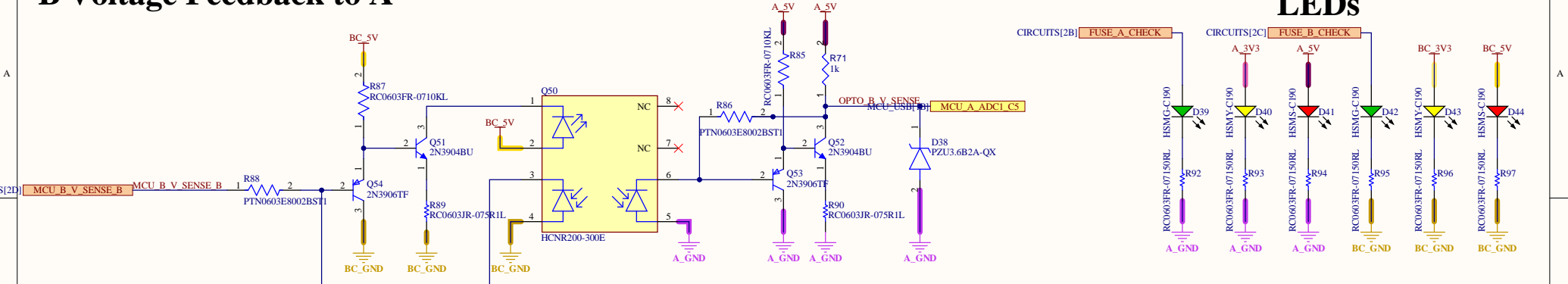
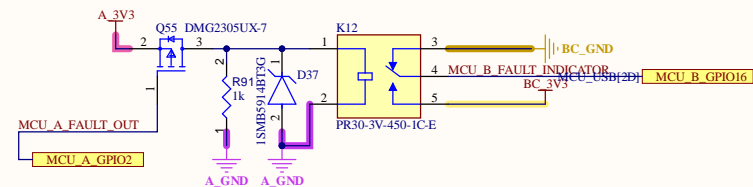


