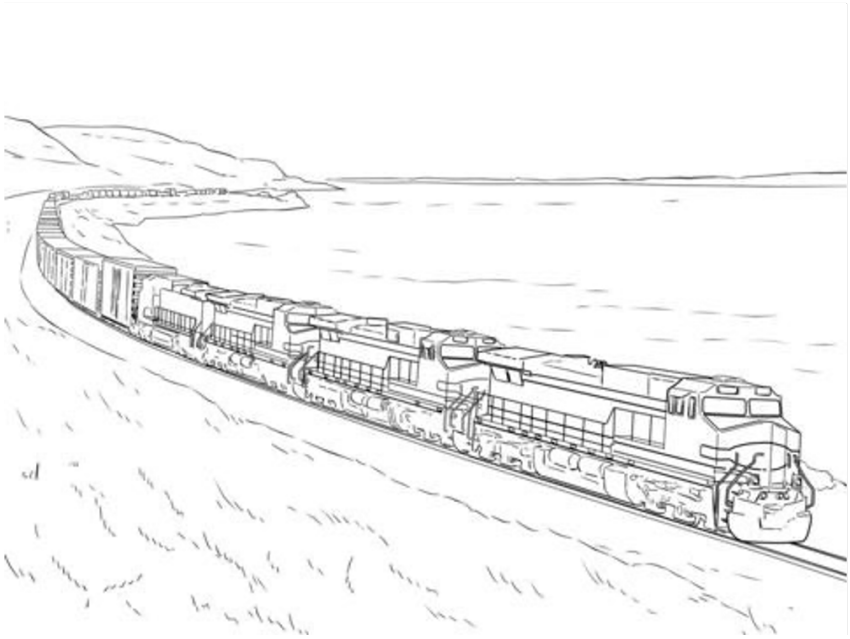

A Layout Control System for Model Railroads

Helmut Fieres December 9, 2024

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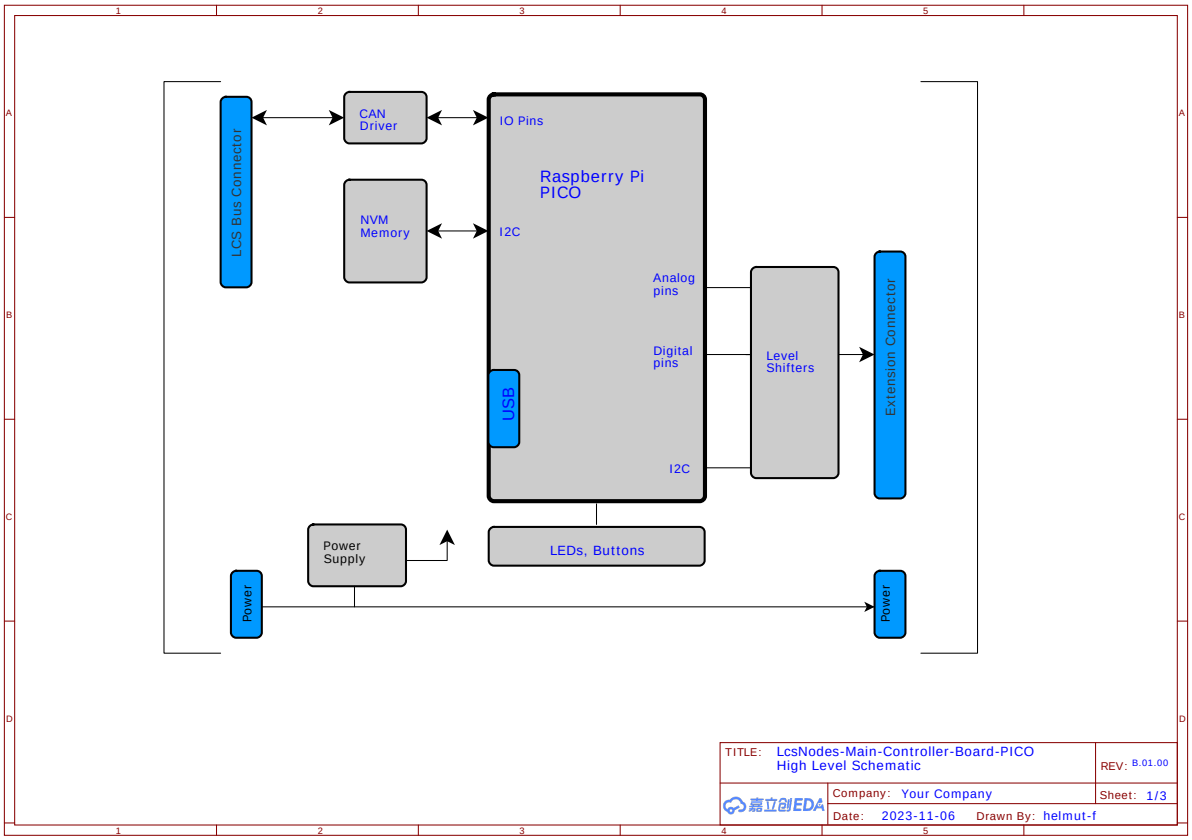
A Tests

