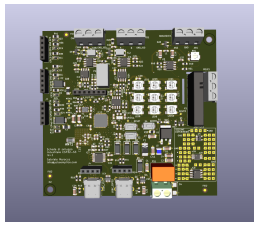
Questa scheda si basa sull'integrato ESP32-S3
Ha le seguenti interfacce
- USB di debug (collegata a una porta UART dell'integrato
- USB nativa
- CAN BUS isolato
- RS485 isolata
E' presente una matrice di 9 LED (3X3) RGB WS12B
E' contenuta una sezione libera destinata ad esperimenti

This board is based on the microcontroller ESP32-S3
There are the following physical communication interfaces
- debug USB (it is connected to a UART port of ESP32-S3
- native USB
- isolated CAN BUS with termination resistor
- isolated RS485 with termination resistor
There is a 9 RGB LED matrix (WS2812B)
There is a free section of testpoints for experiments



gerarchico Sheet

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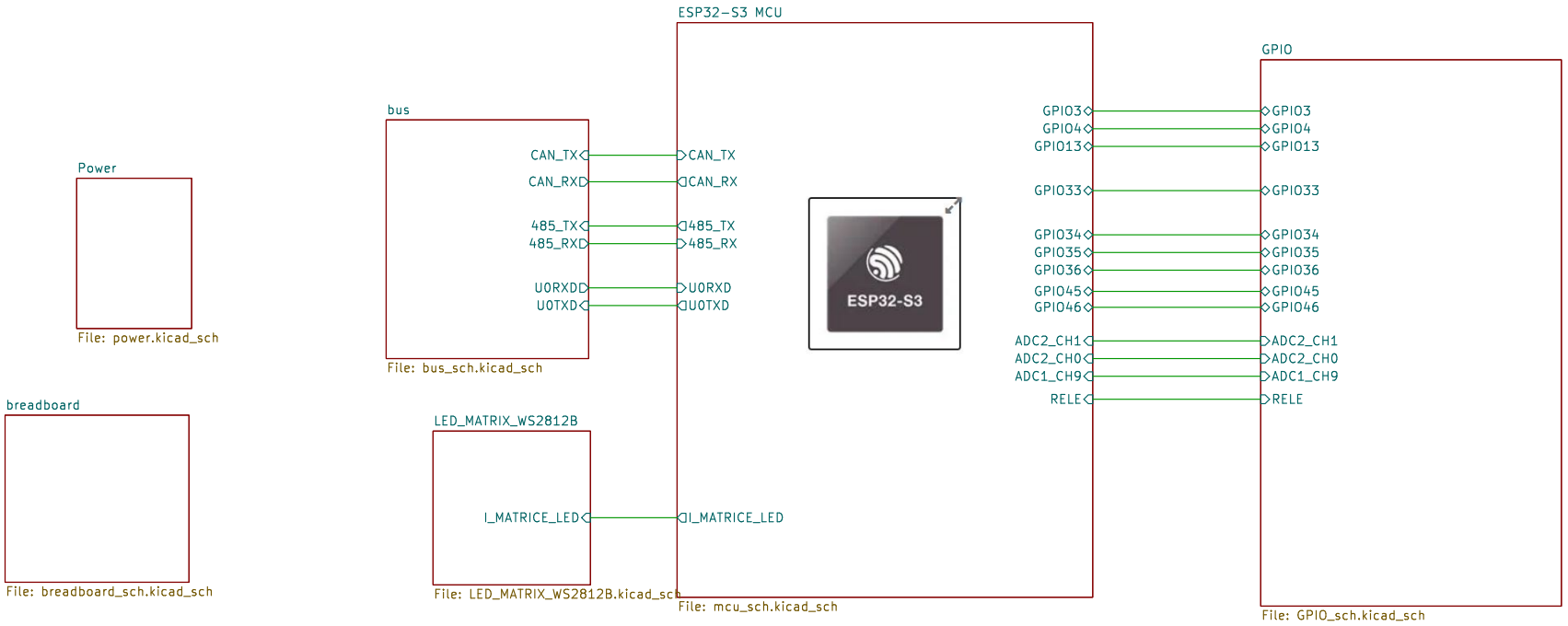
Title: ESP32-S3 industrial EVB

