power

File: power.kicad_sch

Connectors

File: connector.kicad_sch

Ethernet

File: ethernet.kicad_sch

wiredmbus

File: mbus.kicad_sch

SDCard

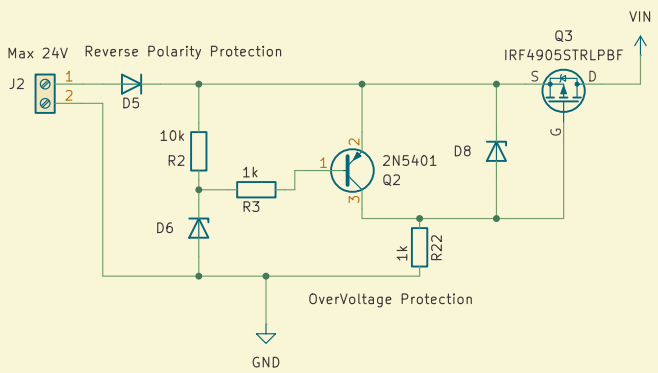
File: sdcard.kicad_sch

Approved By: Jones Kisaka
Deigned By: Rodney Osodo
Abstract Machines
Sheet: /
File: s0-base-board.kicad_sch

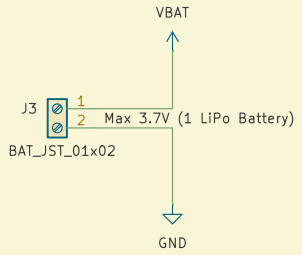
Title: S0 Base Board

Size: A4	Date: 2025-02-26	**Rev: v0.1.0**
KiCad E.D.A. 8.0.8		Id: 1/6

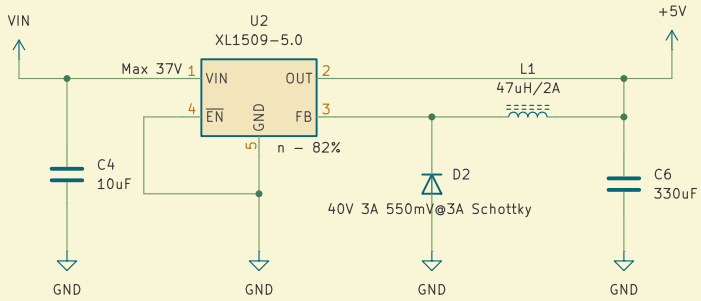
T-BLOCK



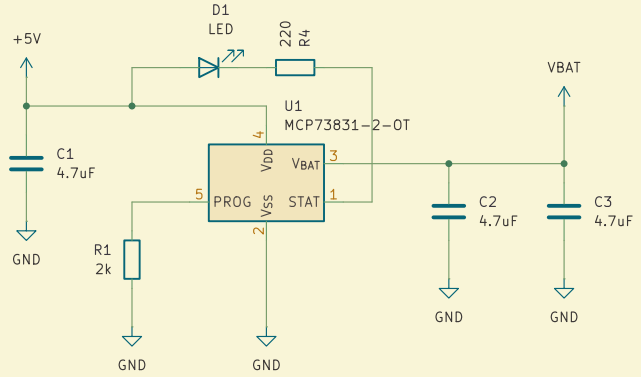
BAT



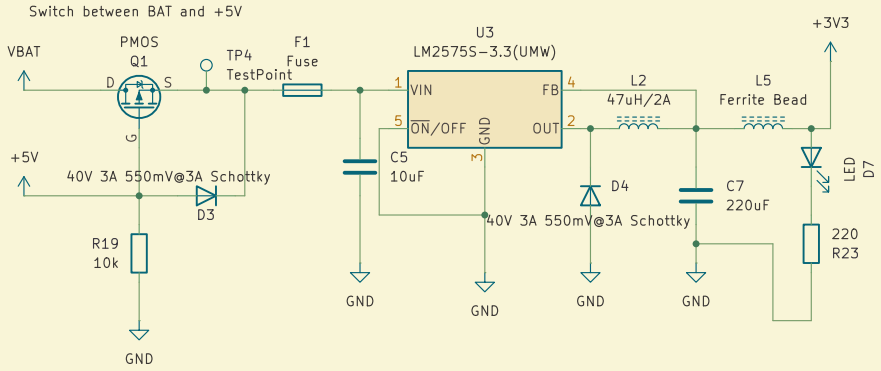
VIN – 5V CONV



BATTERY CHARGER



5V – 3.3V CONV



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Deigned By: Rodney Osodo
Abstract Machines

Sheet: /power/
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Title: S0 Base Board

