

Mini-F0050-OB

MiniBoard | MB113 | Rev 1.0

Table of Contents :

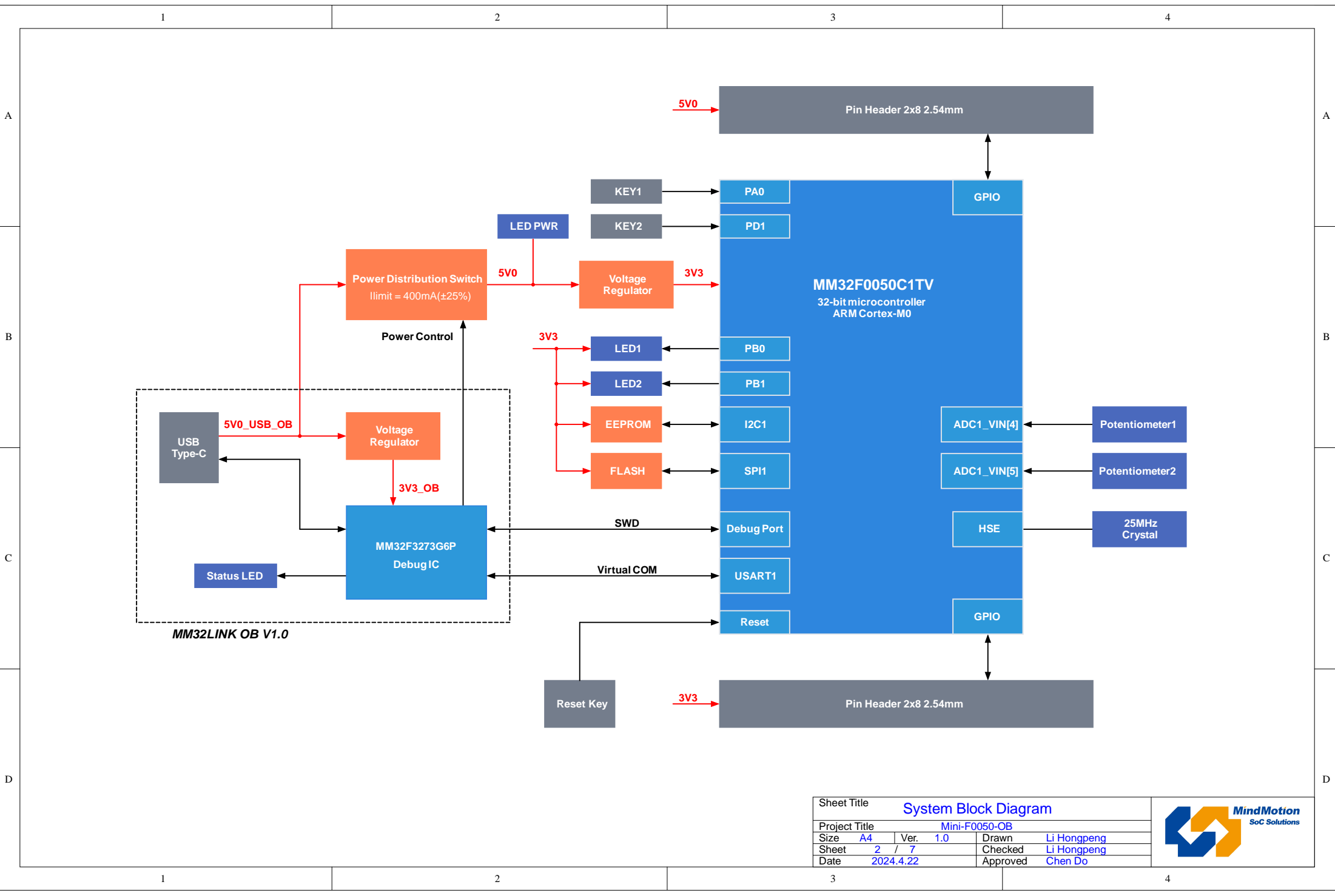
- [1] Project_Overview
- [2] System_Block_Diagram
- [3] MM32LINK-OB_V1.0
- [4] Target_Power
- [5] Target_MCU
- [6] Onboard Resources
- [7] Extension_Connectors

Revision History:

V1.0 First Release

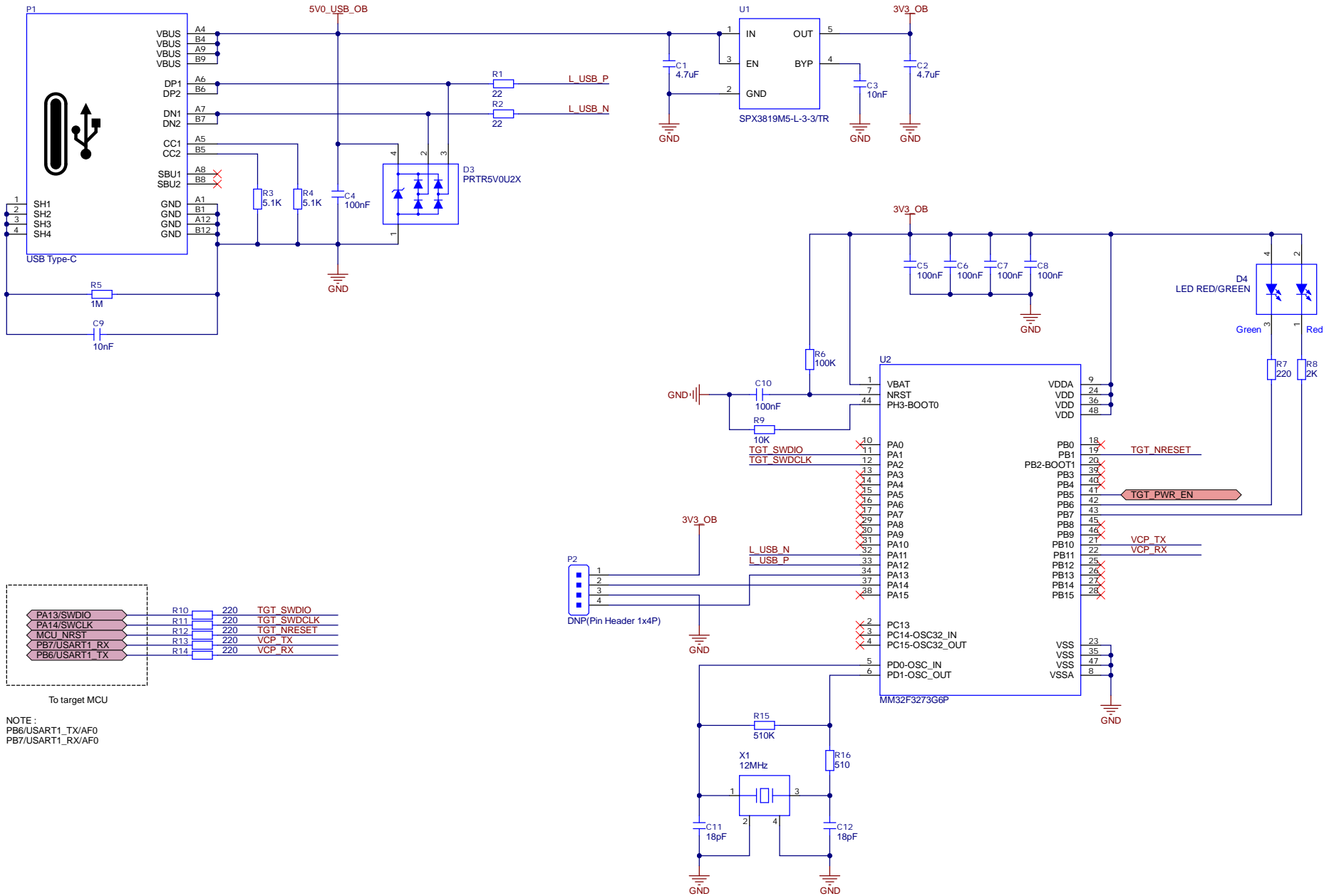
Sheet Title	Project Overview		
Project Title	Mini-F0050-OB		
Size	A4	Ver.	1.0
Sheet	1 / 7	Drawn	Li Hongpeng
Date	2024.4.22	Checked	Li Hongpeng
		Approved	Chen Do





Sheet Title		System Block Diagram	
Project Title		Mini-F0050-OB	
Size	A4	Ver.	1.0
Sheet	2 / 7	Drawn	Li Hongpeng
Date	2024.4.22	Checked	Li Hongpeng
		Approved	Chen Do





PA13/SWDIO	R10	220	TGT SWDIO
PA14/SWCLK	R11	220	TGT SWDCLK
MCU_NRST	R12	220	TGT NRESET
PB7/USART1_RX	R13	220	VCP_TX
PB6/USART1_TX	R14	220	VCP_RX