Size: A4	Date: 2024-08-03	**Rev: 2.0**
KiCad E.D.A. 9.0.3		Id: 1/8



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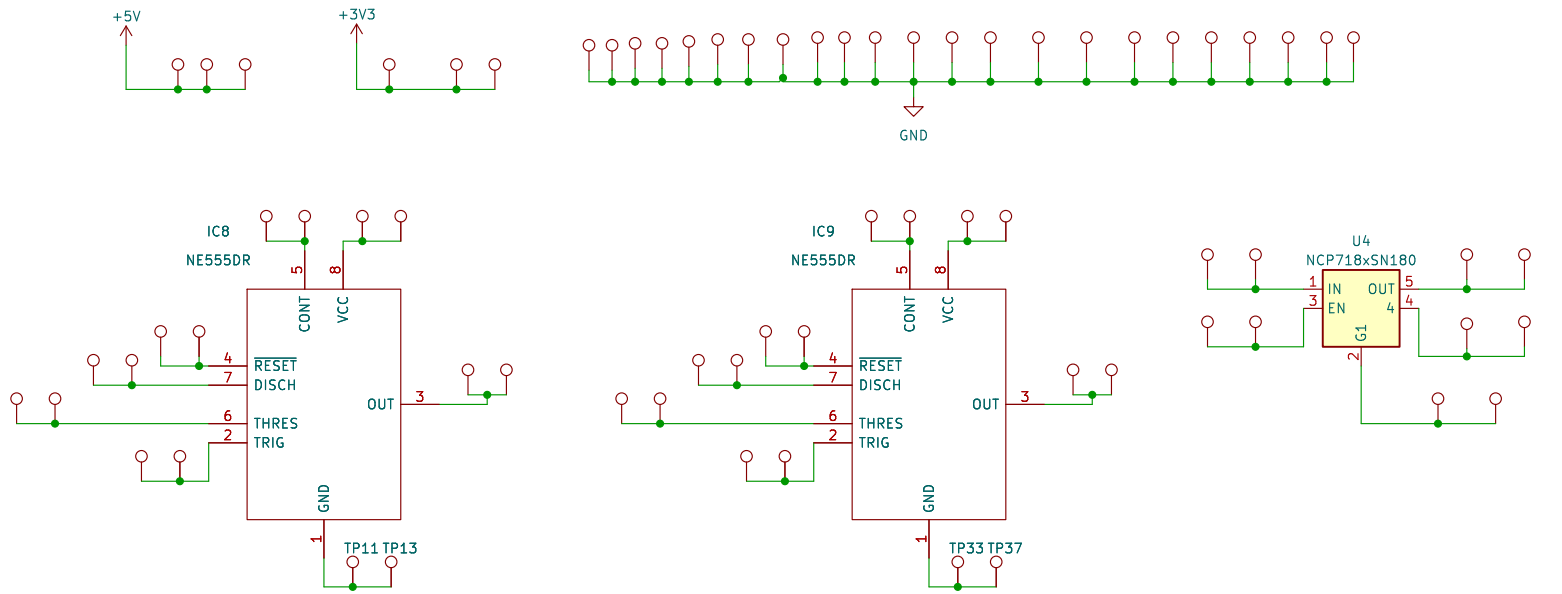
Title: ESP32-S3 industrial EVB