Size: A4	Date: 2025-02-26	**Rev: v0.1.0**
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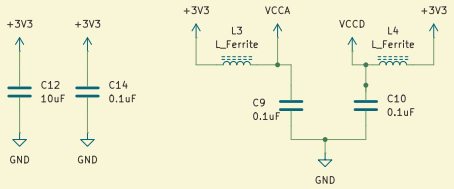
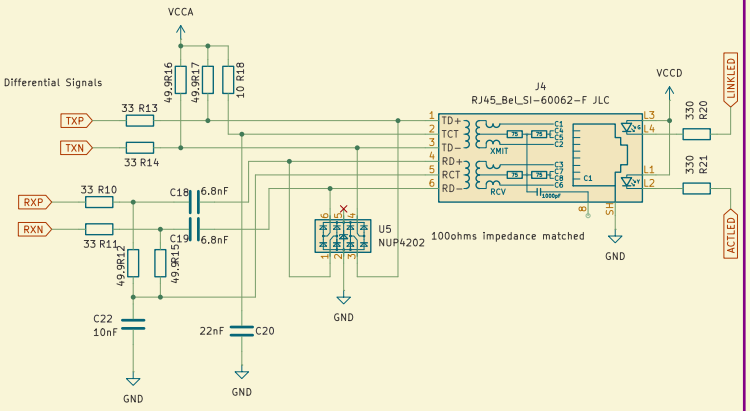
DECOUPLING CAPS

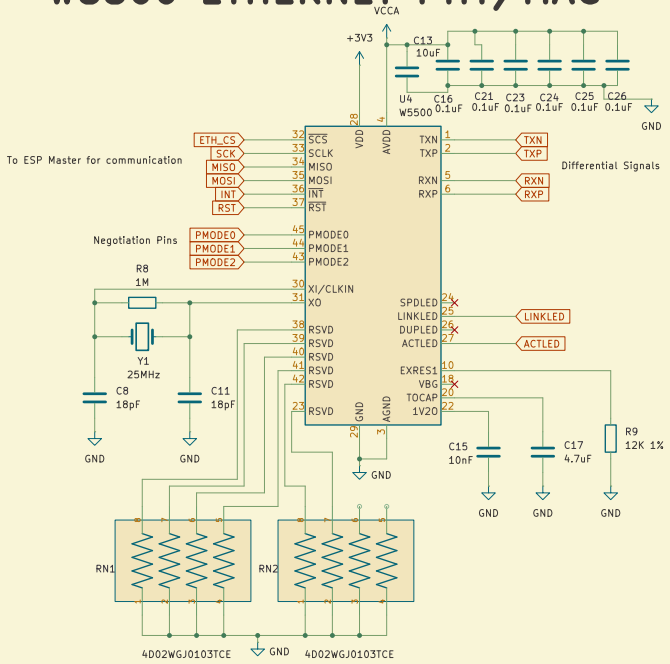
Decoupling Caps help ensure stable operation
Filtering noise
Maintain a steady power supply.



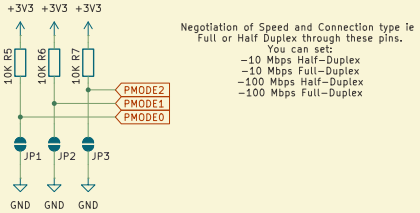
JACK & MAGNETICS



W5500 ETHERNET PHY/MAC



AUTO-NEGOTIATING MODES



Negotiation of Speed and Connection type ie
Full or Half Duplex through these pins.
You can set:
-10 Mbps Half-Duplex
-10 Mbps Full-Duplex
-100 Mbps Half-Duplex
-100 Mbps Full-Duplex

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Abstract Machines
Sheet: /Ethernet/
File: ethernet.kicad_sch

