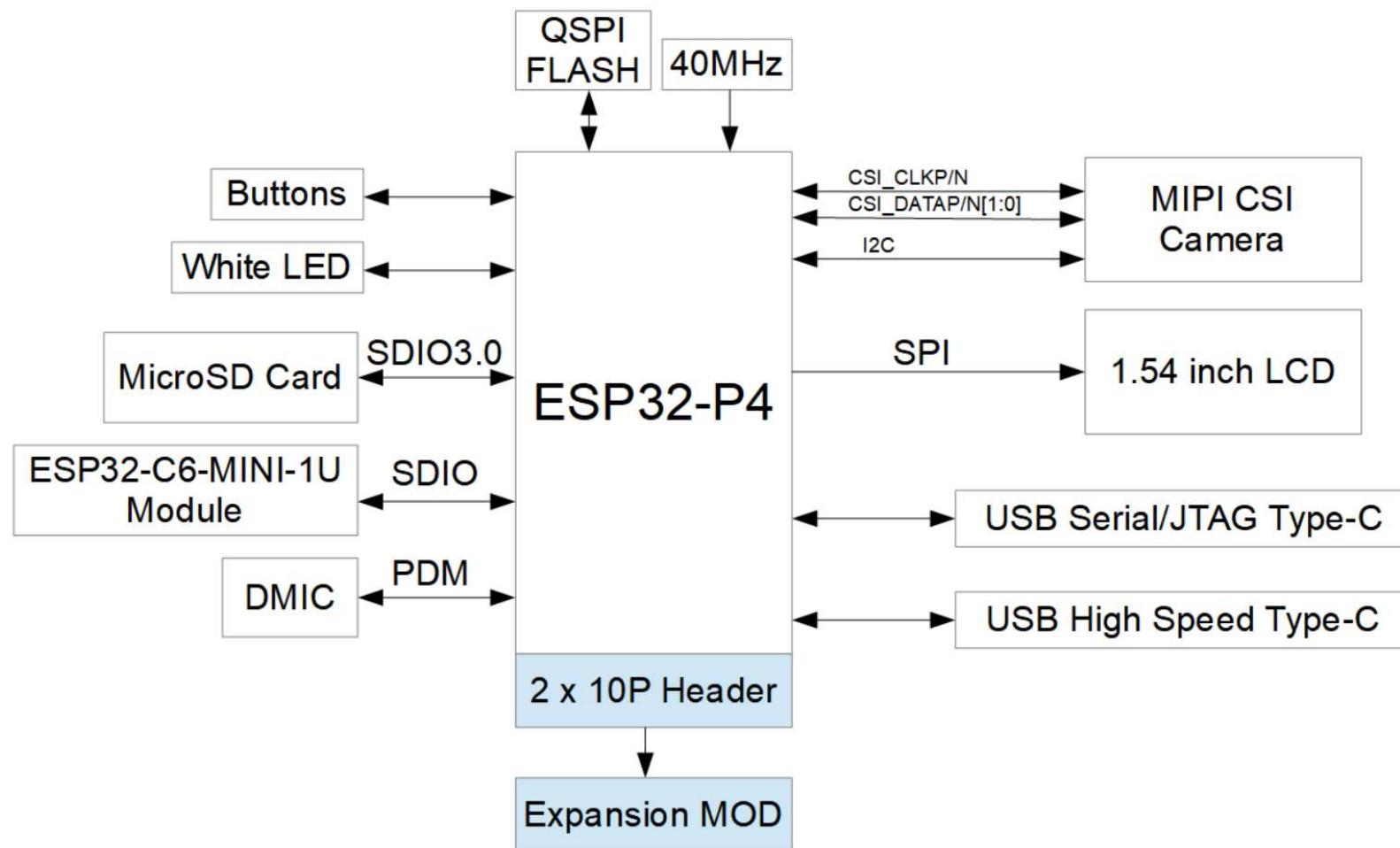


Design Block:



ESPRESSIF

乐鑫信息科技(上海)股份有限公司

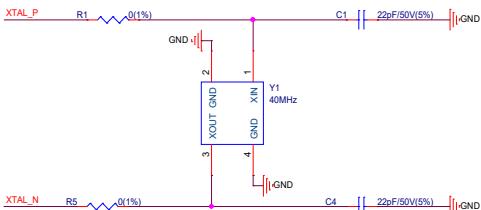
Title: **ESP32-P4-EYE-MB**

Size: **C** Document Number: **01_DESIGNBLOCK**

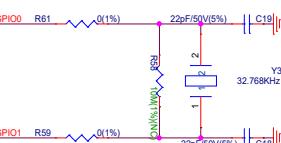
Date: **Wednesday, April 16, 2025**

Rev: **2.3**

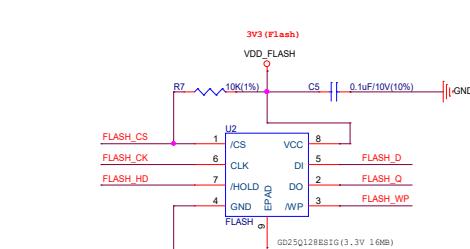
40MHz XTAL:



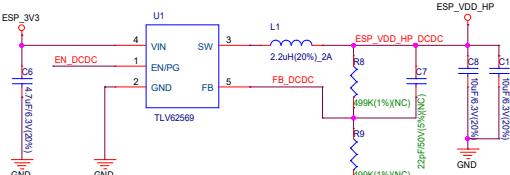
RTC XTAL:



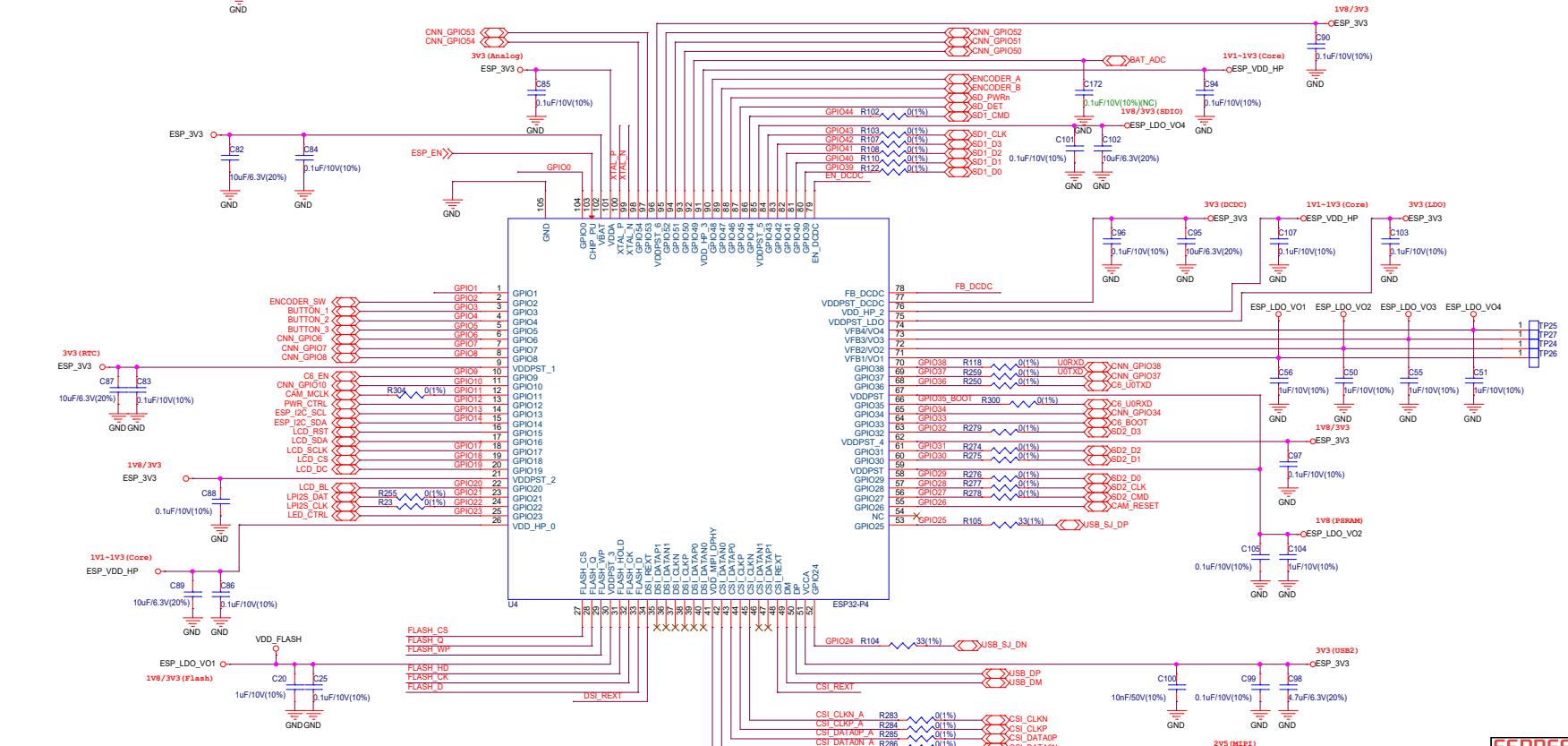
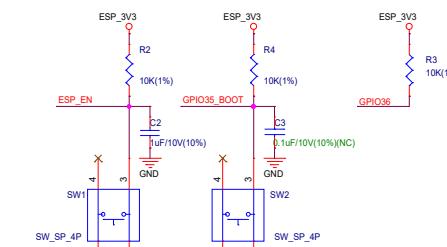
FLASH:



VDD_HP DCDC:



BUTTONS :



ESPRESSIF

乐鑫信息科技（上海）股份有限公司

Title: ESP32-P4-EYE-MB

Size: C Document Number: 02_ESP32-P4

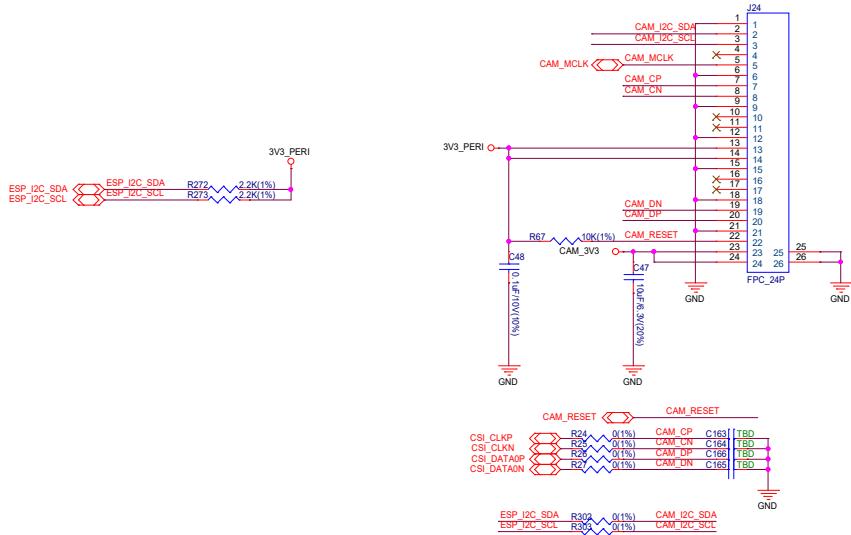
Date: Friday, April 11, 2025

Rev: 2.3

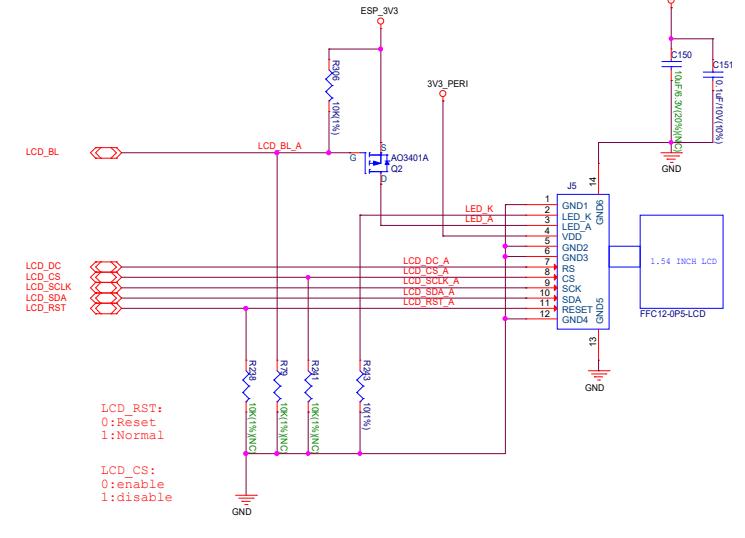
Sheet 2 of 5

Camera Connector:

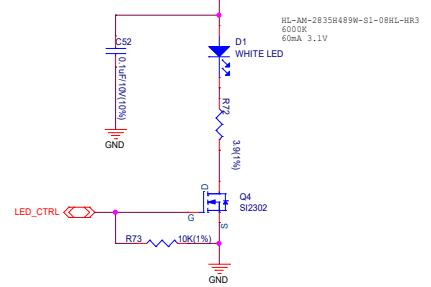
I2C LevelShift:



1.54 INCH LCD:

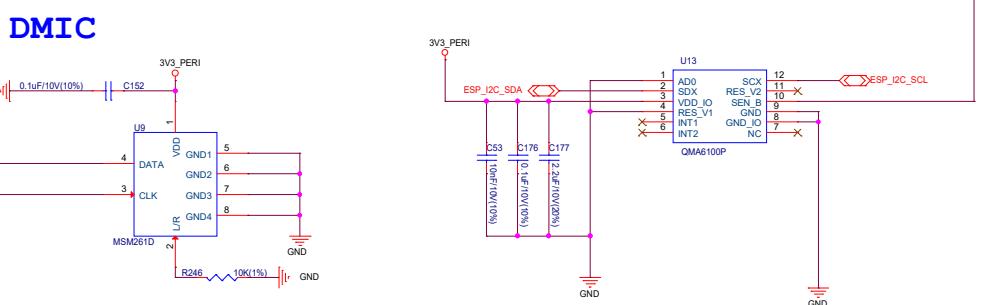


Wightlight



3-axis Accelerometer

DMIC



ESPRESSIF

乐鑫信息科技(上海)股份有限公司

Title: ESP32-P4-EYE-MB

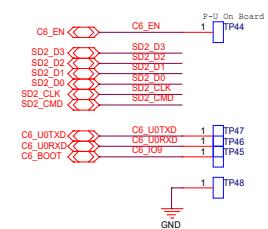
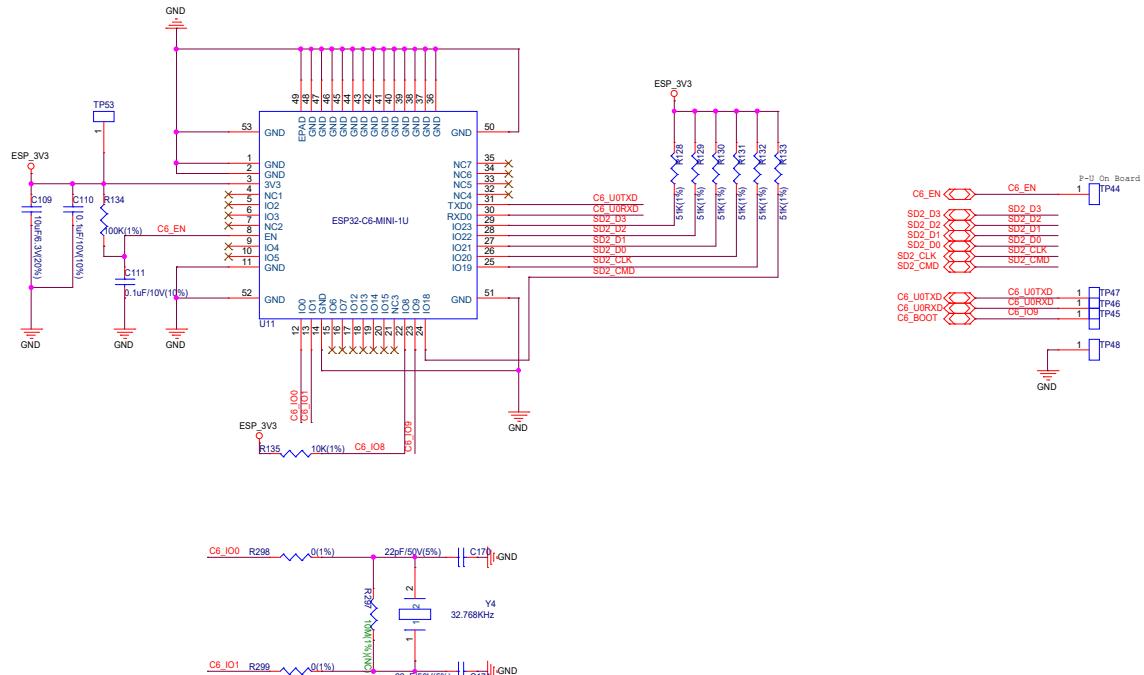
Size: C Document Number: 03_INTERFACE

Date: Friday, April 11, 2025

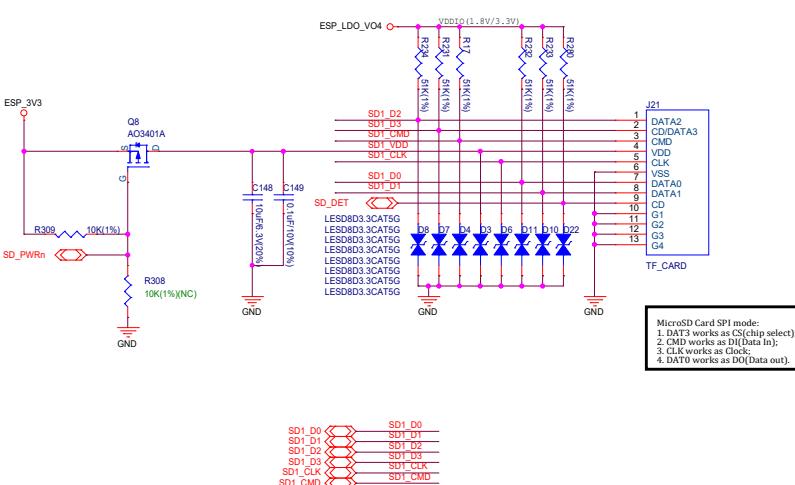
Rev: 2.3

Sheet 3 of 5

WiFi & BT Module:



MicroSD Card:



MicroSD Card GP1 mode:
1. DATA0 works as S[chip select];
2. CMD works as DI(Data In);
3. CLK works as Clock;
4. DATA1 works as DO(Data Out).



