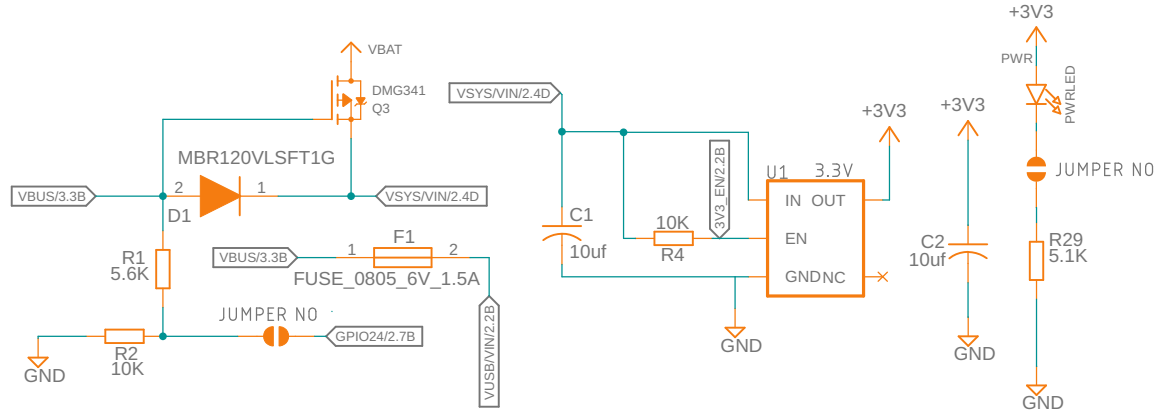
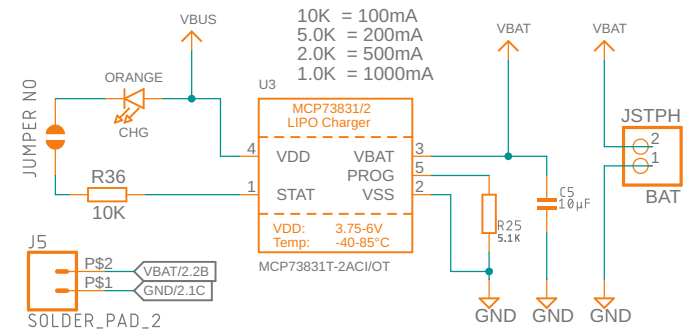


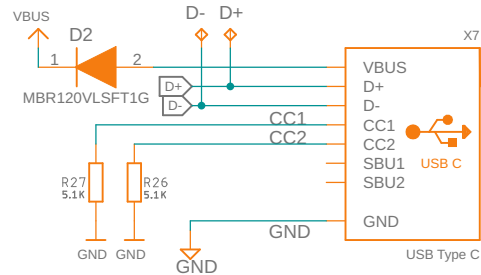
POWER SUPPLY AP2112K-3.3V



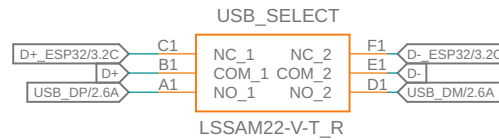
BATTERY CHARGING



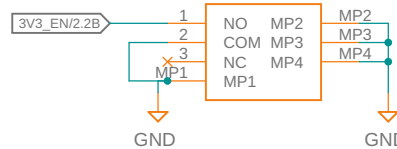
USB TYPE C CONNECTOR



USB SELECTOR



POWER SWITCH



MOUNTING HOLES

- H1 MOUNT-PAD-ROUND3.0
- H2 MOUNT-PAD-ROUND3.0
- H3 MOUNT-PAD-ROUND3.0
- H4 MOUNT-PAD-ROUND3.0

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PROPRIETARY

Description:
Development board based on RP2040 microcontroller
Dual cortex M0+ 133 Mhz with WIFI communication
via espressif ESP32 microcontroller

Title: UNIT DualMCU RP2040 + ESP32

SKU: UE0002

REV: 2.1.2

Last date time: 01/11/2022 11:45 a.m.