Size: A4	Date:	**Rev: 2.0**
KiCad E.D.A. 9.0.3		Id: 2/8

Testpoint e piazzole libere per esperimenti

Free testpoints and pads for experiments



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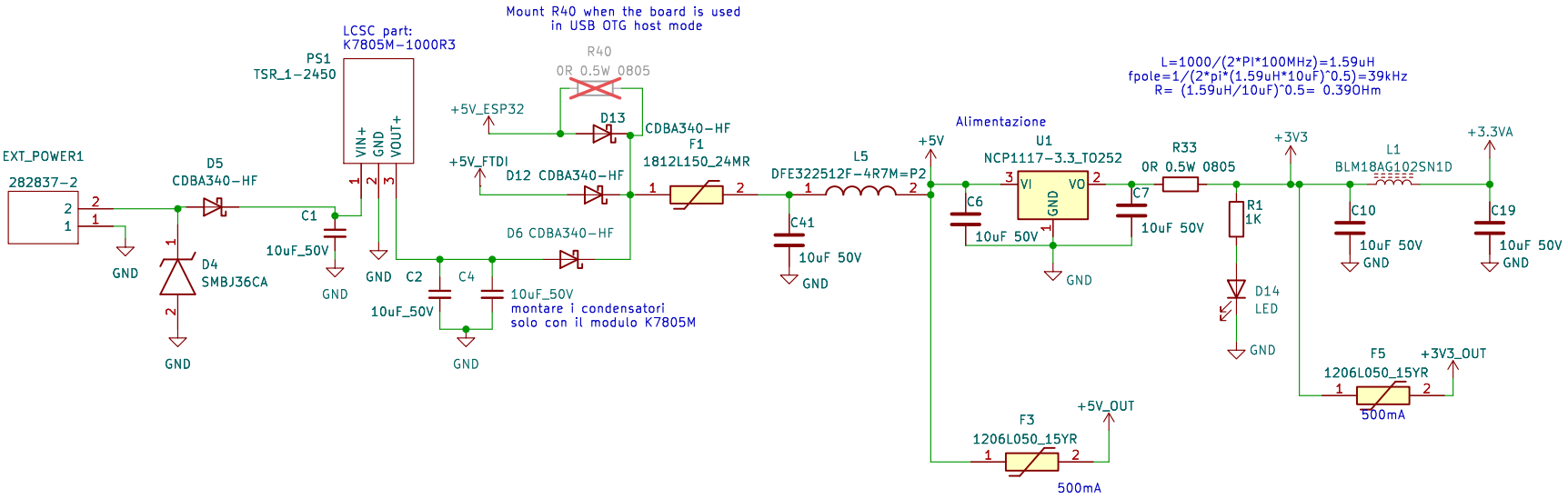
Title: ESP32-S3 industrial EVB

Size: A4	Date: 2024-08-03	**Rev: 2.0**
KiCad E.D.A. 9.0.3		Id: 7/8



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Sheet: /gerarchico Sheet/Power/
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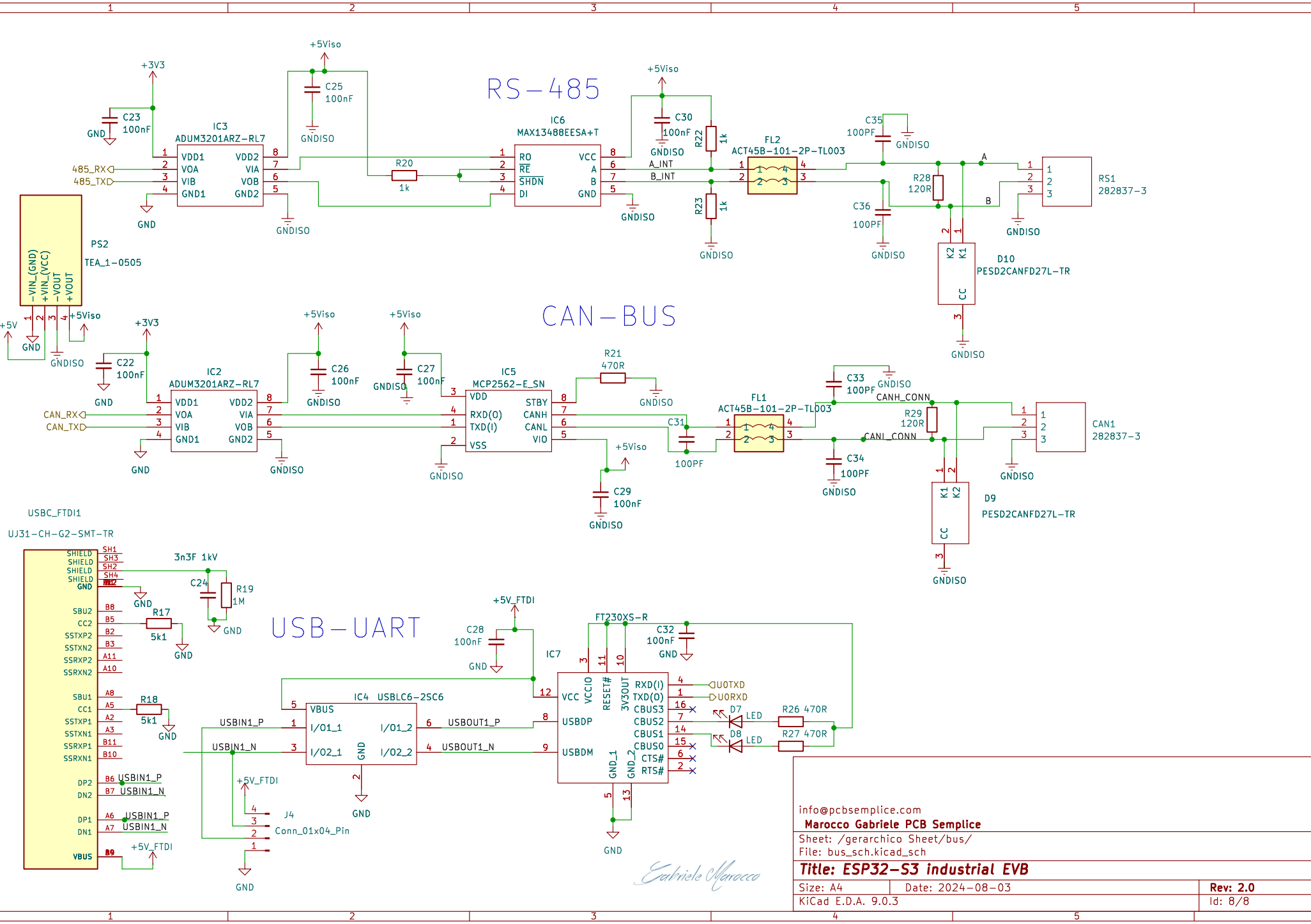
Title: ESP32-S3 industrial EVB