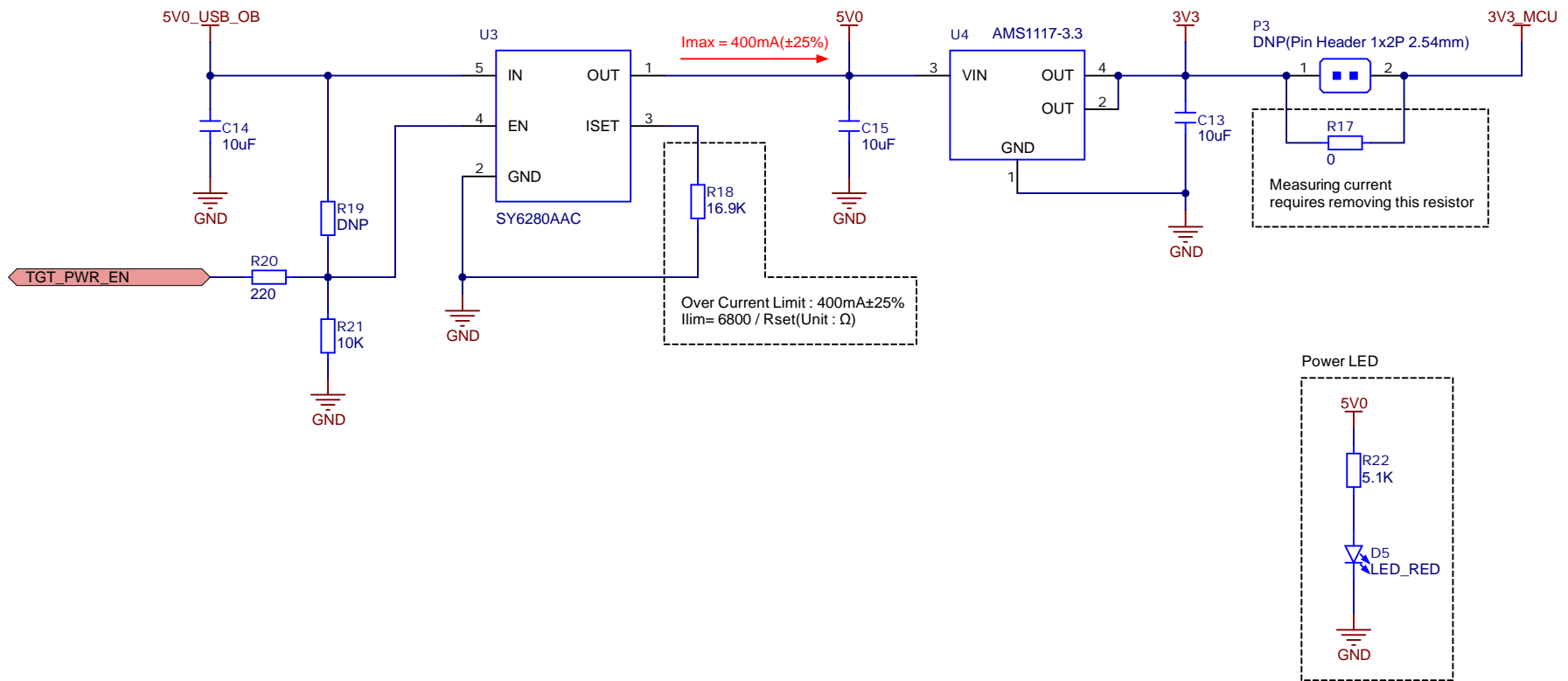
To target MCU

NOTE -
PB6/USART1_TX/AF0
PB7/USART1_RX/AF0

DNP : DO NOT POPULATE

Sheet Title		MM32LINK-OB V1.0	
Project Title		Mini-F0050-OB	
Size	A3	Ver.	1.0
Sheet	3 / 7	Drawn	Li Hongpeng
Date	2024.4.22	Checked	Li Hongpeng
		Approved	Chen Do