Title: S0 Base Board

Size: A3	Date: 2025-02-26	**Rev: v0.1.0**
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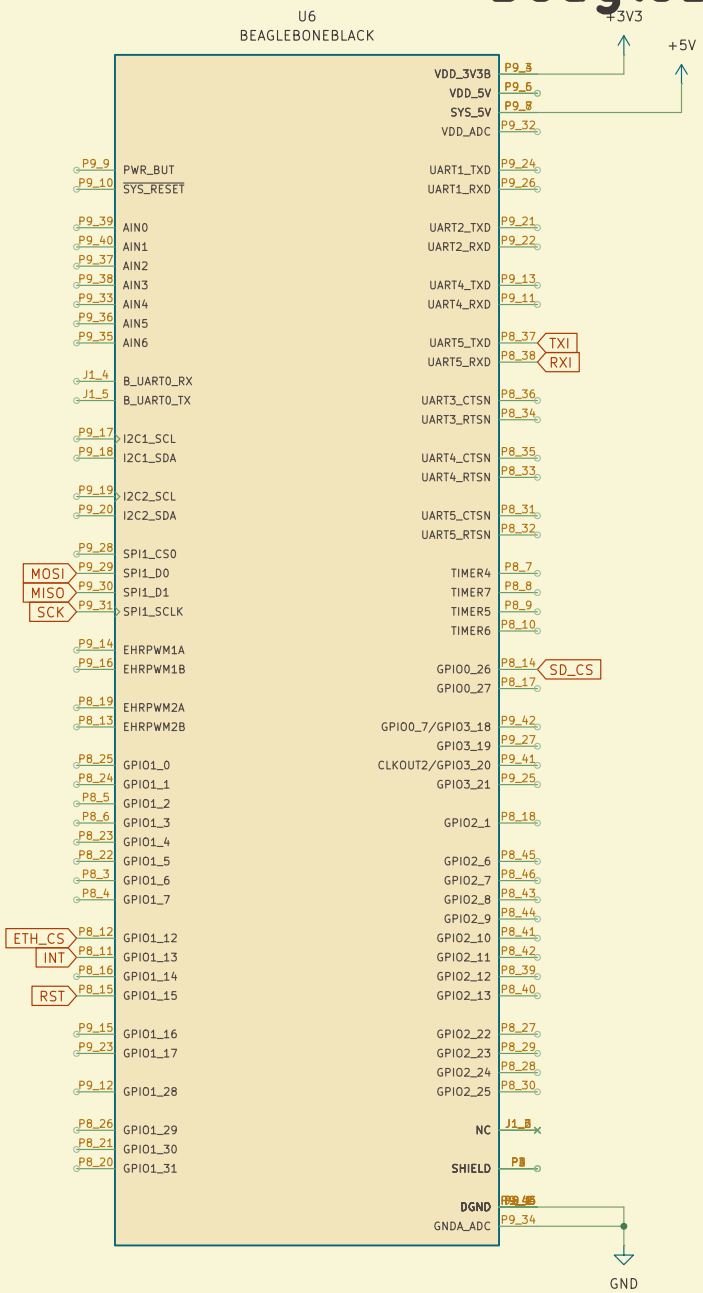
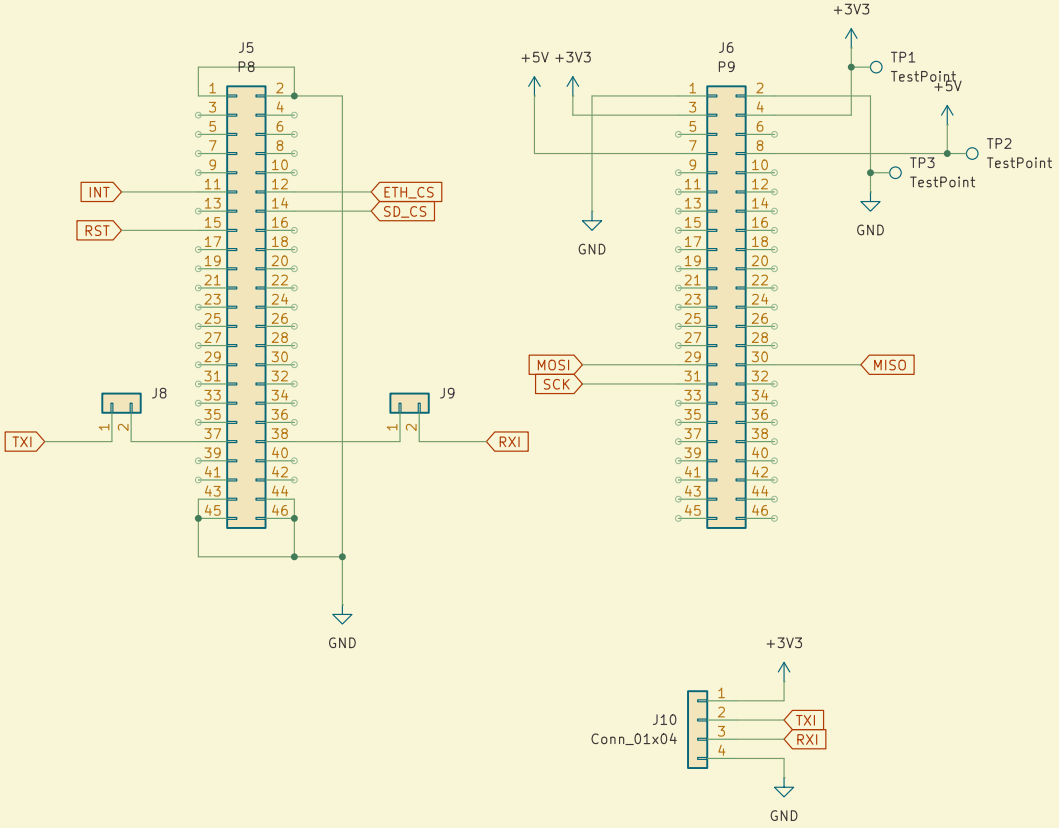
BeagleBone Cape Board



