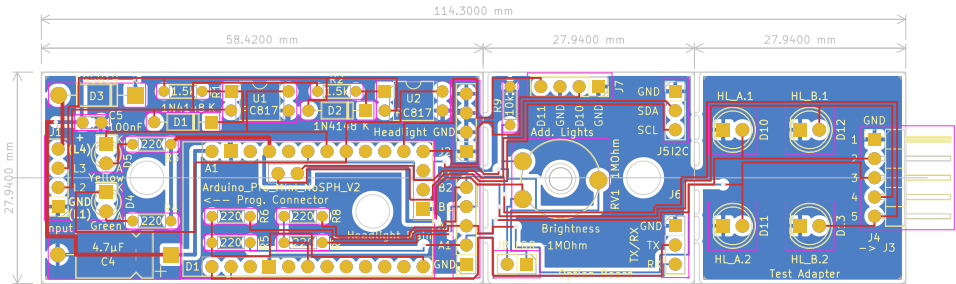PCB Dimension Note:
Needs to fit in Lego Raster (8mm x 8mm / 64x32)
& 3D printed case with wall thickness > 1mm.

|  | X (mm) | Y (mm) | Notes |
|---|---|---|---|
| Practical max | 28.86 | 60.86 | With 0.3 mm clearance |
| Adjusted to grid) | **27.94** | **58.42** | **Best choice** |



114.3000 mm
58.4200 mm
27.9400 mm
27.9400 mm
27.9400 mm

D3
C5
100nF
1.5K
1N414 8 K
D1
U1
C817
D2
Rx
1.5K
1N414 8 K
U2
C817
Headlight GND
GND
SDA
SCL
J5 I2C
J6
J7
D11 GND
D10
Add. Lights
HL_A.1
HL_B.1
D10
D12
GND
HL_A.2
HL_B.2
D11
D12
J4
—> J3
Test Adapter
A1
Arduino_P... ...NOSPH_V2
<-- Prog. Connector
220
220
220
220
R8
Yellow
Green
nput
4.7μF
C4
D1
GND
RV1 1MOhm
Brightness
1MOhm
TX/RX
GND
TX
R...
GND

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ToGo—Lab

Sheet:
File: 0004-DenshaBekutoru_v0.2.kicad_pcb
Title: DenshaBekutoru 電車ベクトル (Train Vector)
Size: A4
Date: 2026-03-08
Rev: 3
KiCad E.D.A. 8.0.9
Id: 1/1