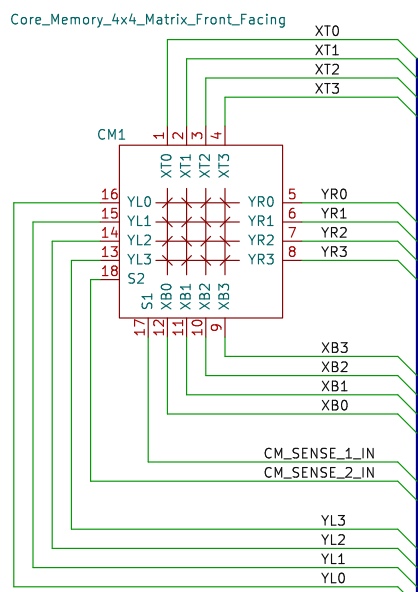
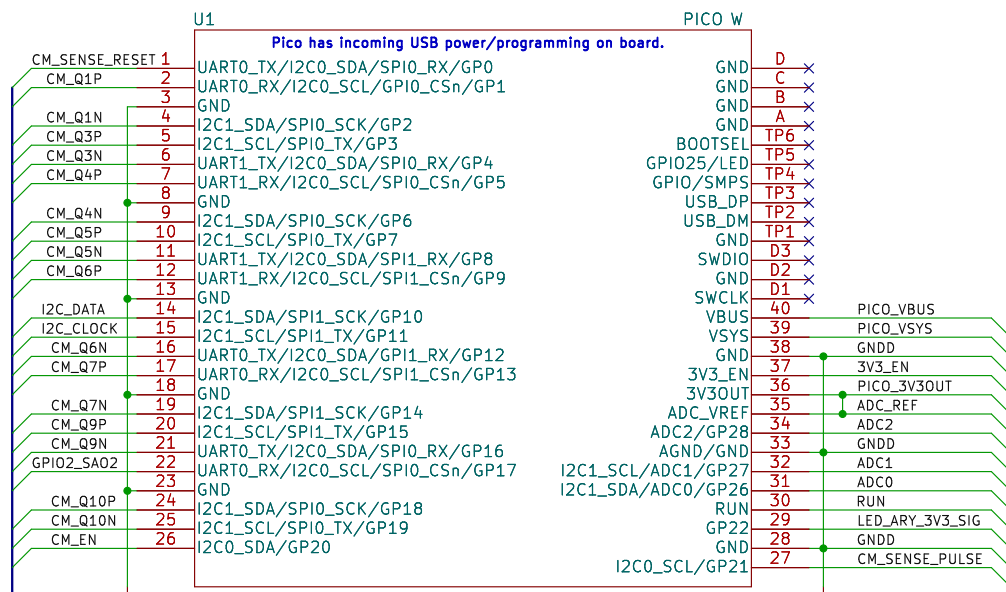