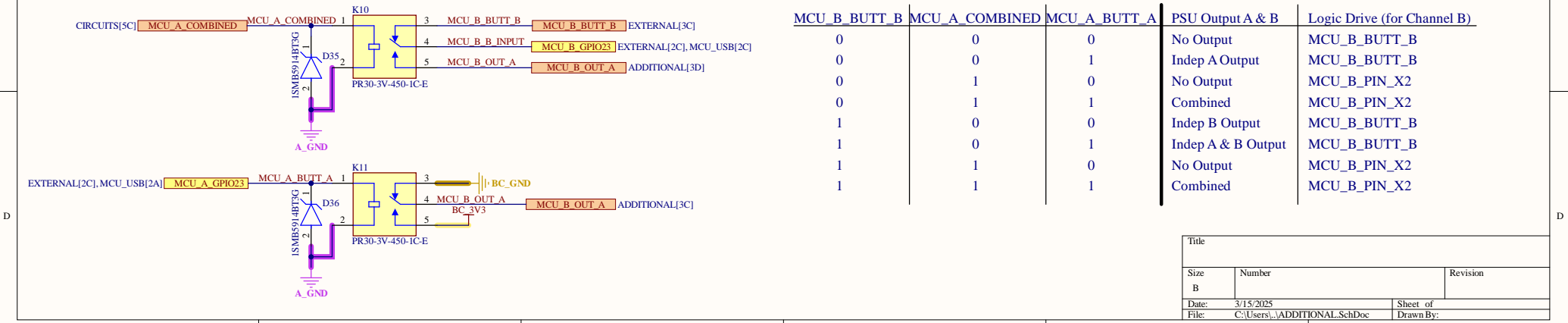
B Voltage Feedback to A



A Fault Indicator to B

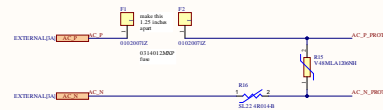


Channel B ON/OFF Logic

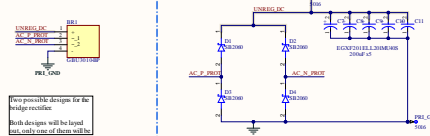


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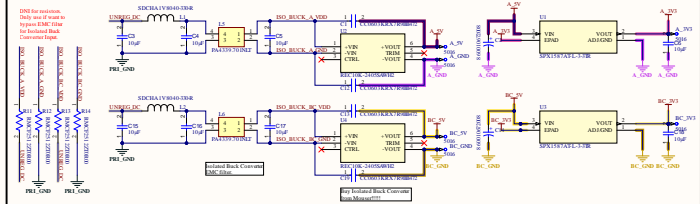
## INPUT PROTECTION