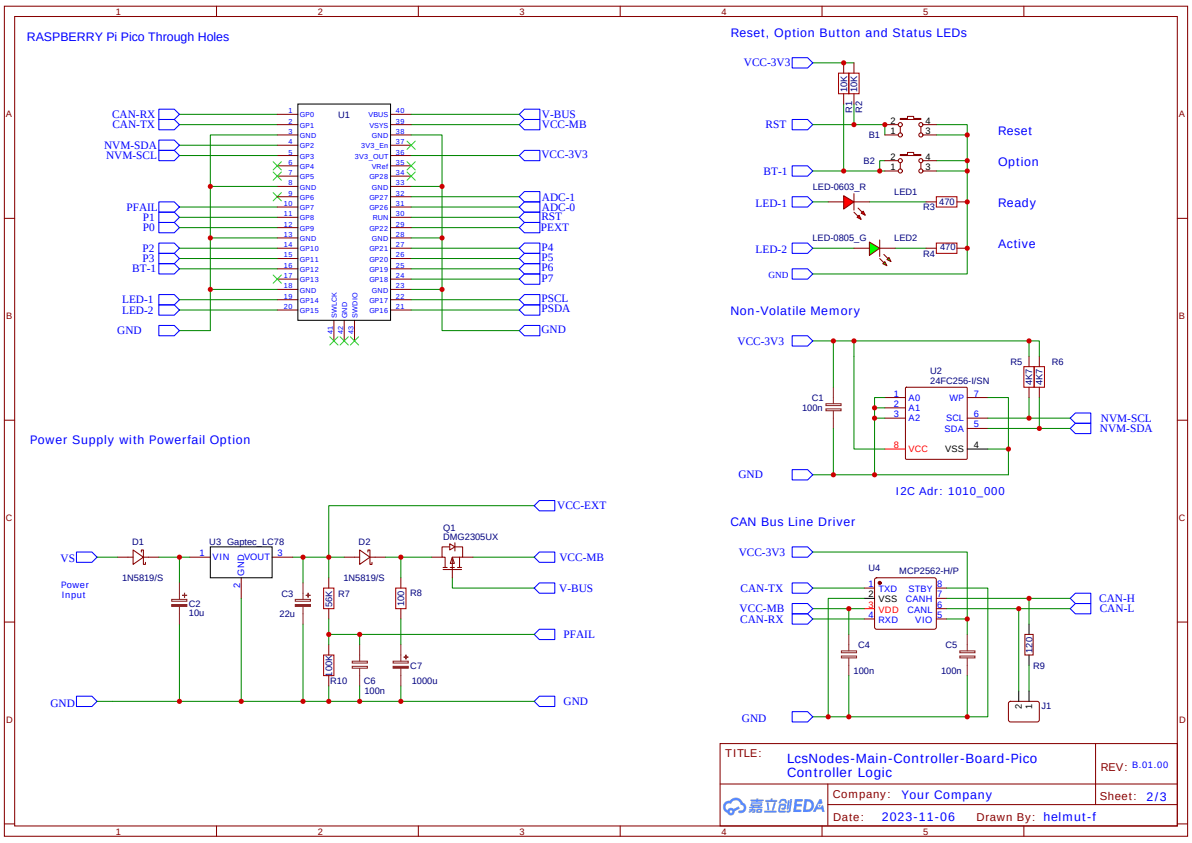
A.1 Schematics

float barrier command to ensure that text stays close to the picture but no text from after the picture.