ESPRESSIF

乐鑫信息科技(上海)股份有限公司

Title: ESP32-P4-EYE-MB

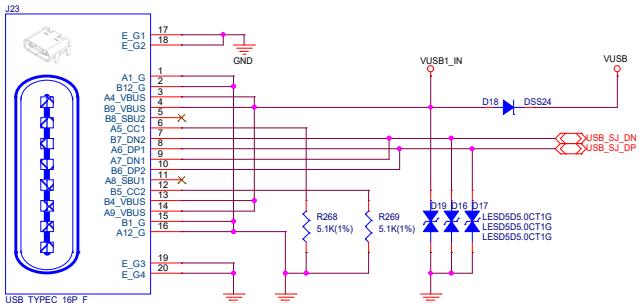
Size: C Document Number: 04_WIFI&BT

Date: Friday, April 11, 2025

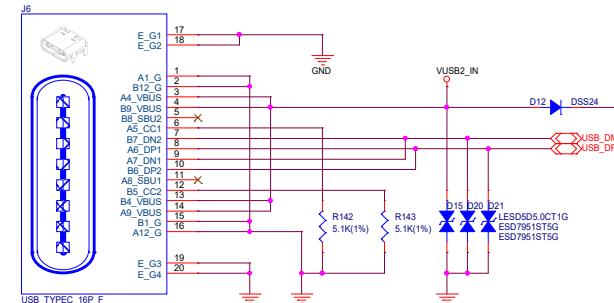
Sheet 4 of 5

Rev 2.3

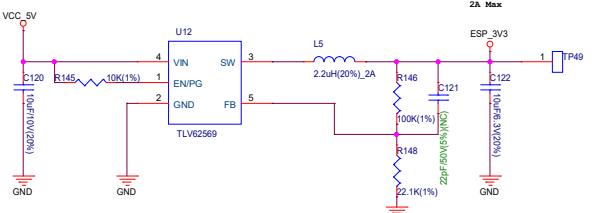
USB Serial/JTAG & Power in:



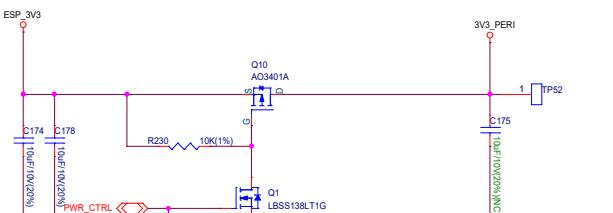
USB HighSpeed & Power in:



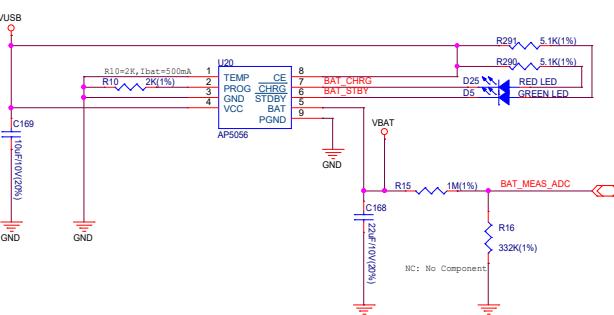
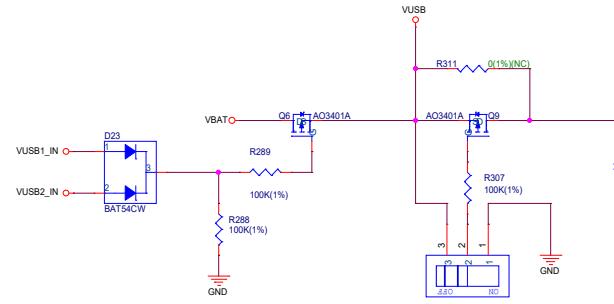
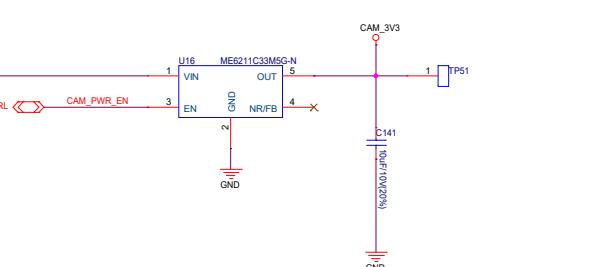
3V3 DC-DC For ESP:



3V3_PERI 3.3V



CAM AVDD 3.3V



ESPRESSIF

乐鑫信息科技(上海)股份有限公司

Title

ESP32-P4-EYE-MB

Size

C

Document Number

05_PWR_USB

Rev

2.3

Date

Friday, April 11, 2025

Sheet

5

of

5