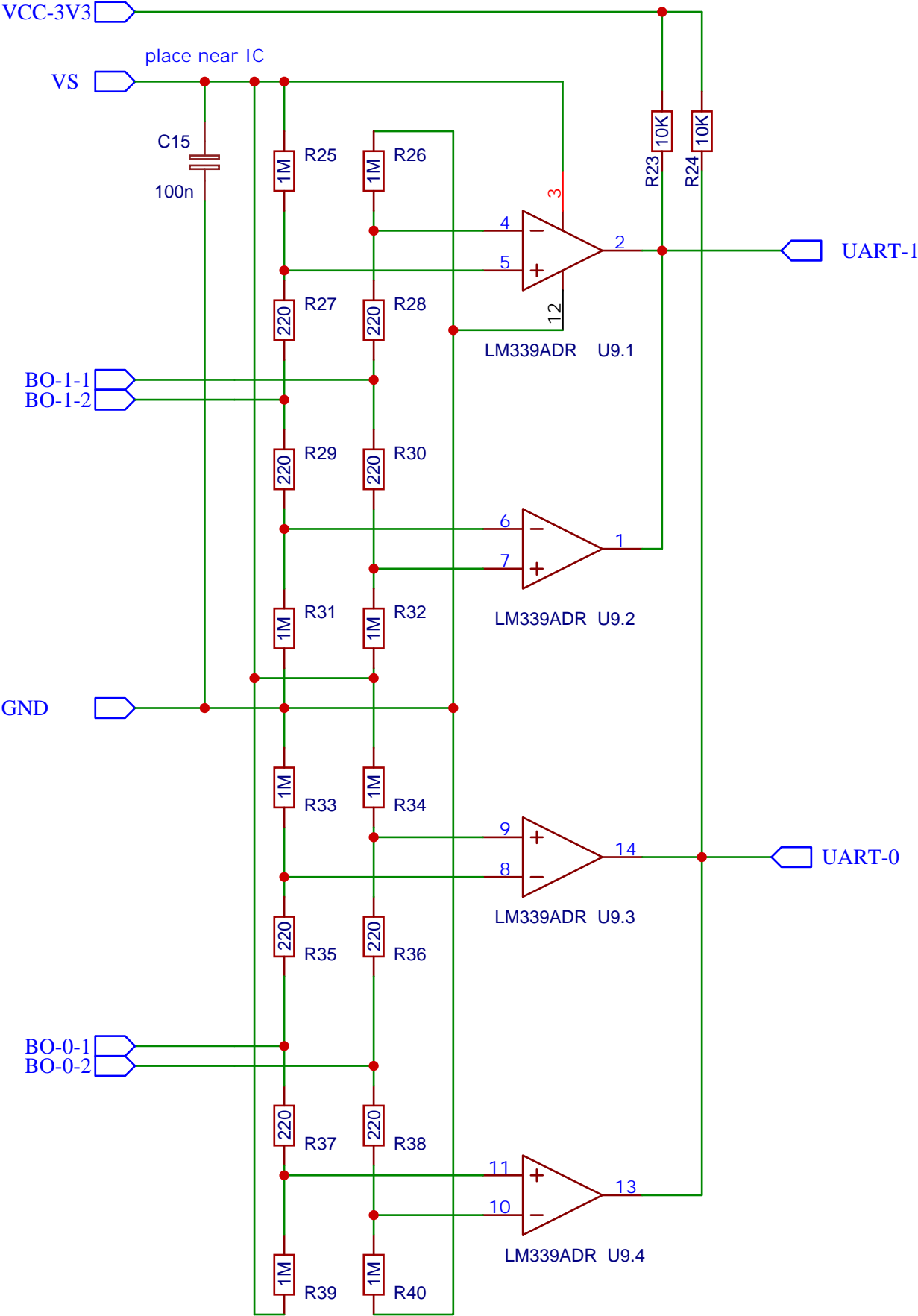
Sel-2	Sel-1	->	B-x-1	B-x-2	ENB-x	STATE
0	0	->	GND	GND	GND	"Z"
0	1	->	VCC	GND	PWM/BLK	"FWD"
1	0	->	GND	VCC	PWM/BLK	"REV"
1	1	->	DCC1	DCC2	DCC/BLK	"DCC"

ENB == LOW -> Z

The Dual Bridges can be configured to run as a Mono Block.
Jumper position (1-2) -> MONO mode.
Jumper position (2-3) -> DUAL mode.
WARNING: ALL jumpers blocks must be set to the correct option.







[illegible]

DCC Signal, Cutout and Block Signal.