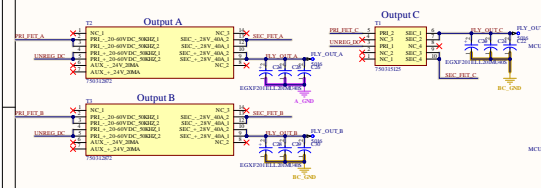
## BRIDGE RECTIFIER



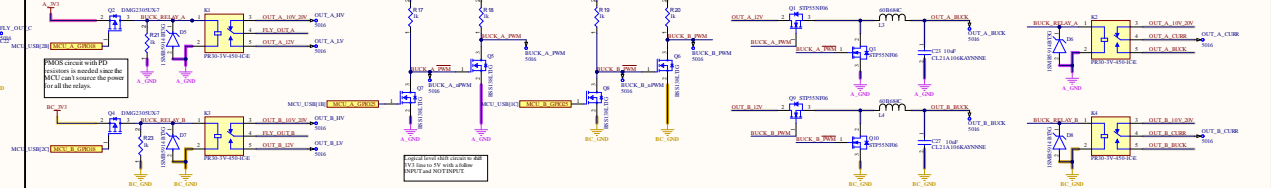
## ISOLATED BUCK 5V & LDO 3.3V



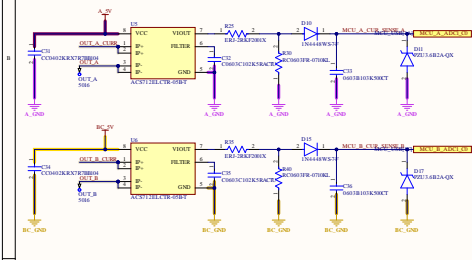
## FLYBACK TRANSFORMER



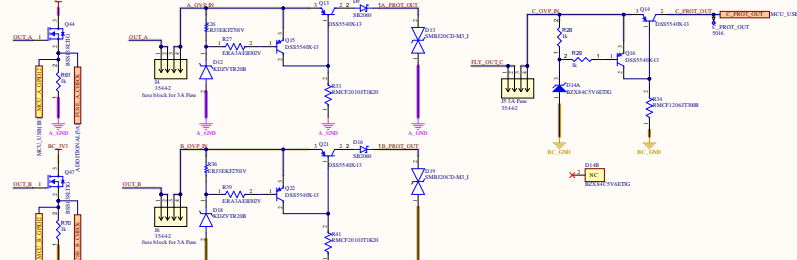
## OUTPUTS 1V-20V



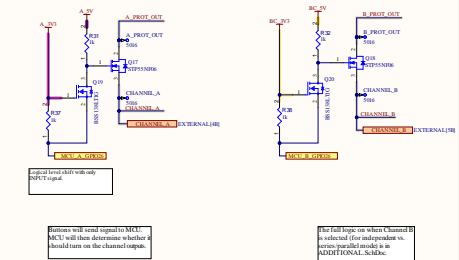
## CURRENT SENSE



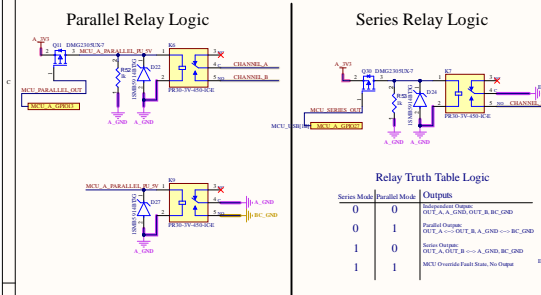
## OVP



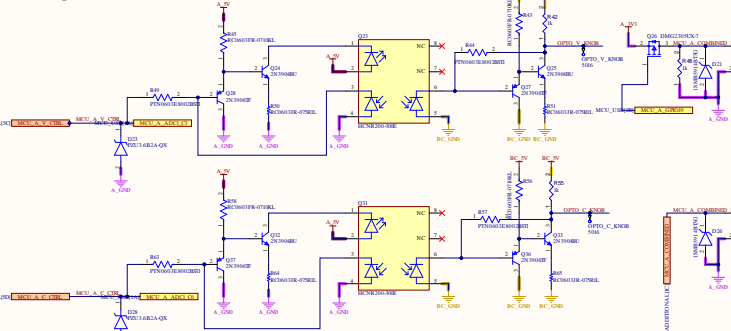
## Output A & B Enable



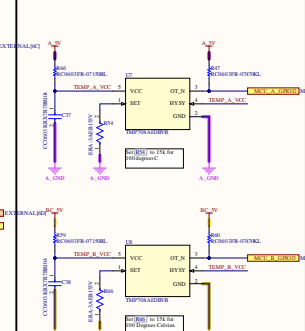
