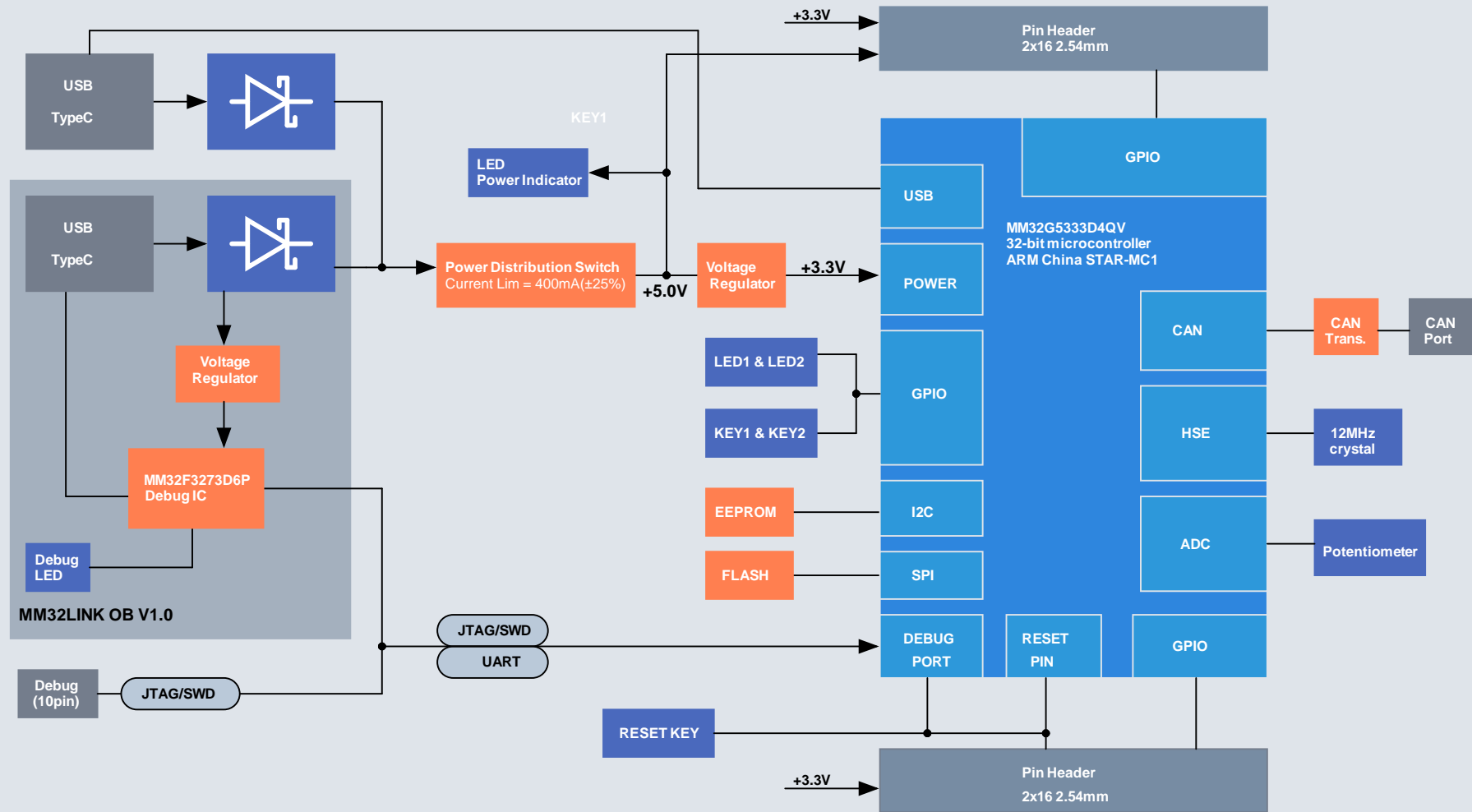


Mini-G5333-OB



Connector

General Component

Chip

Target MCU

Project Title **MB101-Mini-G5333-OB**

Sheet Title **01---System Block Diagram**

Size **A4** / Rev **A** Drawn **Lu Weiwei**

Sheet **1** / **9** Checked **Li Hongpeng**