Size: A4	Date: 2024-08-03	**Rev: 2.0**
KiCad E.D.A. 9.0.3		Id: 6/8



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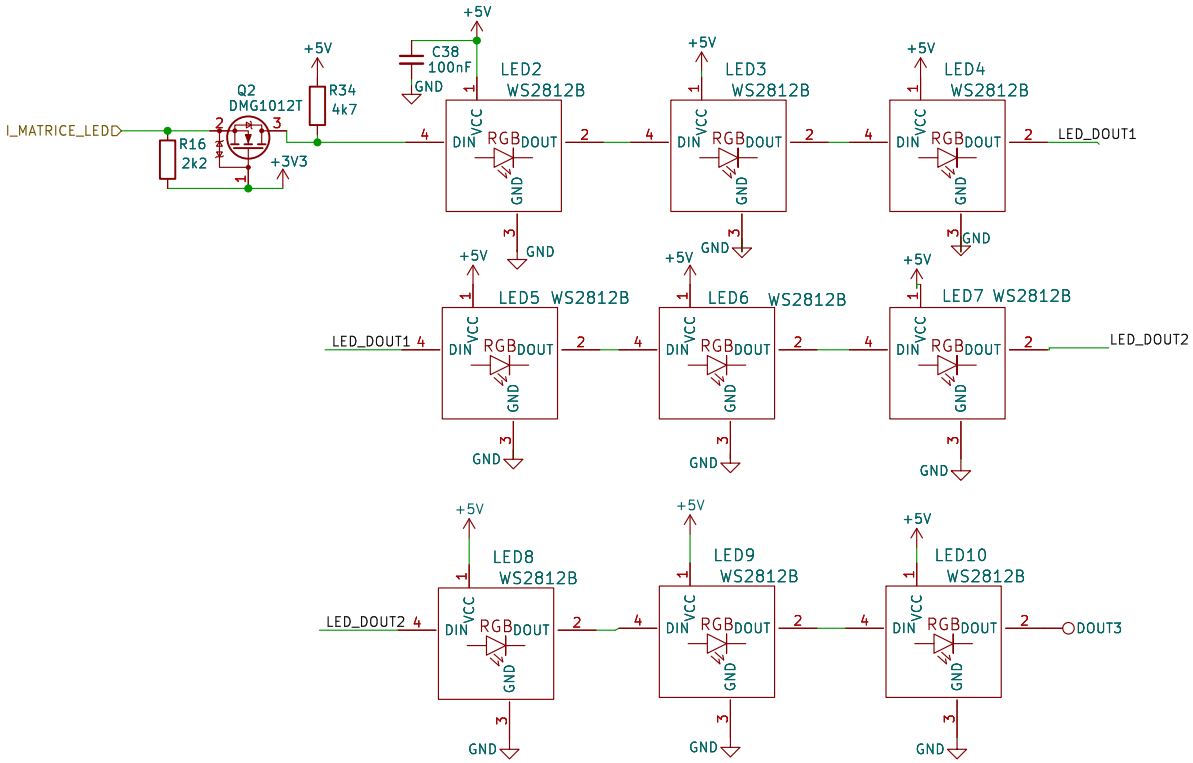
File: bus_sch.kicad_sch