DUT

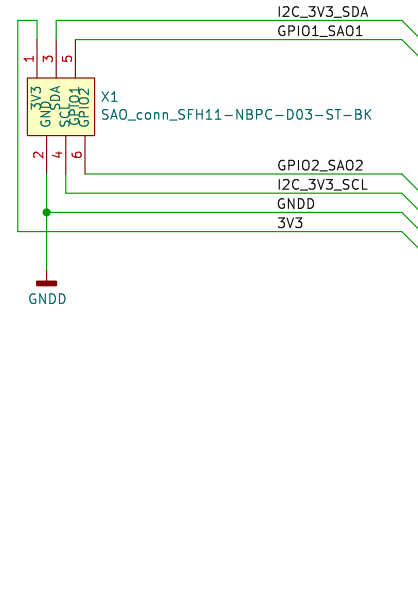
CORE MATRIX



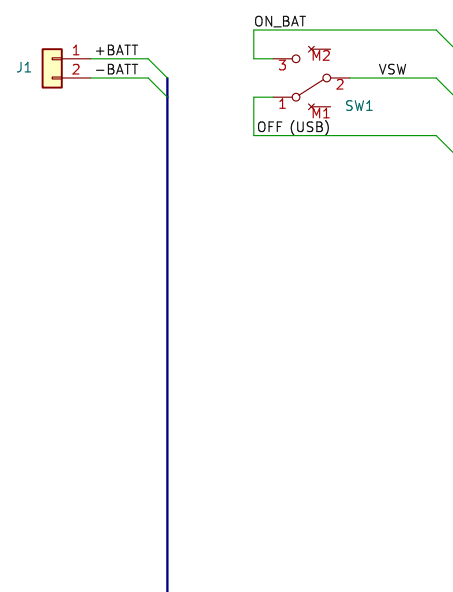
PICO



SAO

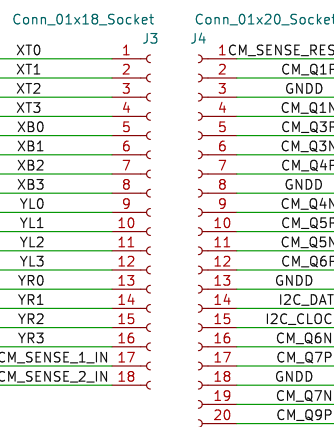
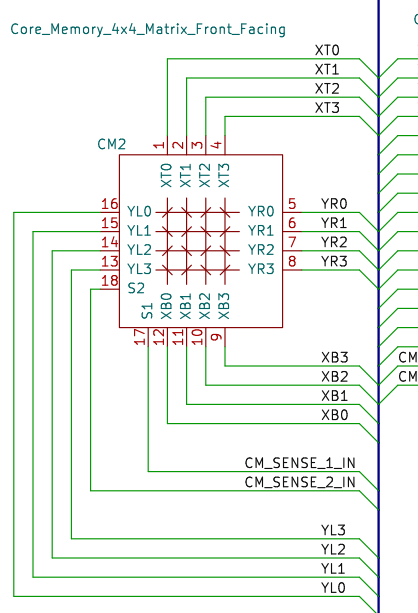