SHEET: 1 of 3

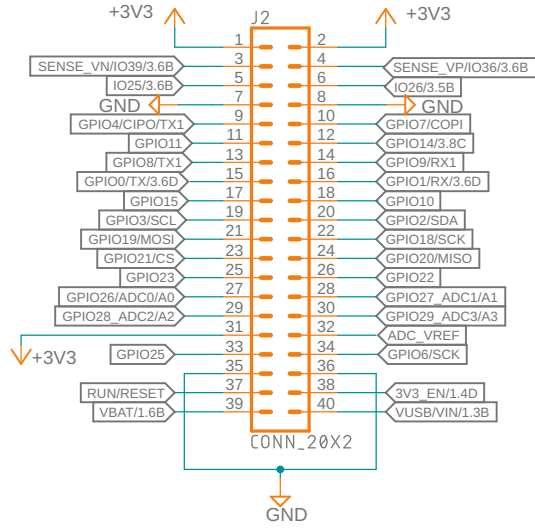
File: DualMCU_V30_Schematic

Sheet description: POWER SUPPLY & USB SELECTOR

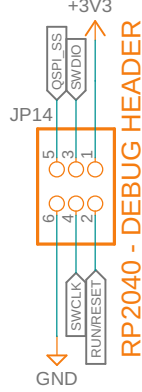
Author: ADRIAN RABADAN ORTIZ

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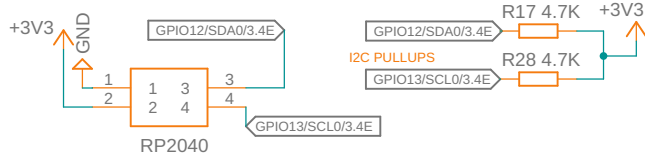
RP2040 - PIN HEADER



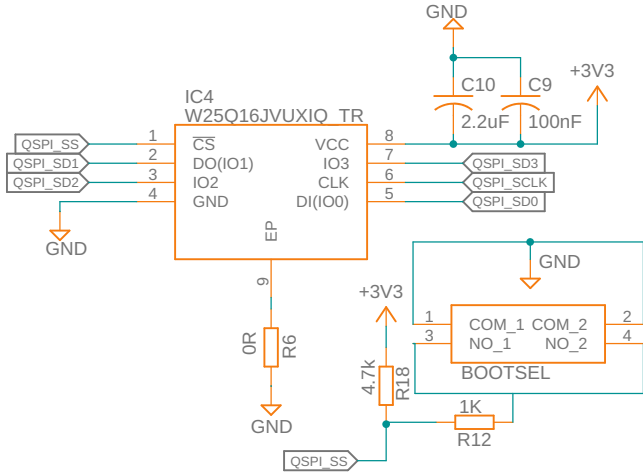
RP2040 - DEBUG HEADER



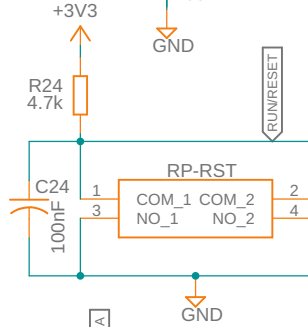
I2C - JST CONNECTORS (1 mm pitch)



RP2040 - SERIAL FLASH MEMORY



RP2040 - RESET BUTTON



DMG1012UW-7
ADC GPIO pins have diode to VDDIO (other GPIO do not) FET stops leakage through ADC3 pin diode into 3V3 net when 3V3 supply is off (VSYS present but 3V3_EN low)

Title: UNIT DualMCU RP2040 + ESP32

SKU: UE0002

REV: 2.1.2

Last date time: 01/11/2022 11:45 a.m.

SHEET: 2 of 3

File: DualMCU_V30_Schematic

Sheet description: RP2040 CONNECTIONS

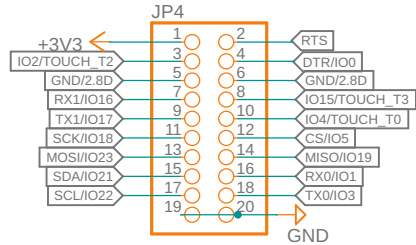
Author: ADRIAN RABADAN ORTIZ



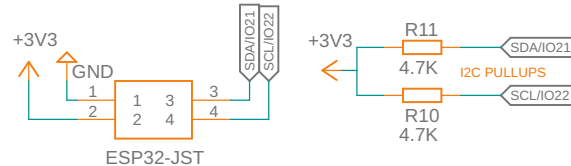
PROPRIETARY

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ESP32 - PIN HEADER



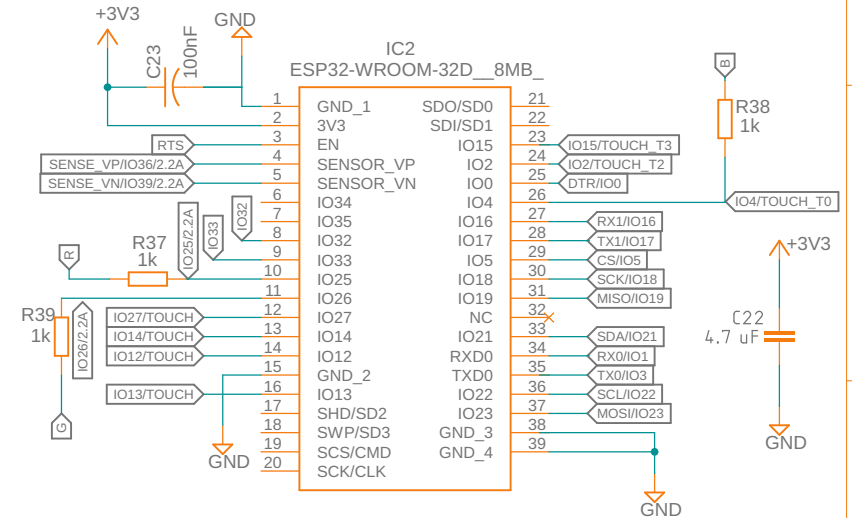
I2C - JST CONNECTOR (1 mm pitch)