## PARALLEL/SERIES MODE CIRCUITS



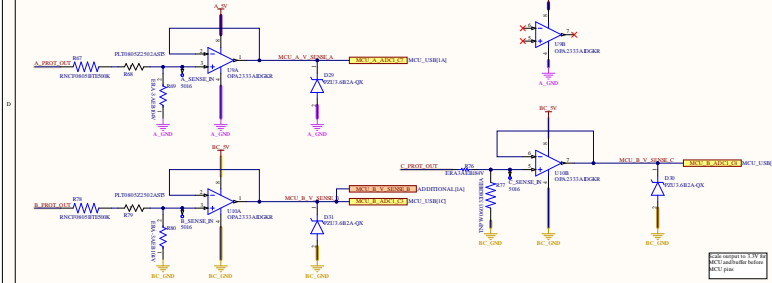
## Voltage/Current Control Knobs



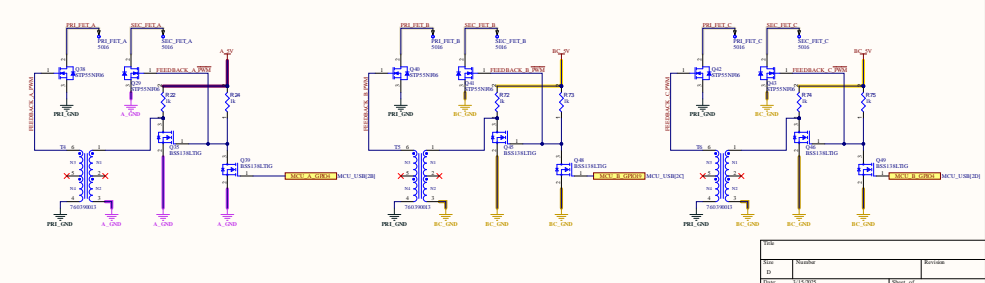
## Temperature Sense



## FEEDBACK CIRCUIT



## DRIVE CIRCUIT



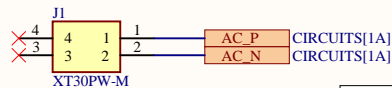
# INPUT



Sola E300 0.300KVA 240X480-120



R5ABLKBLKFF0

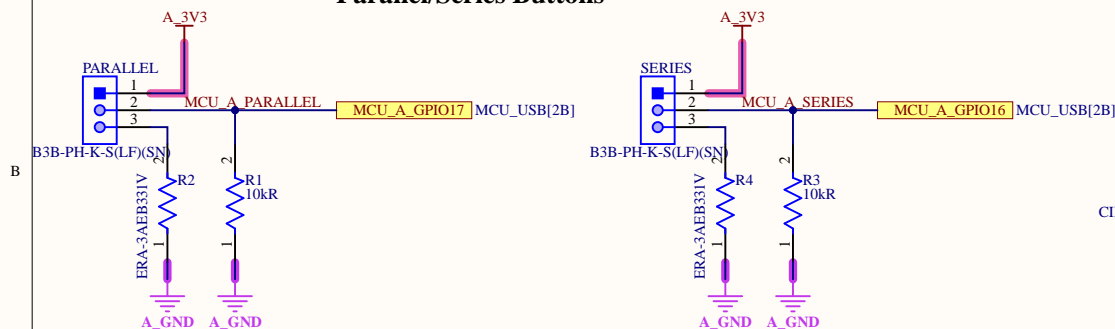


EMI filter, transformer, and rocker switch connected before the XT30 connector.