Title: ESP32-S3 industrial EVB

Size: A4	Date: 2024-08-03	**Rev: 2.0**
KiCad E.D.A. 9.0.3		Id: 8/8

matrice di LED RGB (WS2812)
WS2812 RGB LED matrix



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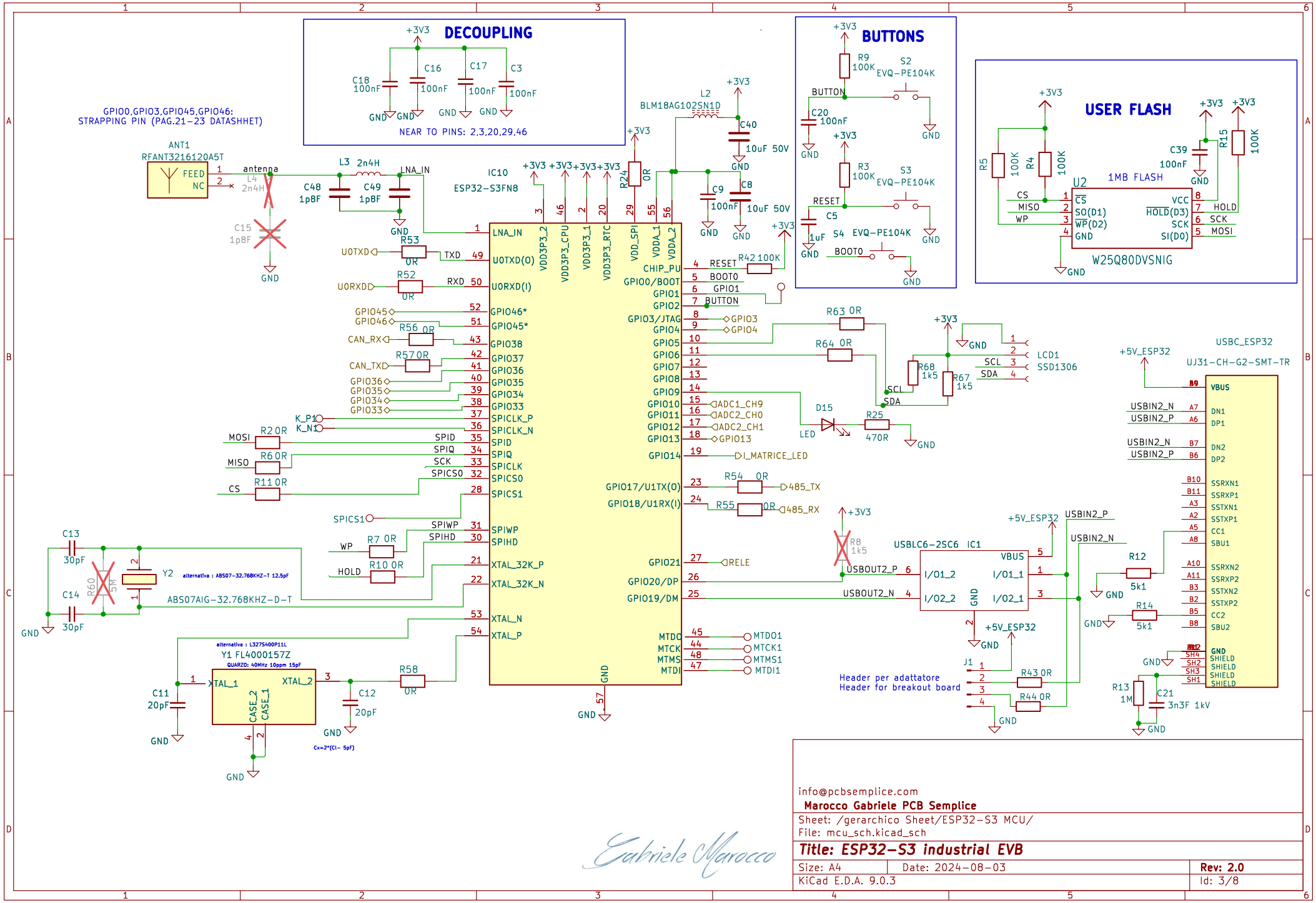
Sheet: /gerarchico Sheet/LED_MATRIX_WS2812B/
File: LED_MATRIX_WS2812B.kicad_sch