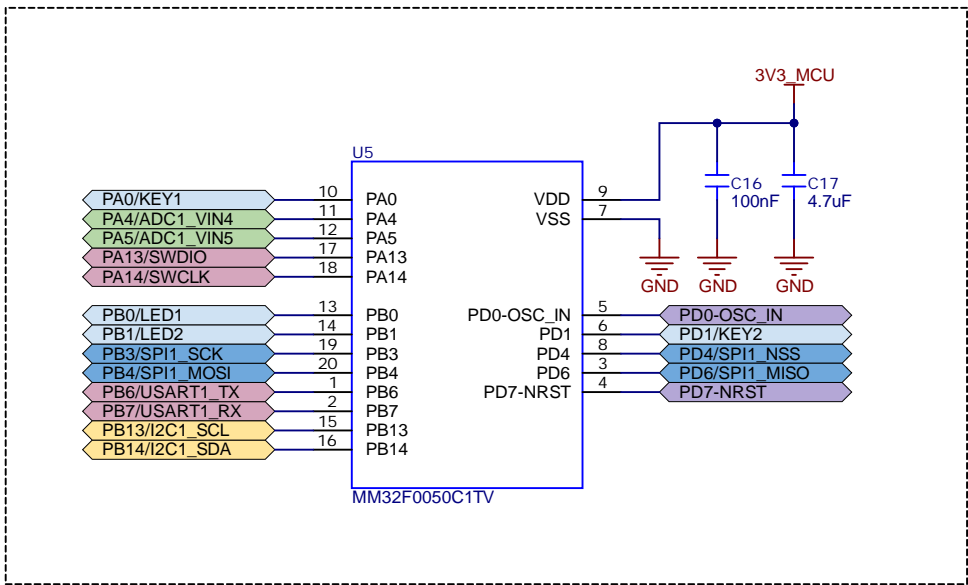


DNP : DO NOT POPULATE

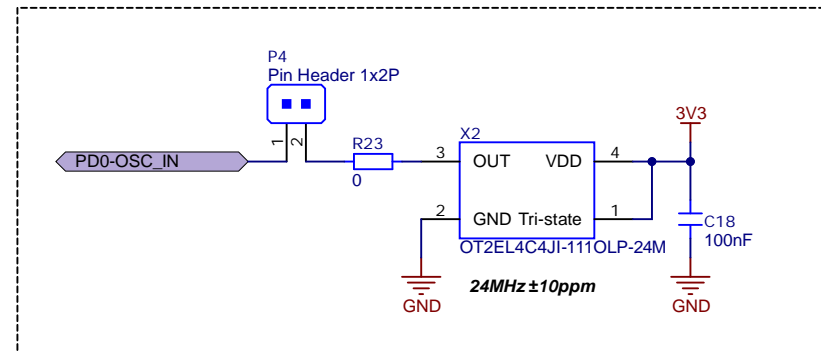
Sheet Title	Target Power		
Project Title	Mini-F0050-OB		
Size	A4	Ver.	1.0
Sheet	4 / 7	Drawn	Li Hongpeng
Date	2024.4.22	Checked	Li Hongpeng
		Approved	Chen Do



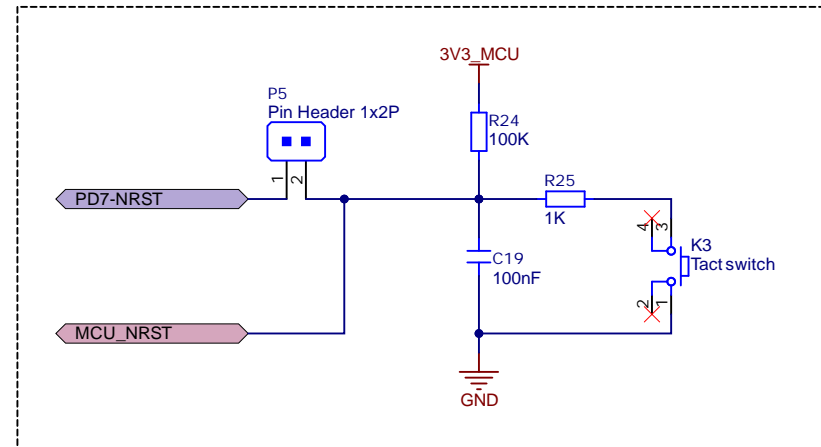
MCU



MCU HSE Clock



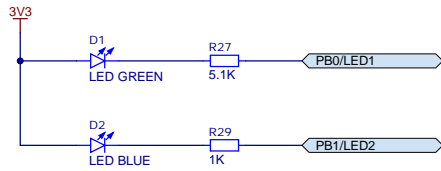
MCU Reset



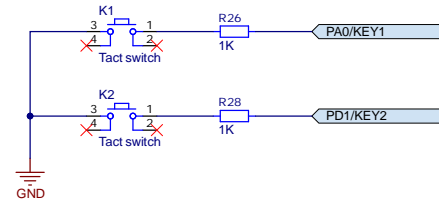
Sheet Title		Target MCU	
Project Title		Mini-F0050-OB	
Size	A4	Ver.	1.0
Sheet	5 / 7	Drawn	Li Hongpeng
Date	2024.4.22	Checked	Li Hongpeng
		Approved	Chen Do



