

1x
Raspberry Pi 4B



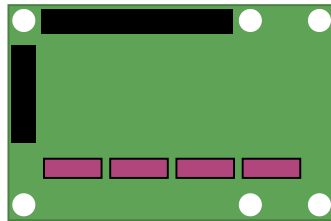
ETH To user / To Cluster controller

2x USB 3.0

2x USB 2.0

To probes

1x
Probe Shield

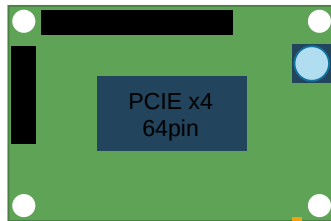


STDC 14 Connector

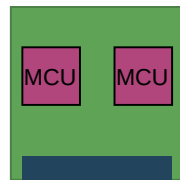
40 Pin 2.56mm GPIO Connector

20 Pin 2.56mm Probe Bus Connector

up to 8x
Target Stack
Shield

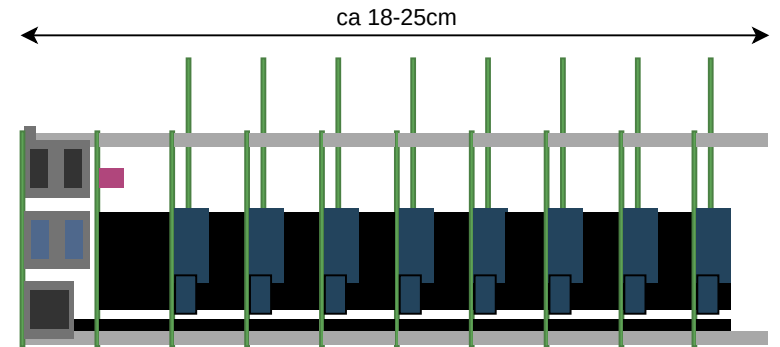


Target
Daughterboard

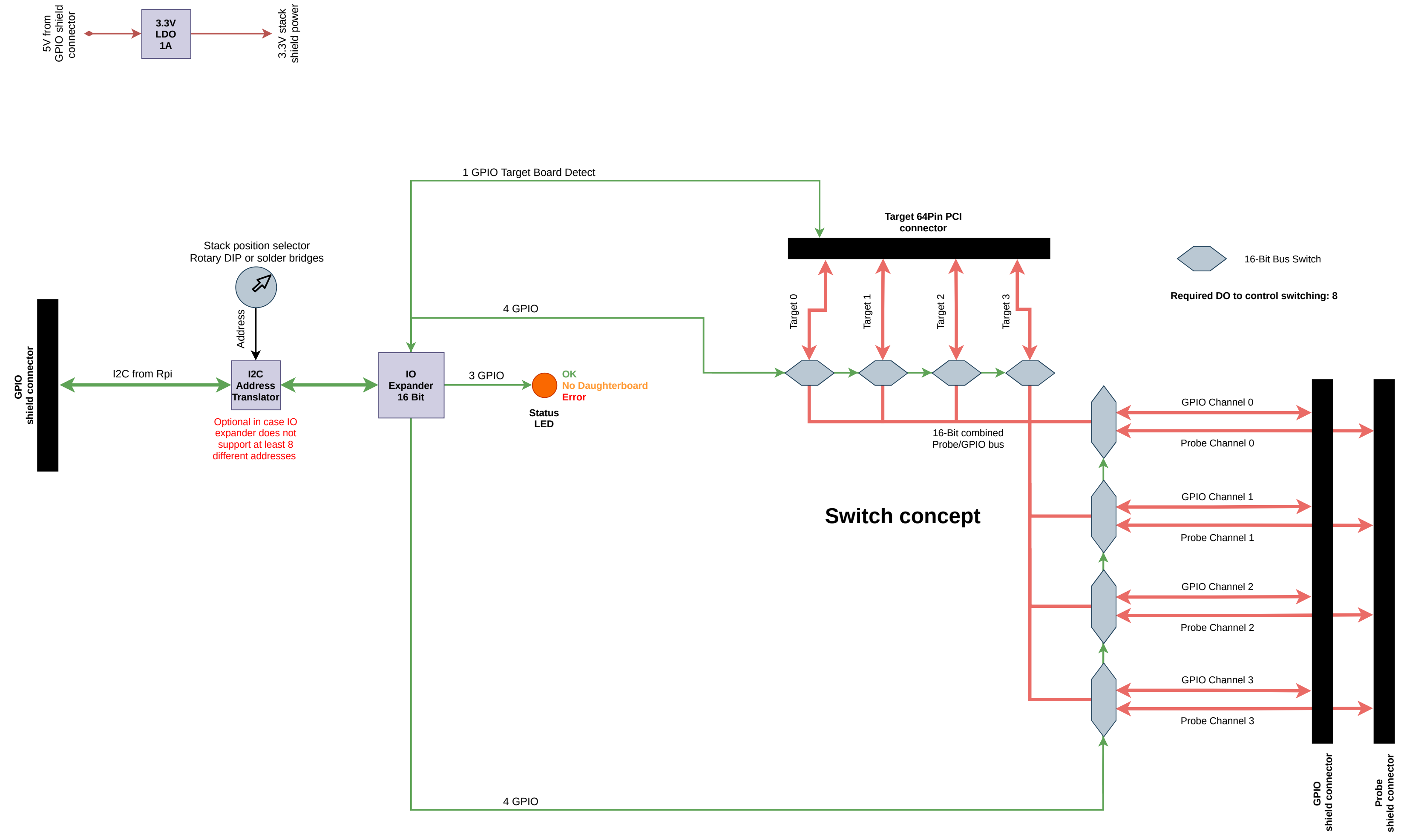


Max 4 MCU per
board

PCIE x4
64pin

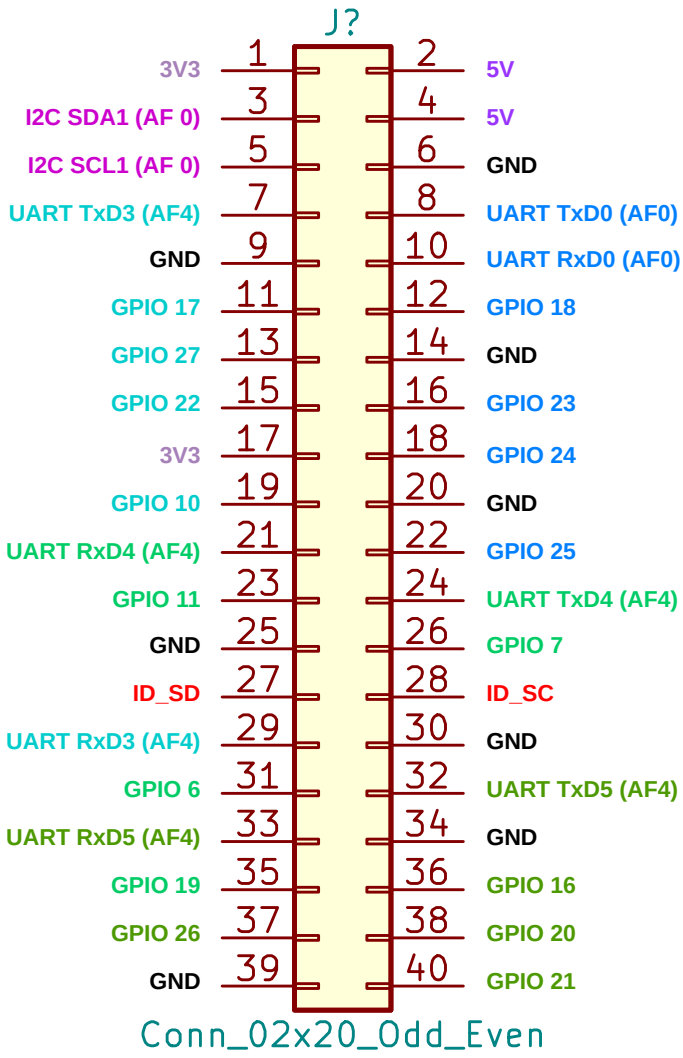


Target Stack
Shield



Raspberry 40pin
connector
config bcm2711
(rpi designations)