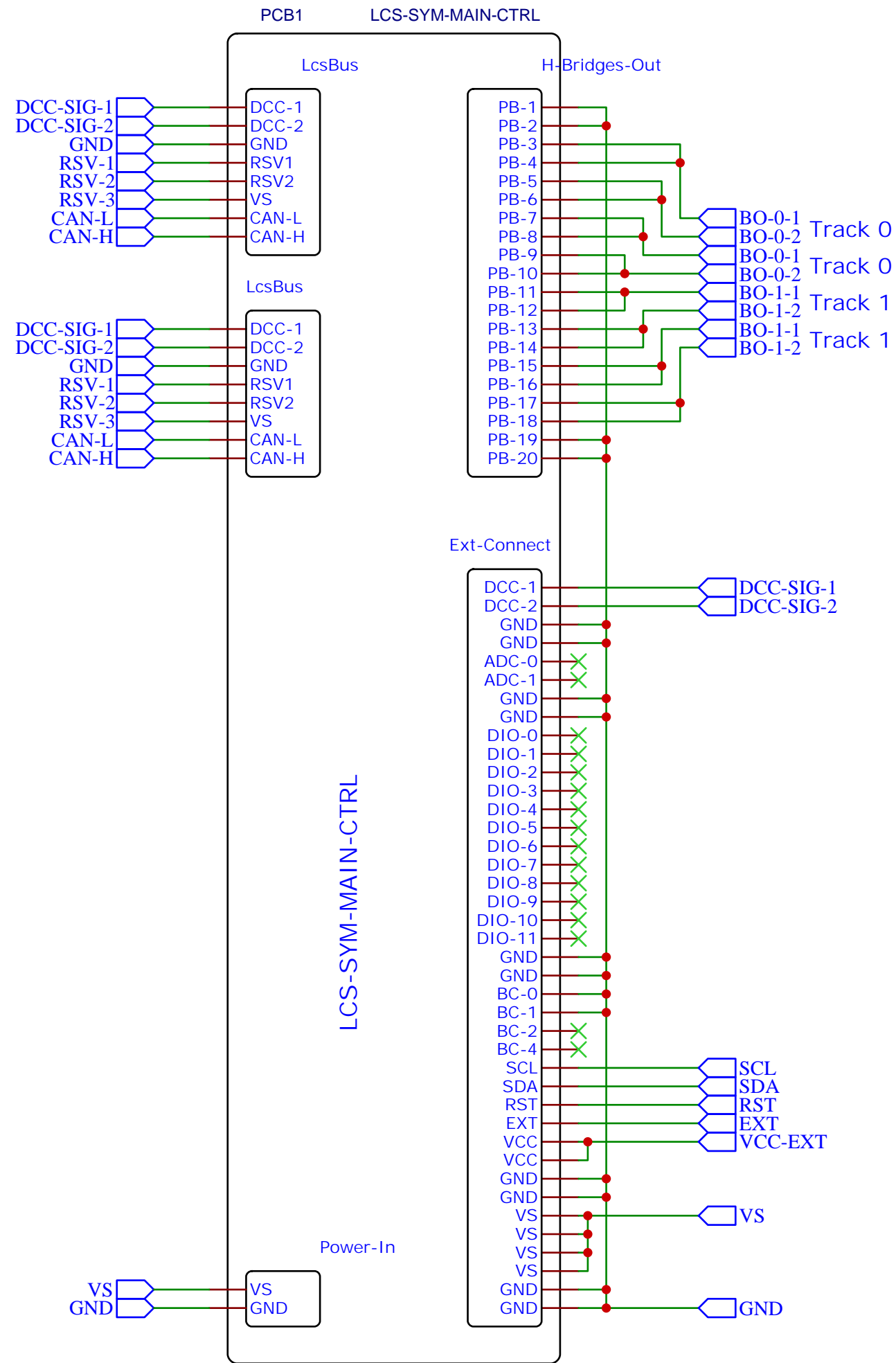
DCC Input:
00->CUTOUT
01->DCC+
10->DCC-

The diagram shows three signals over time:

- DCC:** A differential signal with levels '+', '0', and '-'. It starts with a pulse to '+', then to '-', then back to '+'. A green line labeled 'Cutout Period' spans the duration where the signal is at the '0' level.
- CUT:** A signal that transitions from '0' to a high level during the 'Cutout Period' and returns to '0' after it.
- BLK:** A signal that remains at a high level but has two narrow pulses to '0' that occur during the 'Cutout Period'.

LcsNodes-Dual-Block-Controller-Board - DCC Signal Input - Page 6 of 7

Block Controller PCB connectors



Power Supply with Powerfail Option