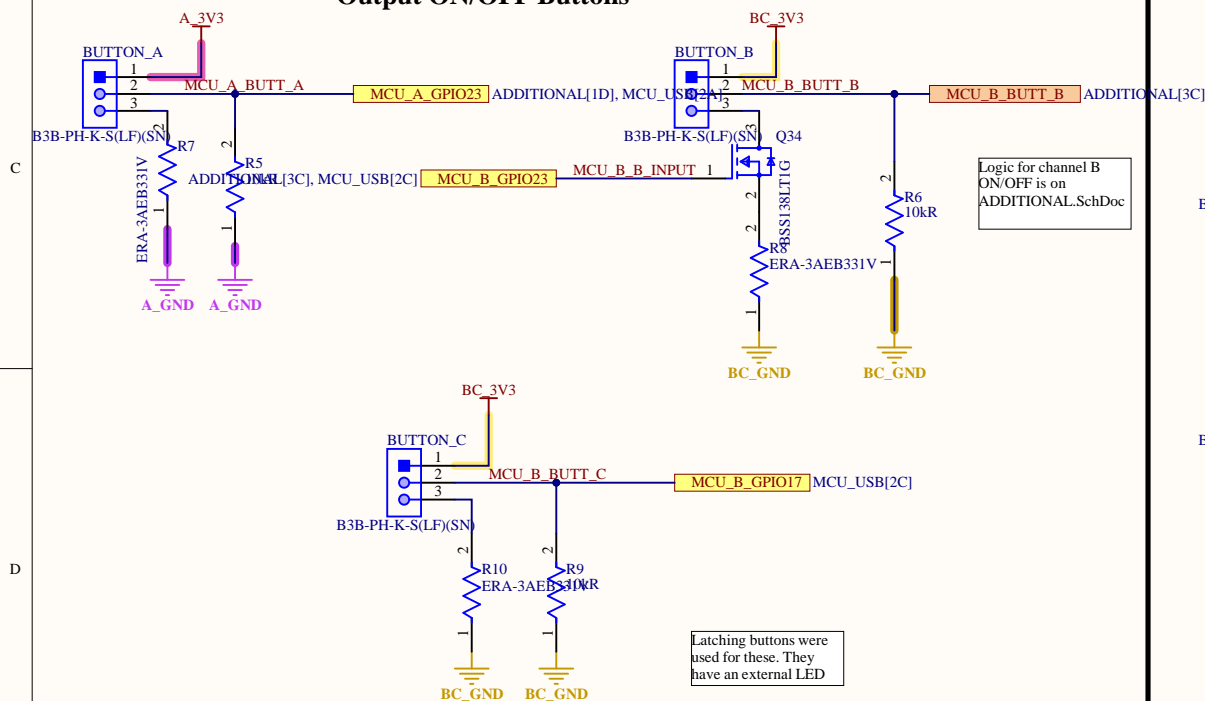
# BUTTONS

## Parallel/Series Buttons

Button Link:  
<https://www.mouser.com/ProductDetail/485-1476>



## Output ON/OFF Buttons

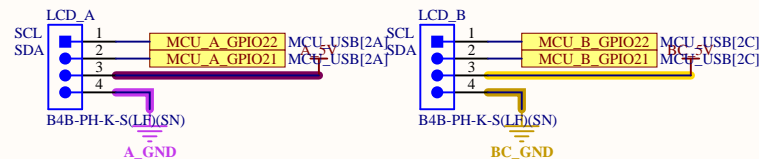


Logic for channel B ON/OFF is on ADDITIONAL.SchDoc

Latching buttons were used for these. They have an external LED

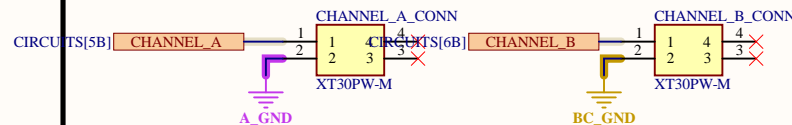
# OUTPUT CONNECTORS

## LCD Connectors

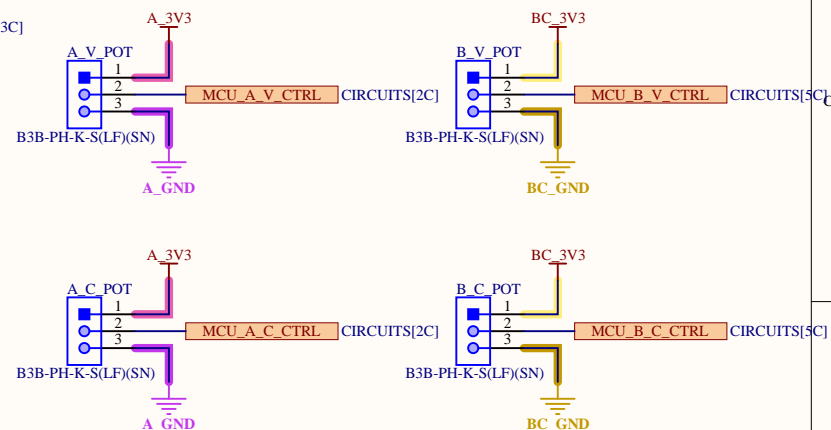


LCD Display:  
<http://amazon.com/gp/product/B0BWTFN9WF?smid=A1PKC2PUMNR8VD&th=1>