POWER

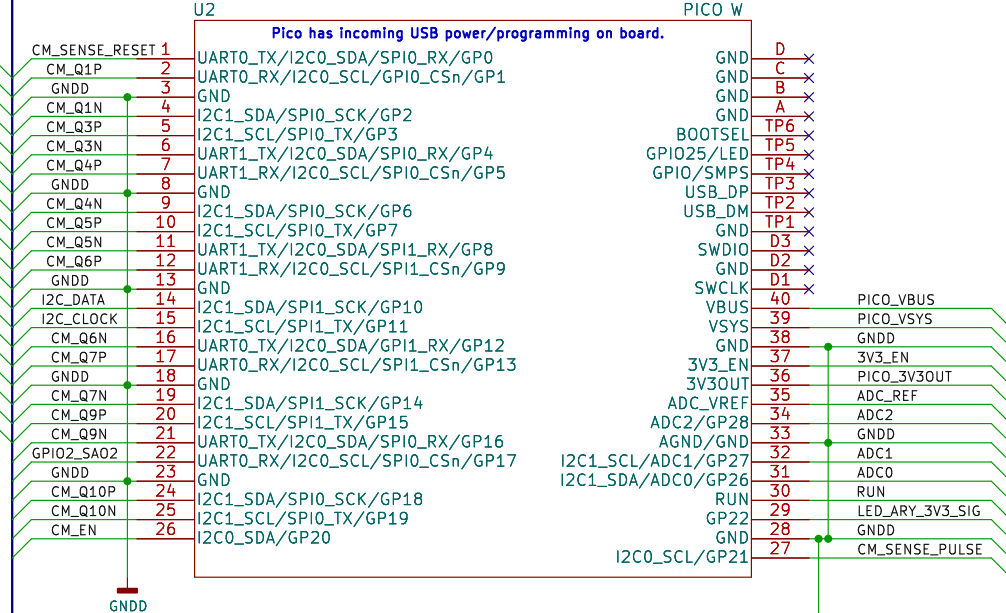


TEST CIRCUIT

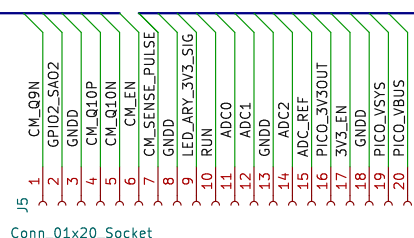
CORE TEST



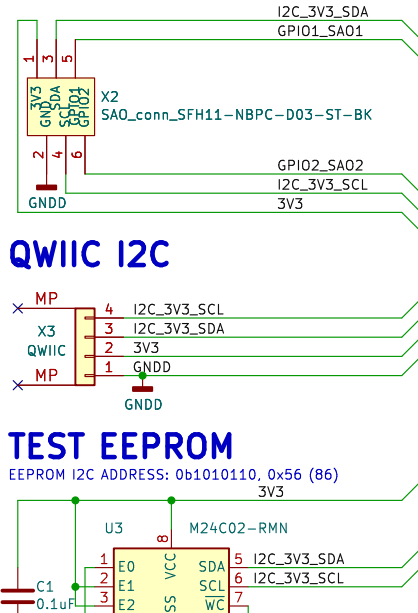
PICO 1-20



PICO 21-40



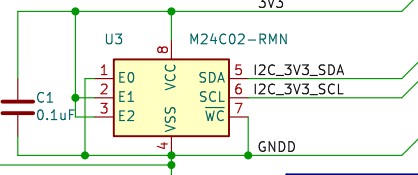
SAO



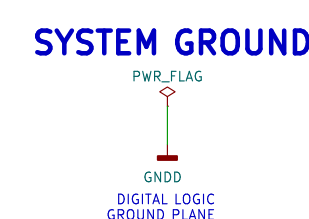
QWIIC I2C

TEST EEPROM

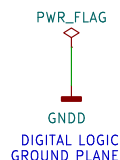
EEPROM I2C ADDRESS: 0b1010110, 0x56 (86)



POWER TEST



SYSTEM GROUND



OLED

I2C GPIO

I2C ADDRESS TABLE

All 7-bit addresses should be greater than 0x07 and less than 0x78 (120).

I2C ADDRESS TABLE

| | |
|--------------------------|-----------|
| OPTIONAL: | |
| AMBIENT PROX. SENSOR | 0x38 (56) |
| OLED | 0x3C (60) |
| AND!XOR IO Exp. MCP23017 | 0x20 (32) |
| AND!XOR EEPROM AT24C32r | 0x50 (80) |
| NFC CLICK PN7120 | 0x50-53 |

INCLUDED:
AMBIENT LIGHT SENSOR
HALL SENSOR

| | | |
|-----------------------|------|------|
| HALL SENSOR 1 | 0x30 | (48) |
| HALL SENSOR 2 | 0x31 | (49) |
| HALL SENSOR 3 | 0x32 | (50) |
| HALL SENSOR 4 | 0x33 | (51) |
| EEPROM (BOARD ID) | 0x57 | (87) |
| EEPROM (TEST FIXTURE) | 0x56 | (86) |

OLED MONOCHROME I2C

Connect via SAO.

Generic 0.96" (128x64) or 1.5" (128x128)
I2C 4-pins, often ADDRESS: 0x3C (60 decimal)
Alternate is 0x3D, not 0x7A or 0x78 (wrong 8-bit)!

All non-polarized capacitors are X7R or X5R ceramic unless otherwise noted.

Concept and design by Andy Geppert • www.MachineIdeas.com

Sheet: /
File: Core16_Test_Fixture.kicad_sch

Title: Core16 Logic Board Test Fixture

| | | |
|------------------------------|------------------|----------|
| Size: C | Date: 2023-11-16 | Rev: 0.2 |
| KiCad E.D.A. kicad (7.0.0-0) | | Id: 1/1 |