Data **2023.07.03** Approved **Chen Do**



A

B

C

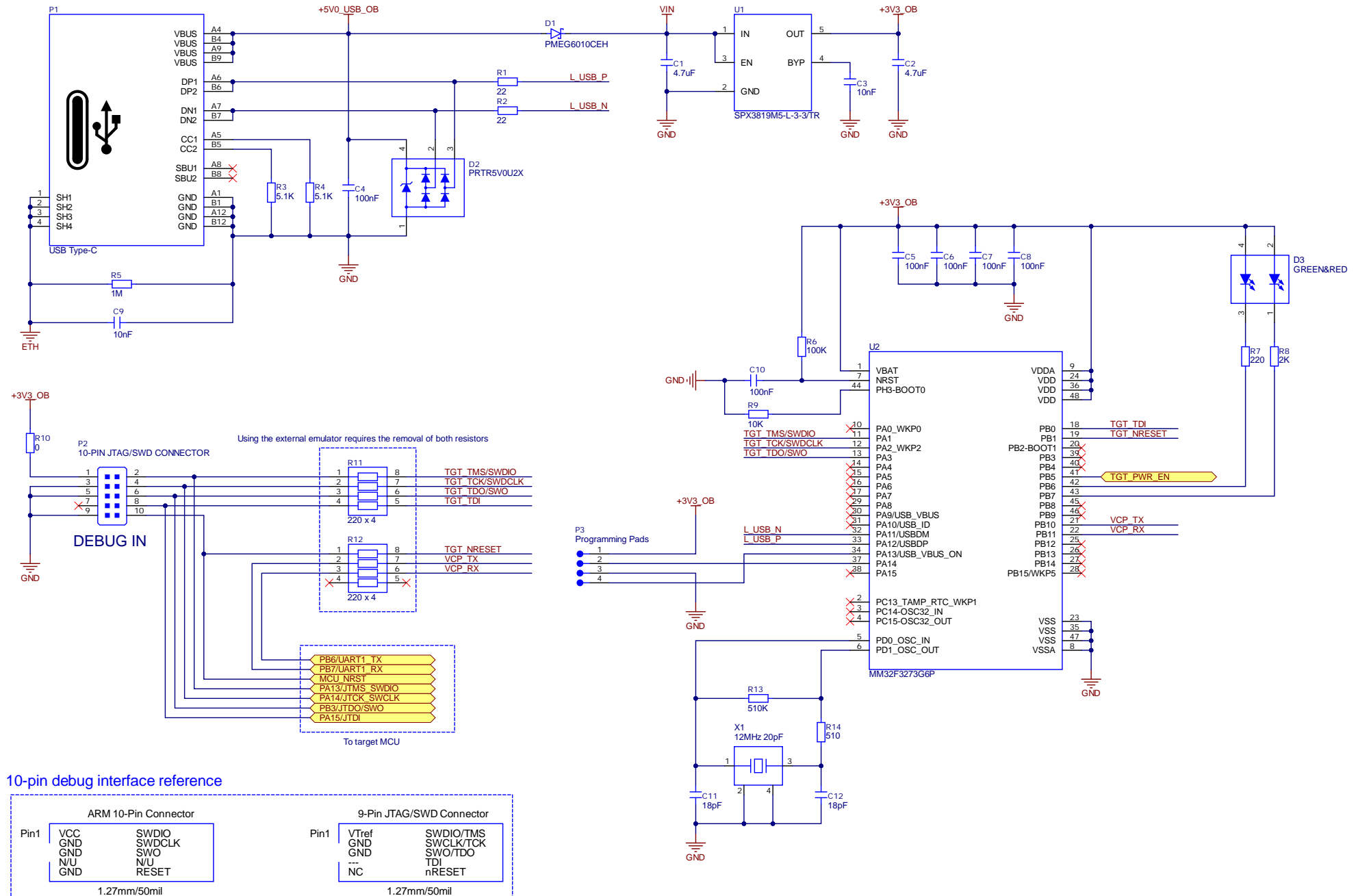
D

A

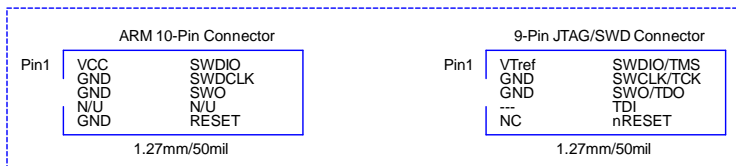
B

C

D



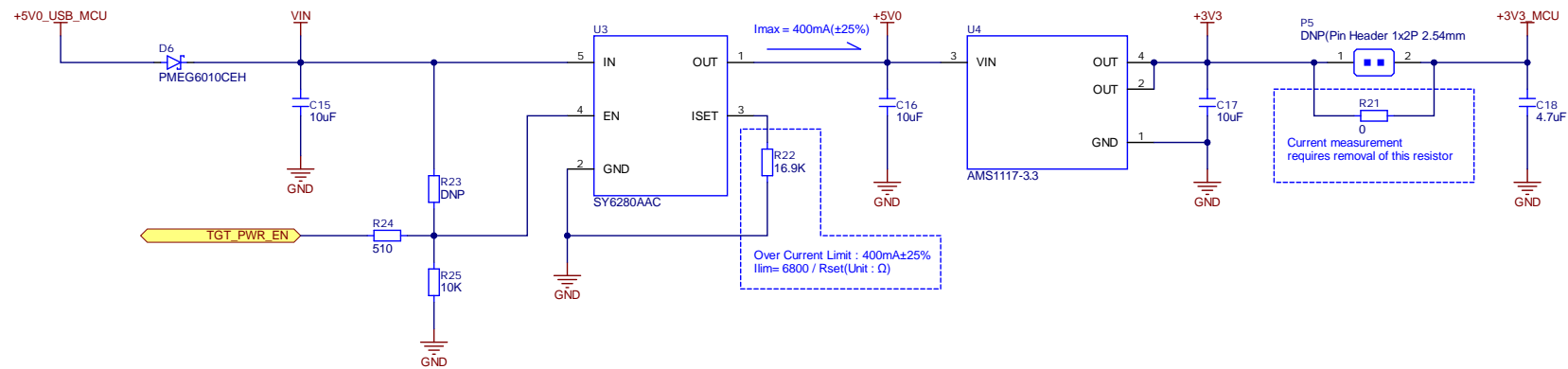
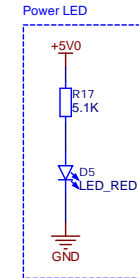