Female Pin Headers connected to the BeagleBone Cape



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Deigned By: Rodney Osodo	
Abstract Machines	
Sheet: /Connectors/	
File: connector.kicad_sch	
Title: S0 Base Board	
Size: A4	Date: 2025-02-26
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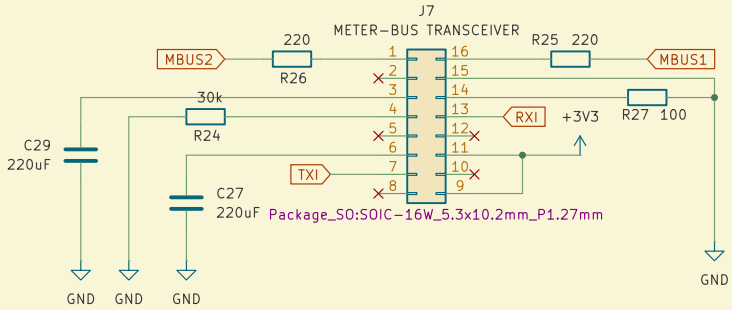
	Rev: v0.1.0



1 – BUSL2 – Meter-Bus
2 – VB – Differential bus voltage after rectifier
3 – STC – Support capacitor
4 – RIDD – Current adjustment input
5 – PF – Power fail output
6 – SC – Sampling capacitor
7 – TXI – Data output inverted
8 – TX – Data output
9 – BAT – Logic level adjust
10 – VS – Switch for bus or battery supply output
11 – VDD – Voltage regulator output
12 – RX – Data input
13 – RXI – Data input inverted
14 – RIS – Adjust input for modulation current
15 – GND – Ground
16 – BUSL1 – Meter-Bus

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Deigned By: Rodney Osodo
Abstract Machines

Sheet: /wiredmbus/
File: mbus.kicad_sch

Title: S0 Base Board

Size: A4	Date: 2025-02-26	**Rev: v0.1.0**
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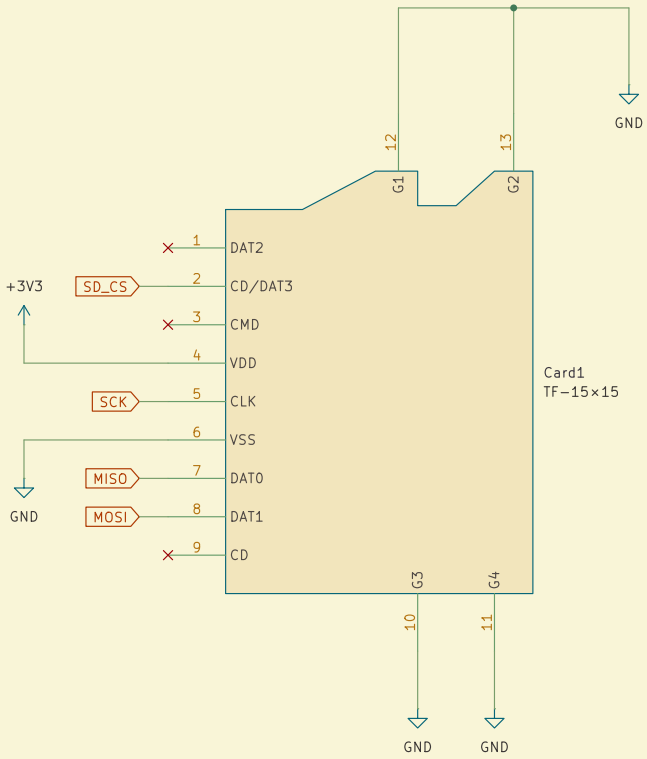

Approved By: Jones Kisaka
Deigned By: Rodney Osodo
Abstract Machines

Sheet: /SDCard/
File: sdcard.kicad_sch

Title: S0 Base Board

Size: A4	Date: 2025-02-26	**Rev: v0.1.0**
KiCad E.D.A. 8.0.8		Id: 6/6