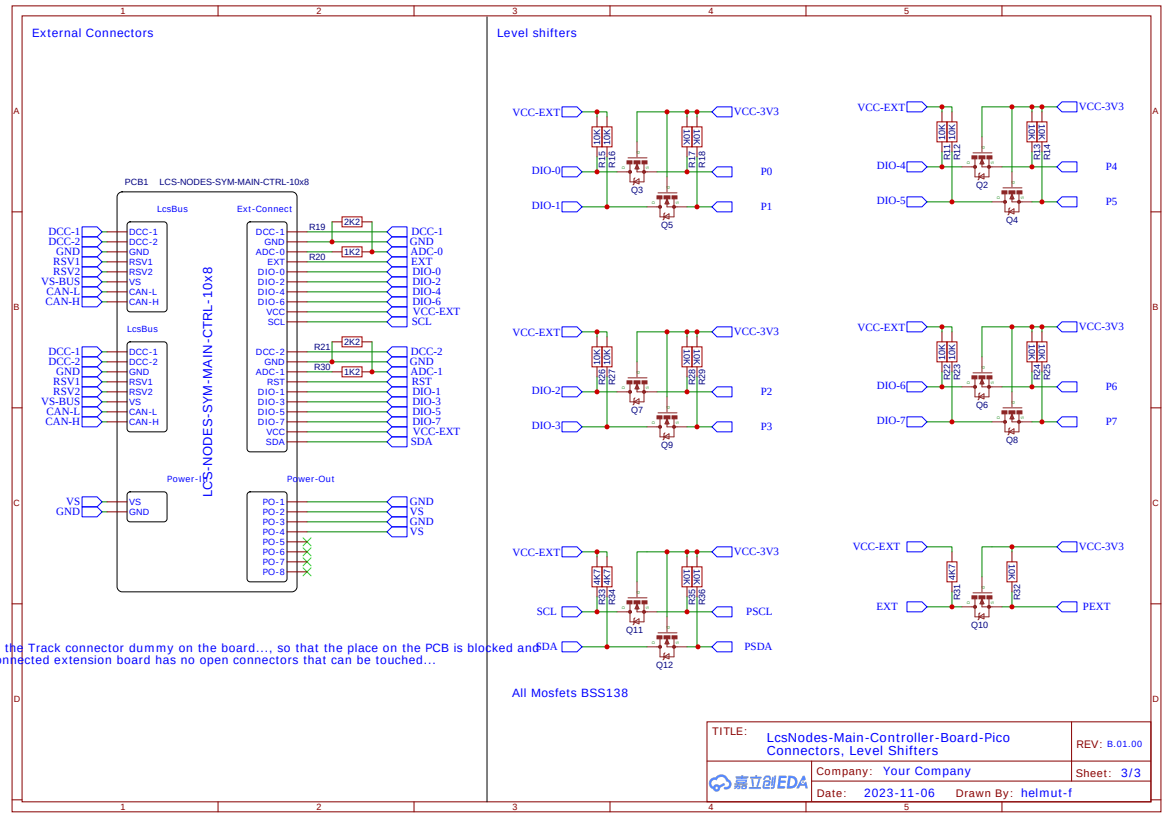
A.1.1 part 1



A.1.2 part 2


RASPBERRY Pi Pico Through Holes
CAN-RX
CAN-TX
NVM-SDA
NVM-SCL
PFAIL
P1
P0
P2
P3
BT-1
LED-1
LED-2
GND
U1
V-BUS
VCC-MB
VCC-3V3
ADC-1
ADC-0
RST
PEXT
P4
P5
P6
P7
PSCL
PSDA
GND
Reset, Option Button and Status LEDs
VCC-3V3
RST
BT-1
LED-1
LED-2
GND
B1
B2
LED-0603_R
LED1
LED-0805_G
LED2
R1
R2
R3
R4
10K
470
Reset
Option
Ready
Active
Non-Volatile Memory
VCC-3V3
C1
100n
U2
24FC256-I/SN
R5
R6
4K7
NVM-SCL
NVM-SDA
GND
I2C Adr: 1010_000
Power Supply with Powerfail Option
VS
Power Input
D1
1N5819/S
U3_Gaptec_LC78
VIN
VOUT
GND
C2
10u
C3
22u
D2
1N5819/S
Q1
DMG2305UX
R7
56K
R8
100
R10
100K
C6
100n
C7
1000u
VCC-EXT
VCC-MB
V-BUS
PFAIL
GND