Per GPIO channel: 4x GPIO, 1x UART



I2C Bus: Controls all IO expanders on Target Stack Shields

3V3: Unused

5V: Power source for shields

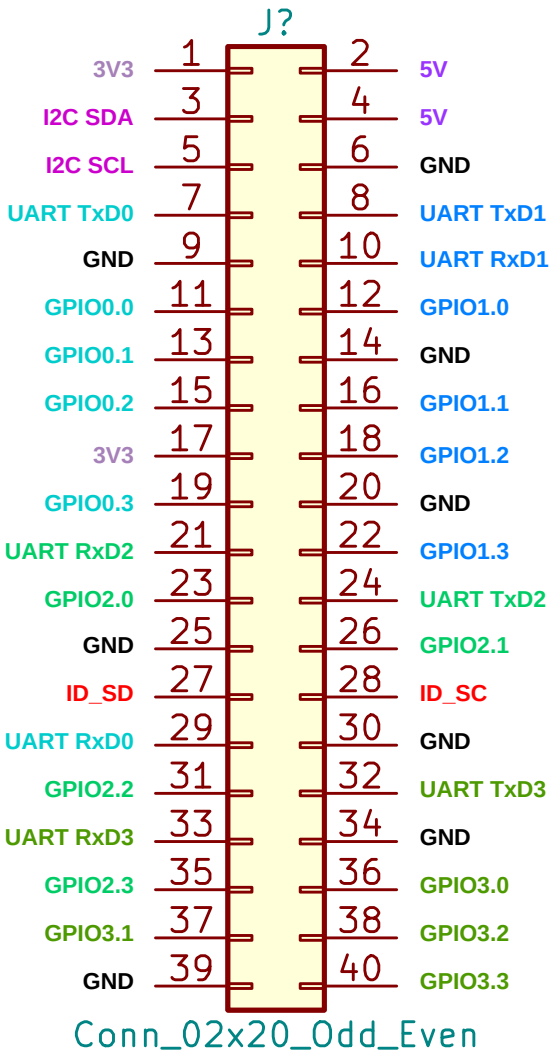
ID_XX: Unused

GPIO Channels:

- Channel 0
- Channel 1
- Channel 2
- Channel 3

GPIO shield
connector
(hive designations)

Per GPIO channel: 4x GPIO, 1x UART



I2C Bus: Controls all IO expanders on Target Stack Shields

3V3: Unused

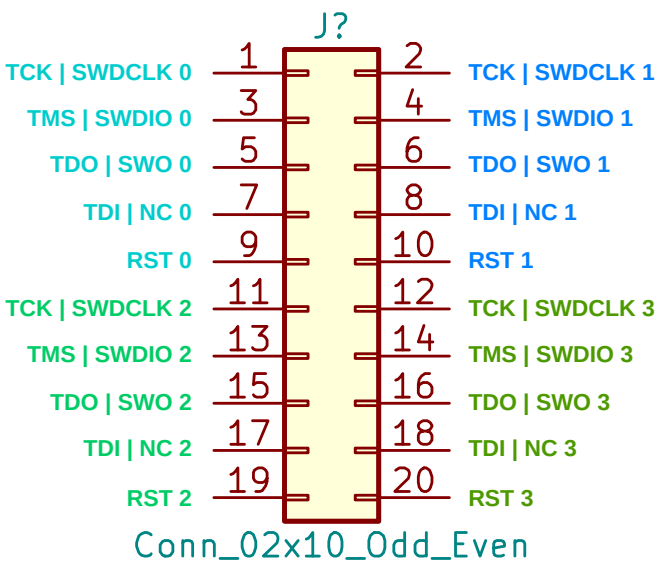
5V: Power source for shields

ID_XX: Unused

GPIO Channels:

- Channel 0
- Channel 1
- Channel 2
- Channel 3

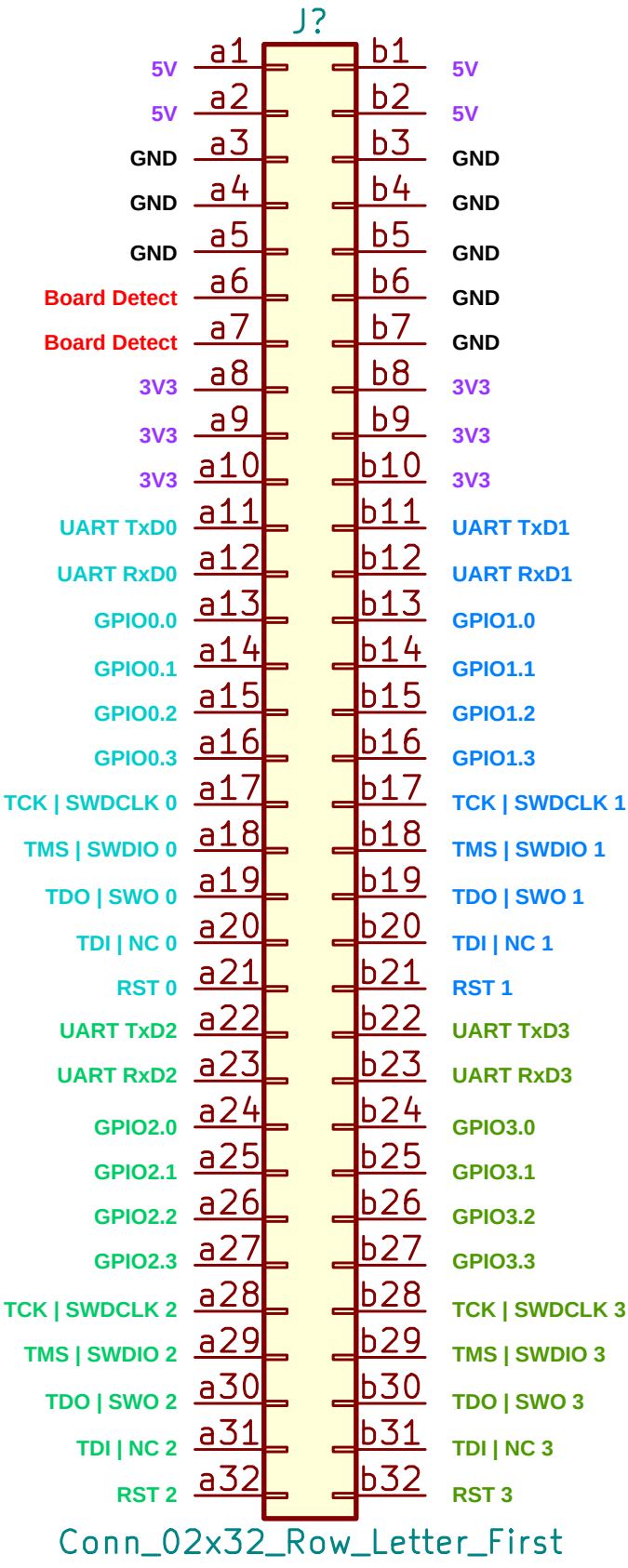
Probe shield
connector
(hive designations)



Probe Channels:

- Channel 0
- Channel 1
- Channel 2
- Channel 3

Target 64Pin PCI
connector
(hive designations)



3V3: 3.3V supplied from shield LDO. Not from rpi 3.3V!

5V: 5V supplied by power supply usb c rpi input

Board Detect: Needs to be connected together on daughterboard, allows shield to detect if daughterboard is present

Channels:

- Channel 0
- Channel 1
- Channel 2
- Channel 3