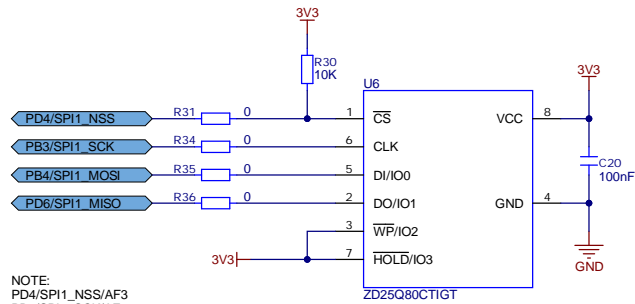
User LEDs



User Keys

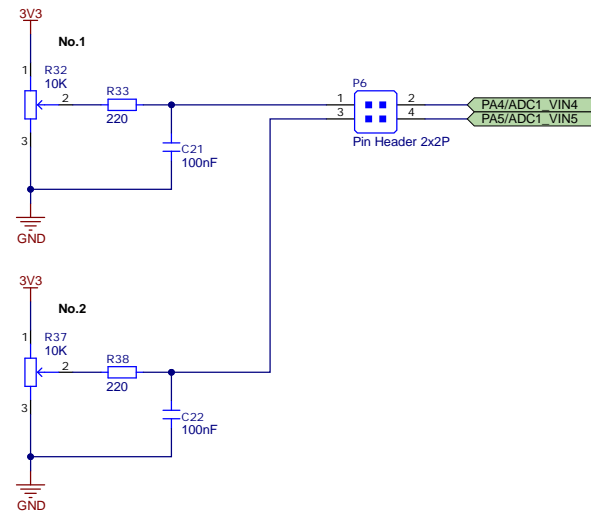


SPI FLASH

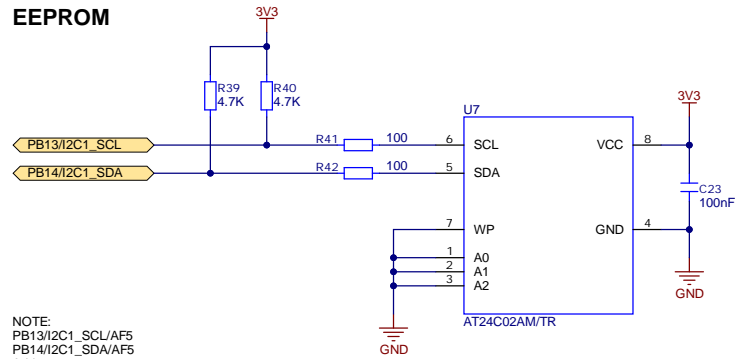


NOTE:
 PD4/SPI1_NSS/AF3
 PB3/SPI1_SCK/AF0
 PB4/SPI1_MOSI/AF2
 PD6/SPI1_MISO/AF0

Potentiometer



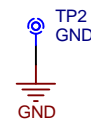
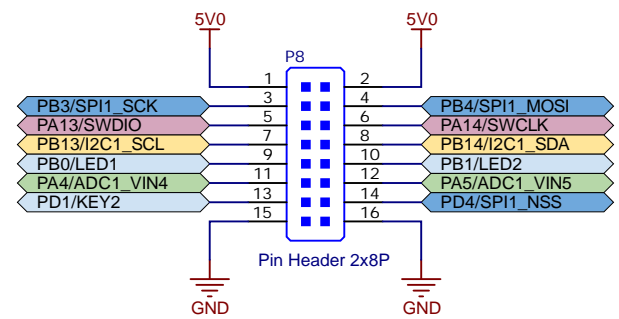
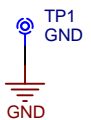
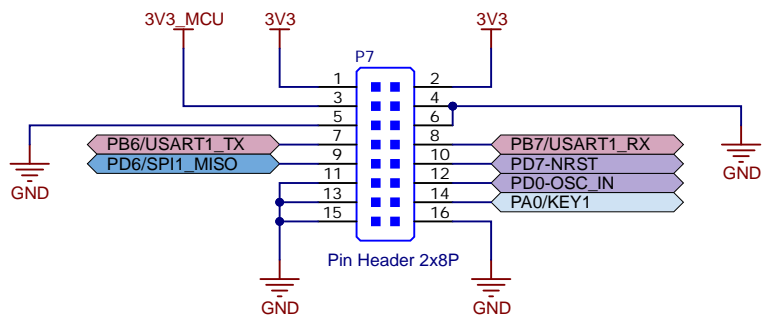
EEPROM