CAN Bus Line Driver
VCC-3V3
CAN-TX
VCC-MB
CAN-RX
GND
U4
MCP2562-H/P
TXD
VSS
VDD
RXD
STBY
CANH
CANL
VIO
C4
100n
C5
100n
R9
120
J1
CAN-H
CAN-L
TITLE:
LcsNodes-Main-Controller-Board-Pico Controller Logic
REV: B.01.00
Company: Your Company
Sheet: 2/3
Date: 2023-11-06
Drawn By: helmut-f

A.1.3 part 3



A.2 Lists

A.2.1 A simple list

- First bullet point
- Second bullet point
- Third bullet point

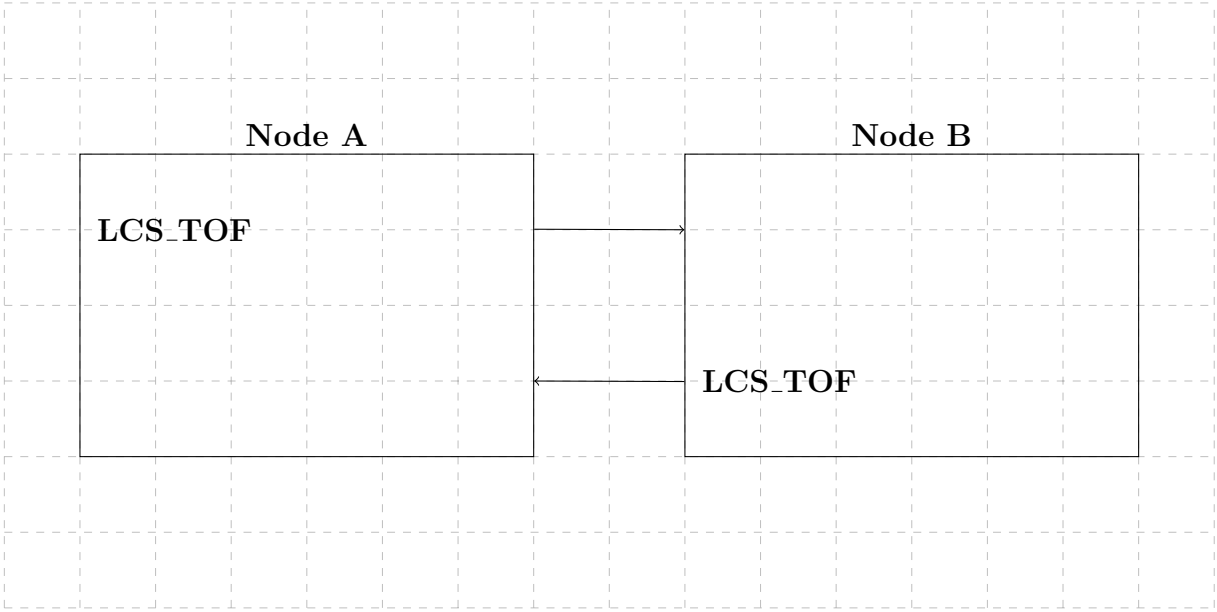
A.2.2 An instruction word layout

A little test for an instruction word layout ... will be a bit fiddling work ...

1	3	6
Test		

A.3 Protocol boxes

A bit cumbersome and we would need to have text at defined locations. Perhaps keep the simple table in the protocol chapter.