## Output Connectors



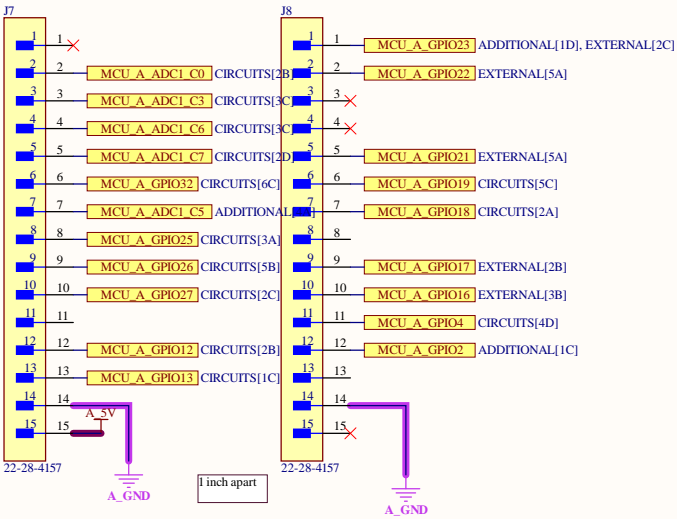
## Pot Connectors



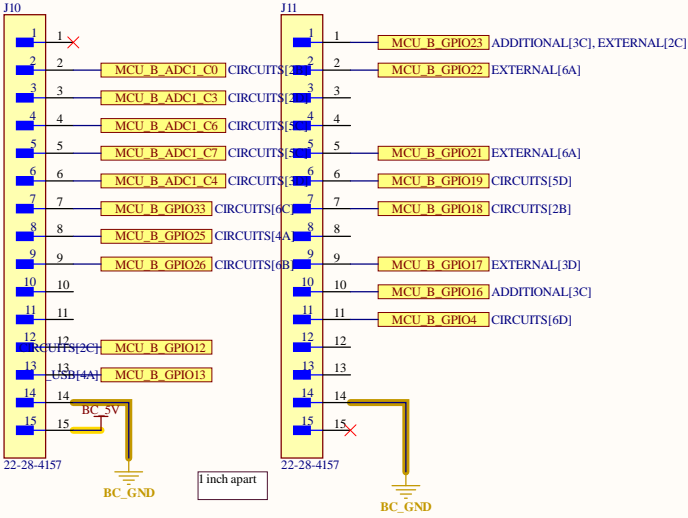
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ESP32-WROOM

MCU A

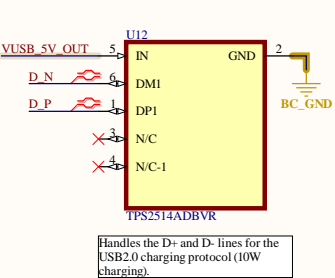
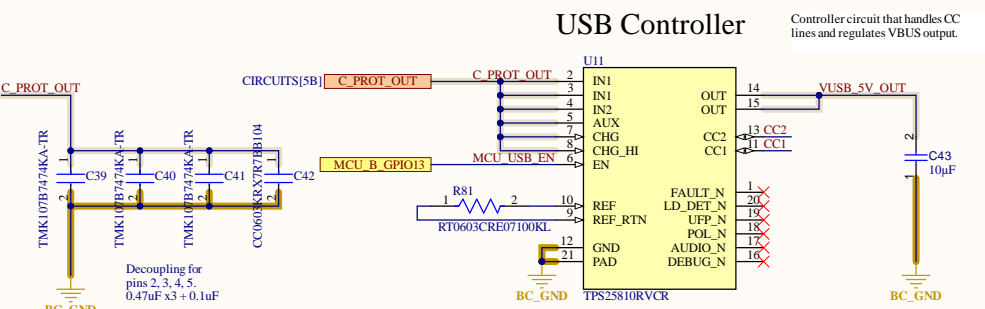


MCU B

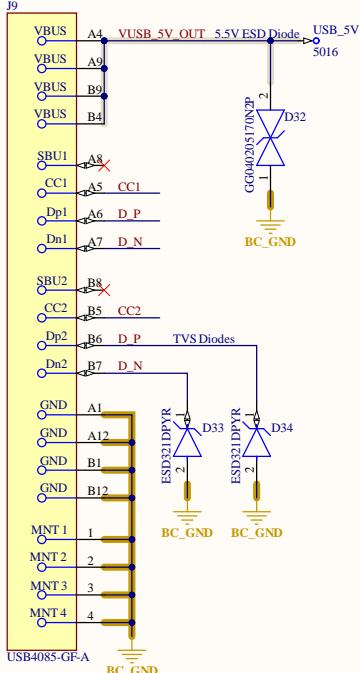


USB-C Output

Planning to do USB2.0 slow charging (5V, 3A max, 10W expected) using USB-C port.



USB-C Port



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# Board Stack Report