NOTE:
 PB13/I2C1_SCL/AF5
 PB14/I2C1_SDA/AF5
 Address : 1010000

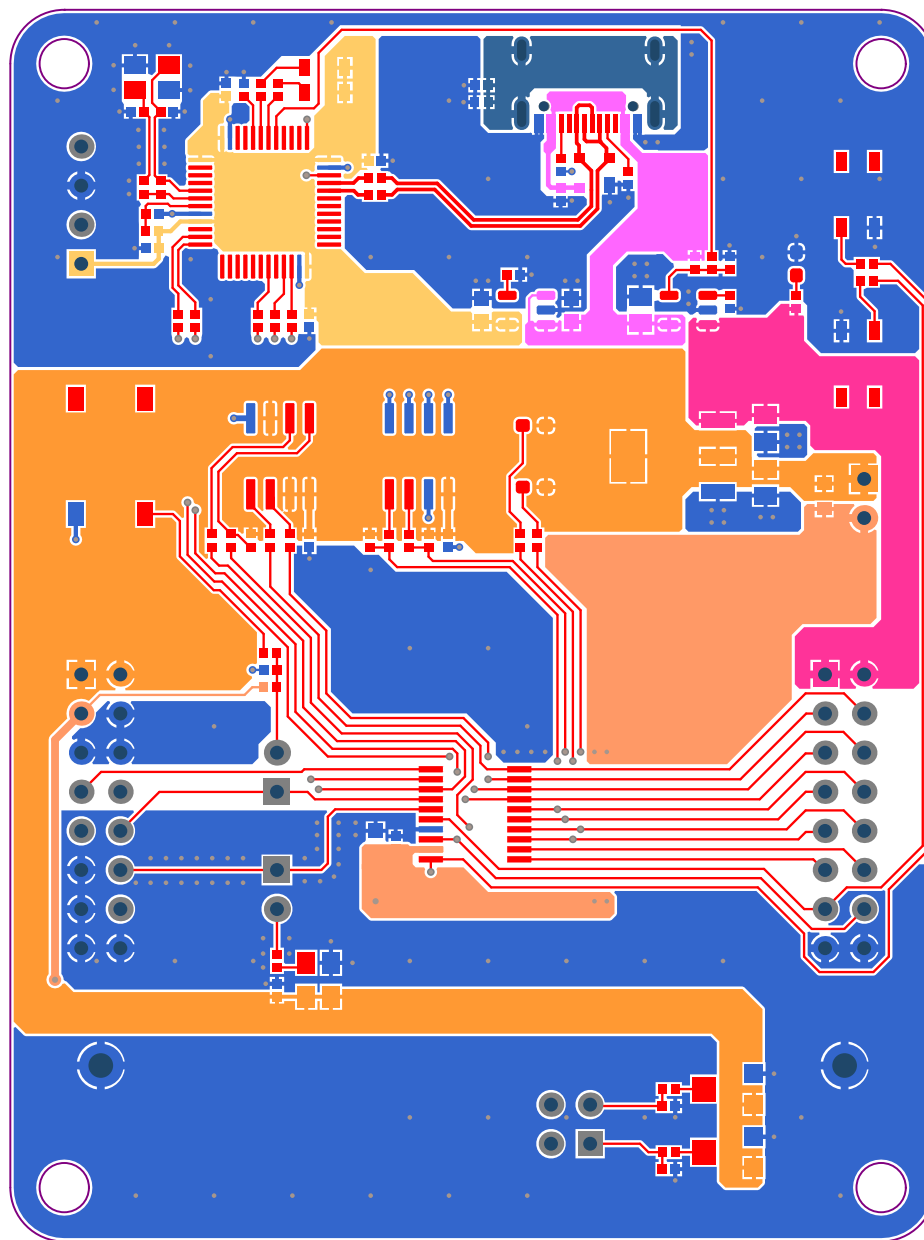
Sheet Title		Onboard Resources	
Project Title		Mini-F0050-OB	
Size	A3	Ver.	1.0
Sheet	6 / 7	Drawn	Li Hongpeng
Date	2024.4.22	Checked	Li Hongpeng
		Approved	Chen Do