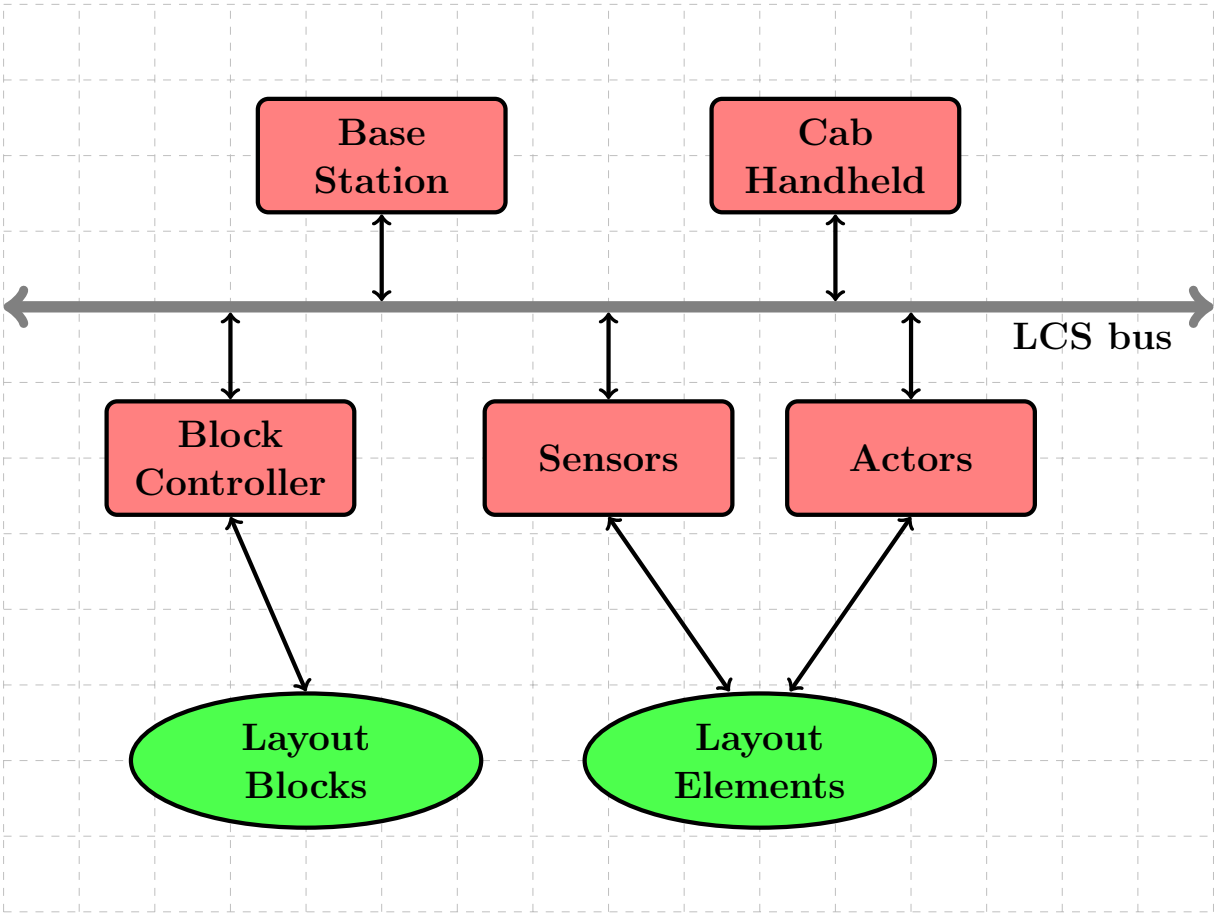
A.4 Split rectangle

We would need the split rectangle for the runtime area maps....

Hugo
Berta
Carla

A.5 Using tikzstyle

Another test with tikzstyle. It still is a lot of work to even make simple pictures look nice :-)


Base Station
Cab Handheld
LCS bus
Block Controller
Sensors
Actors
Layout Blocks
Layout Elements