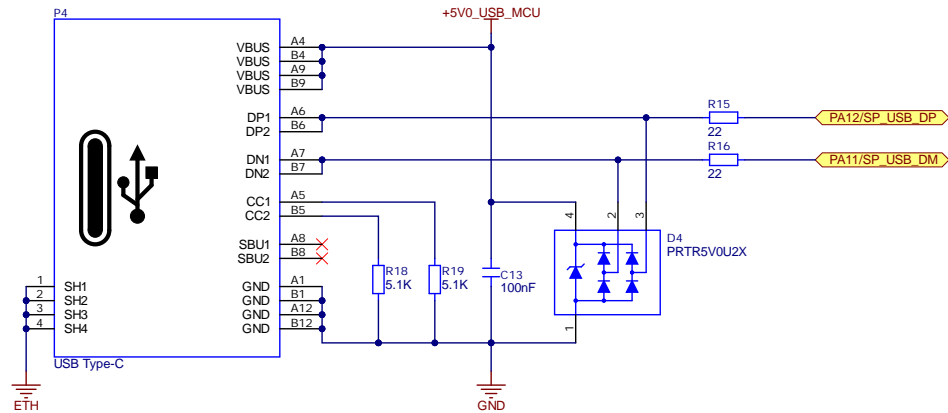
10-pin debug interface reference



DNP : DO NOT PLACE

Project Title		MB101-Mini-G5333-OB	
Sheet Title		02---MM32Link-OB V1.0	
Size	A3	Rev	A
Sheet	2		9
Data		2023.07.03	
		Drawn	Lu Wei
		Checked	Li Hong
		Approved	Chen De