Title: ESP32-S3 industrial EVB

Size: A4	Date: 2024-08-03	**Rev: 2.0**
KiCad E.D.A. 9.0.3		Id: 5/8


DECOUPLING
NEAR TO PINS: 2,3,20,29,46
BUTTONS
USER FLASH
1MB FLASH
W25Q80DVSNIG
GPIO0,GPIO3,GPIO45,GPIO46:
STRAPPING PIN (PAG.21-23 DATASHHET)
ANT1
RFANT3216120A5T
IC10
ESP32-S3FN8
BLM18AG102SN1D
ABS07AIG-32.768KHZ-D-T
Y1 FL4000157Z
QUARZO: 40MHz 10ppm 15pF
USBLC6-2SC6
USBC_ESP32
UJ31-CH-G2-SMT-TR
LCD1
SSD1306
Header per adattatore
Header for breakout board
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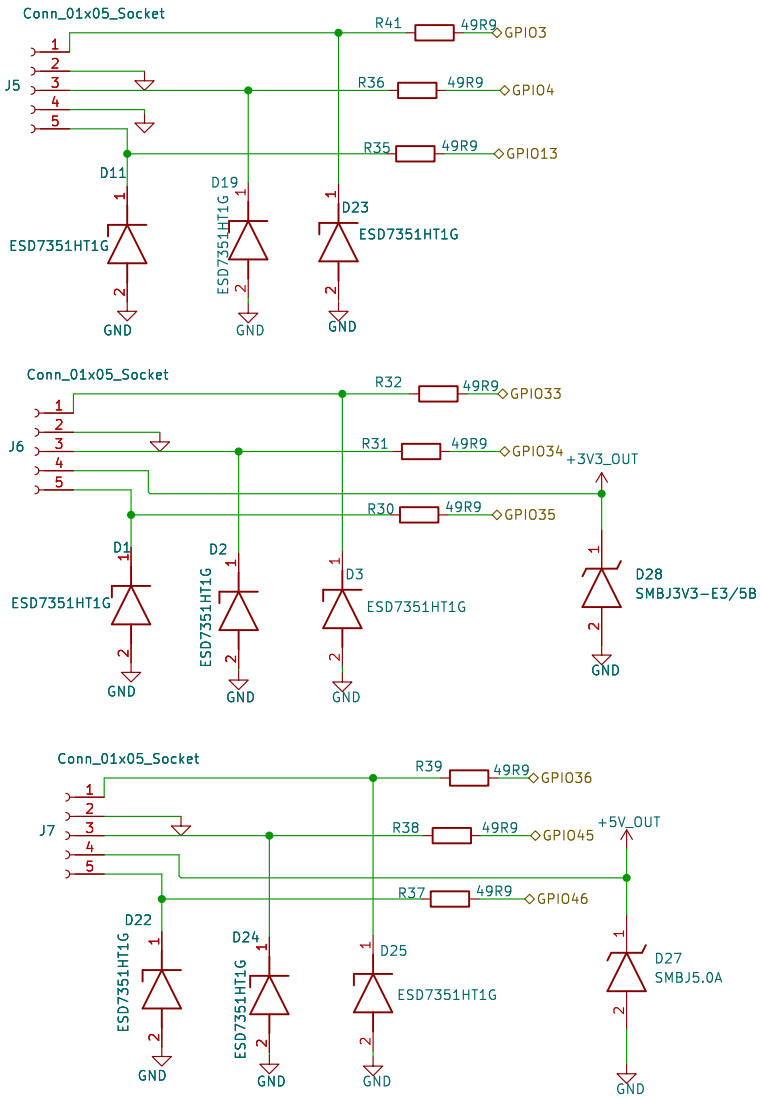
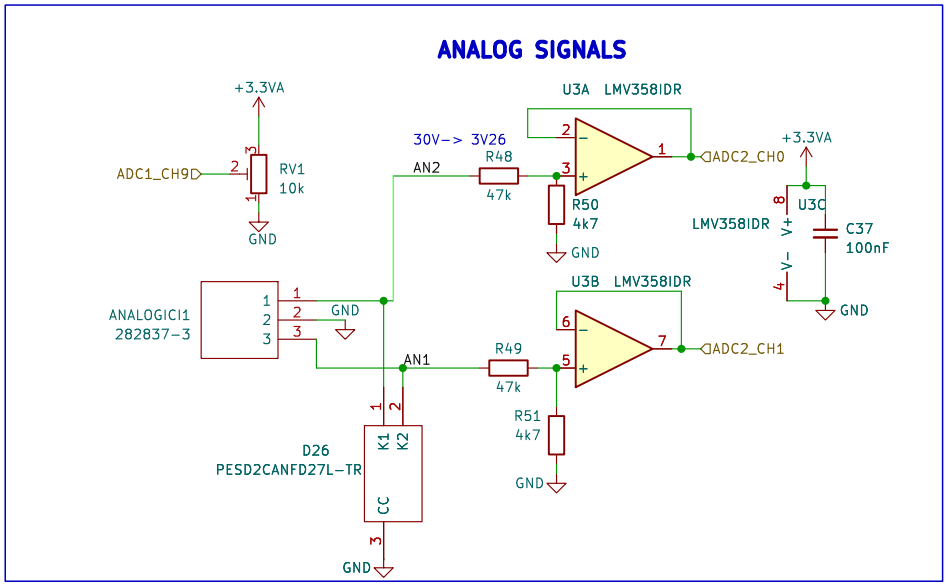
Sheet: /gerarchico Sheet/ESP32-S3 MCU/
File: mcu_sch.kicad_sch
Title: ESP32-S3 industrial EVB
Size: A4
Date: 2024-08-03
Rev: 2.0
KiCad E.D.A. 9.0.3
Id: 3/8