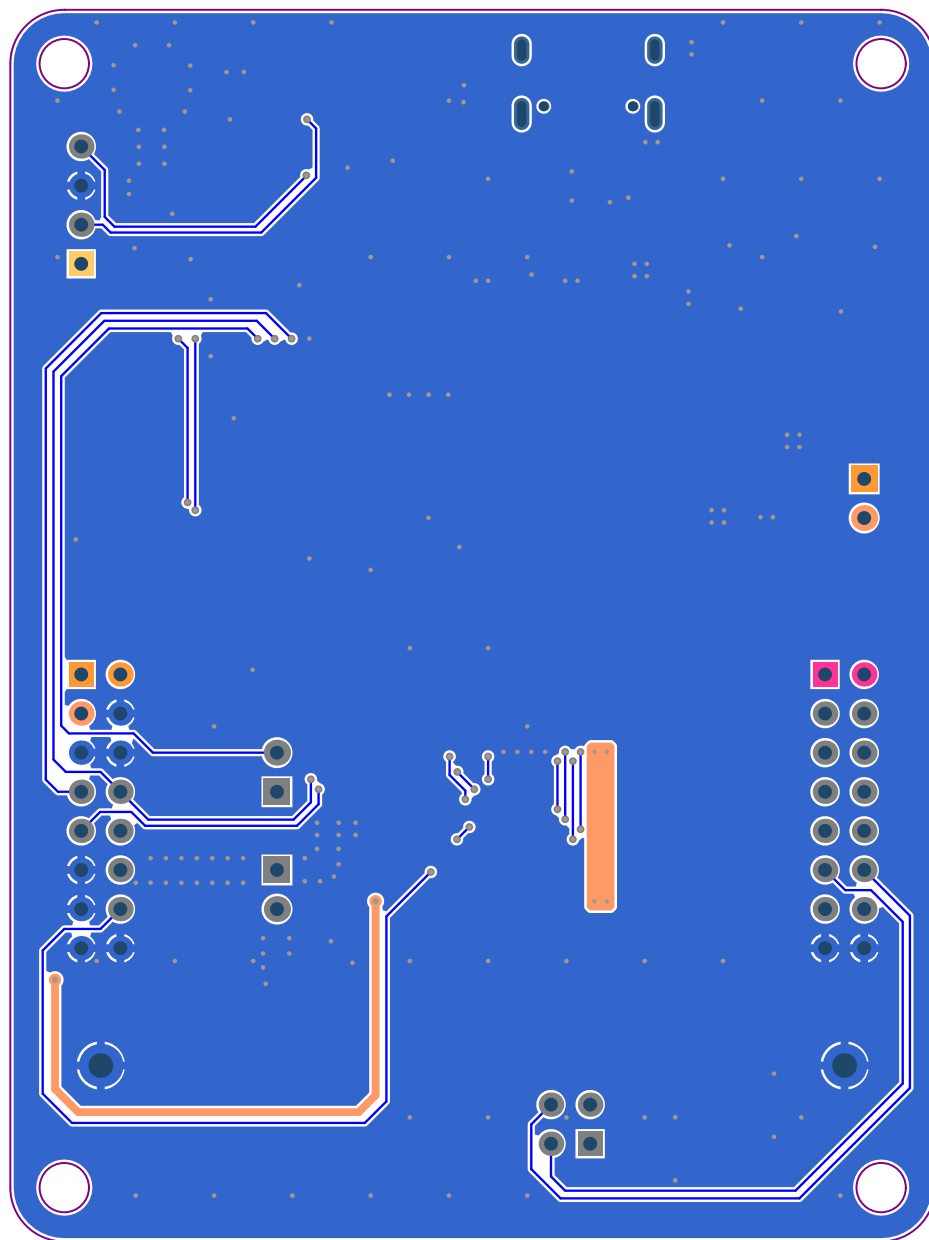


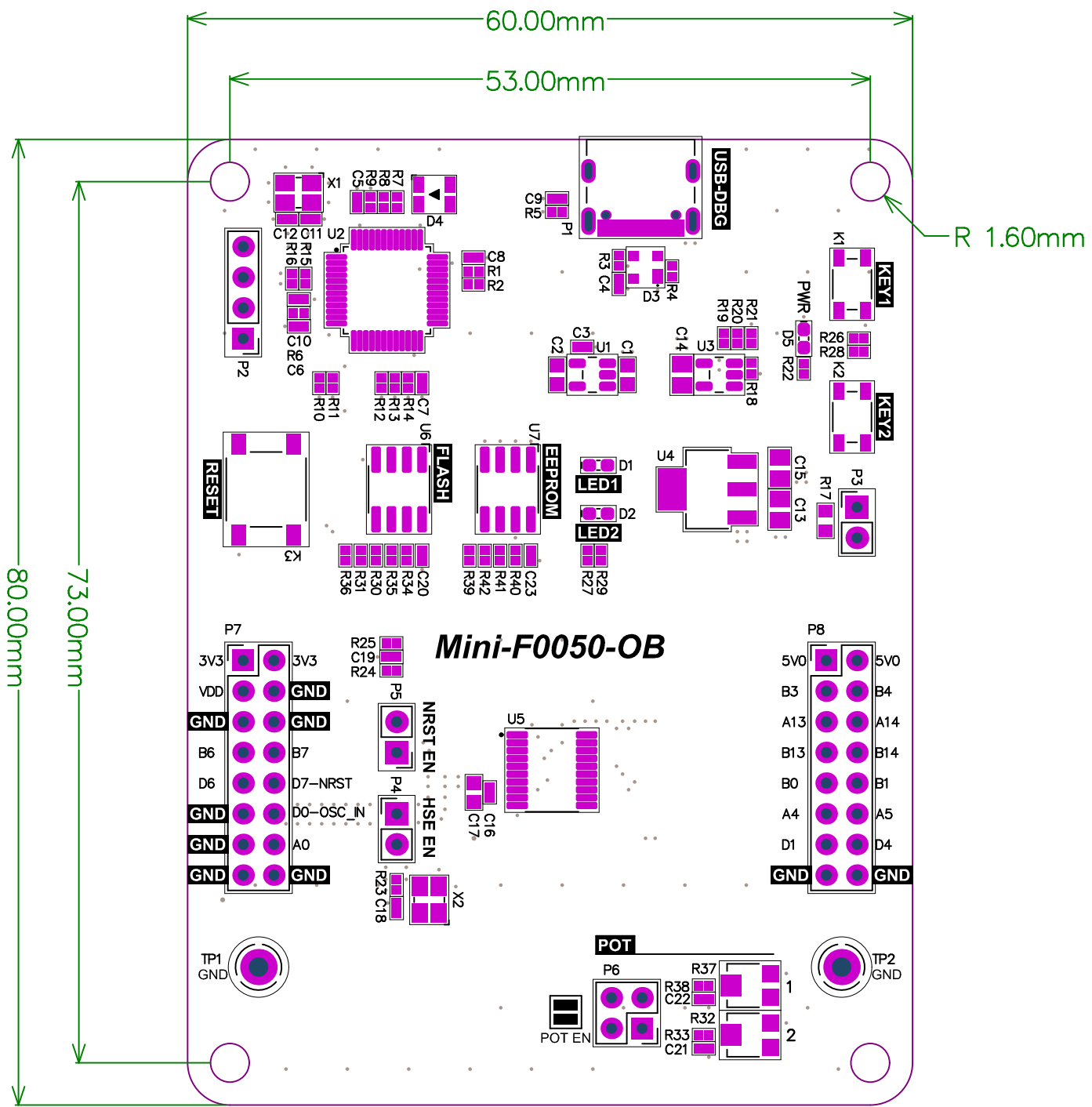


Sheet Title		Extension Connectors			
Project Title		Mini-F0050-OB			
Size	A4	Ver.	1.0	Drawn	Li Hongpeng
Sheet	7 / 7	Checked		Checked	Li Hongpeng
Date	2024.4.22	Approved		Approved	Chen Do











MM32F0050C1TV

Mini-F0050-OB | MB-113 | V1.0

www.mindmotion.com.cn

Current Measurement

- ◻ ← 3V3
- ← MCU_VDD

- 5V0 ◻ ◻ 5V0
- B4 ● ● B3
- A14 ● ● A13
- B14 ● ● B13
- B1 ● ● B0
- A5 ● ● A4
- D4 ● ● D1
- GND ◻ ◻ GND

- 3V3 ◻ ◻ 3V3
- GND ● ● VDD
- GND ● ● GND
- B7 ● ● B6
- D7-NRST ● ● D6
- D0-OSC_N ◻ ● GND
- A0 ● ● GND
- GND ◻ ◻ GND