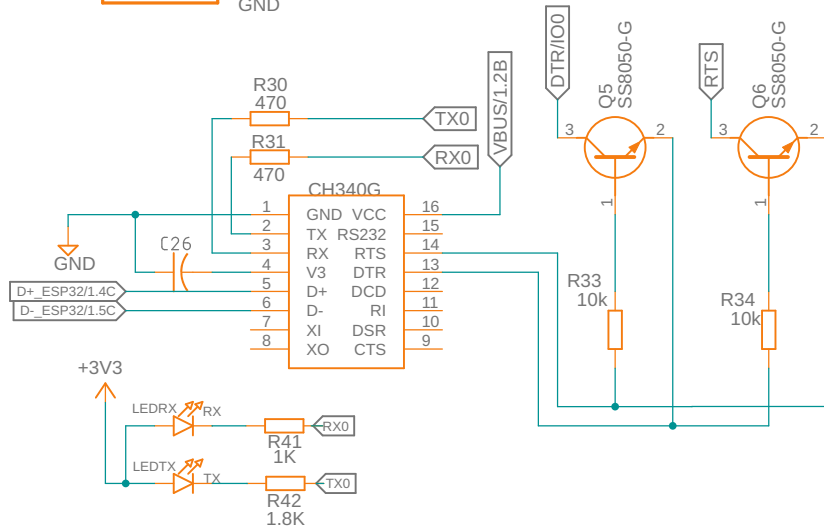
ESP32 - RGB 2020 LED



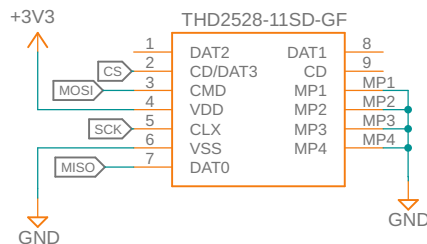
ESP32 WIFI&BLUETOOTH



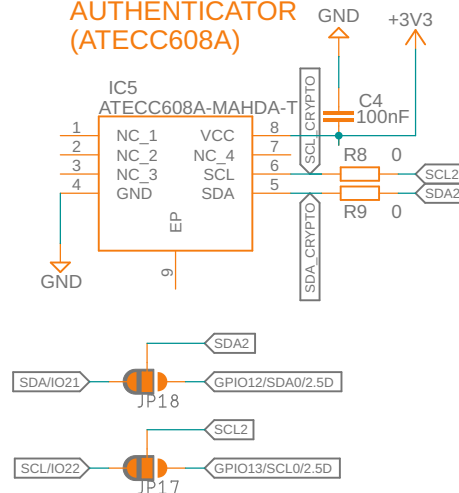
USB -> CH340 CONNECTION



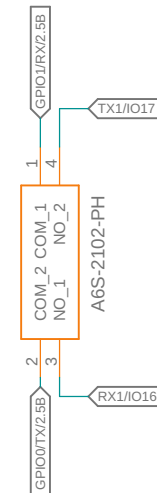
microSD CONNECTOR



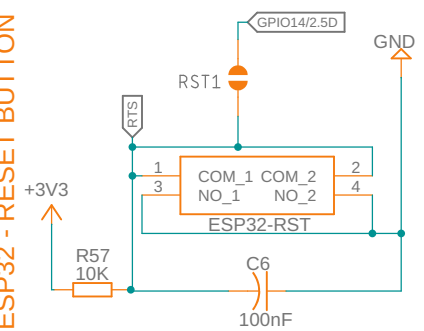
AUTHENTICATOR (ATECC608A)



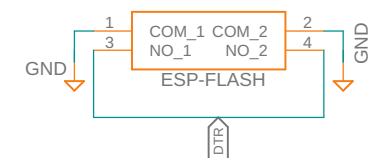
UART DIP switch - ESP32 to RP2040



ESP32 - RESET BUTTON



ESP32 - BOOT BUTTON



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PROPRIETARY

Title: UNIT DualMCU RP2040 + ESP32

SKU: UE0002

REV: 2.1.2

Last date time: 01/11/2022 11:45 a.m.

SHEET: 3 of 3

File: DualMCU_V30_Schematic

Sheet description: ESP32 CONNECTIONS

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Author: ADRIAN RABADAN ORTIZ