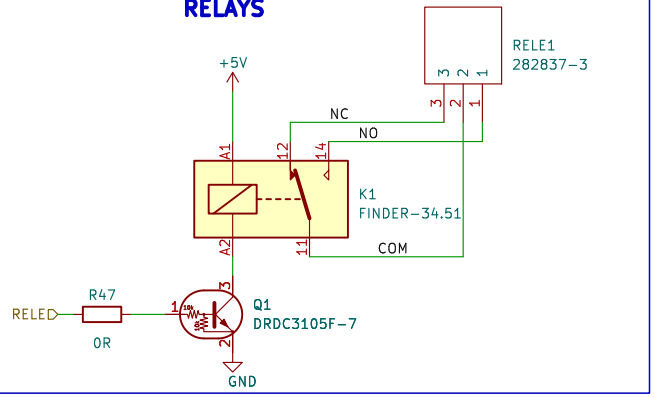
EXTERNAL CONNECTORS



ANALOG SIGNALS



RELAYS



FID1 Fiducial
FID2 Fiducial
FID3 Fiducial
H1 MountingHole
H2 MountingHole

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Sheet: /gerarchico Sheet/GPIO/
File: GPIO_sch.kicad_sch

Title: ESP32-S3 industrial EVB

Size: A4	Date: 2024-08-03	**Rev: 2.0**
KiCad E.D.A. 9.0.3		Id: 4/8