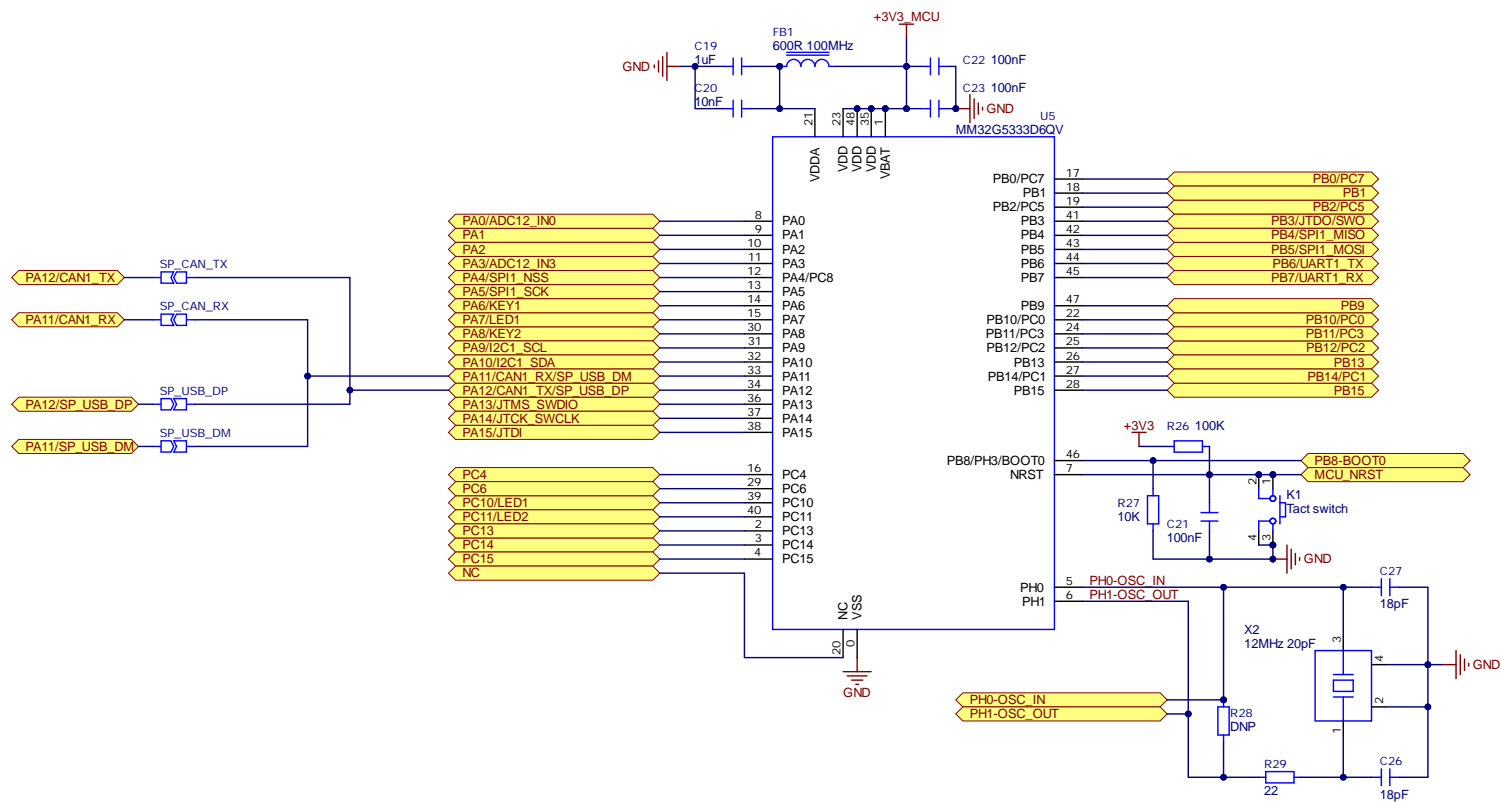




DNP : DO NOT PLACE

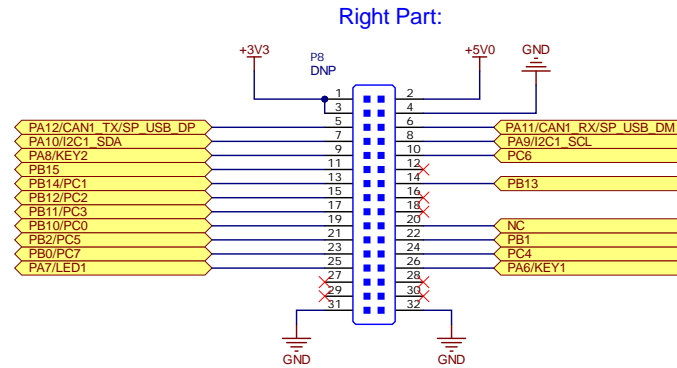
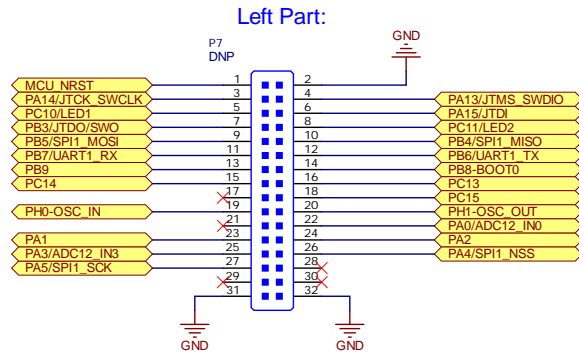
Project Title		MB101-Mini-G5333-OB	
Sheet Title	03---Target Power	Drawn	Lu Weiwei
Size	A3	Rev	A
Sheet	3	Checked	L1 Hongpeng
Date	2023.07.03	Approved	Chen Do





Project Title		MB101-Mini-G5333-OB	
Sheet Title	04---Target MCU	Drawn	Lu Weiwei
Size	A3 / Rev A	Checked	Li Hongpeng
Sheet	4 / 9	Approved	Chen Do
Date		2023.07.03	





Pin assignment:

PIN08---PA0 / TIM2_CH1 / TIM2_ETR / TIM5_CH1 / TIM8_ETR / UART2_CTS / UART4_TX / I3C_SCL / ADC12_IN0 / COMP12_INP0 / COMP1_INM2 / WKP0
PIN09---PA1 / TIM2_CH2 / TIM5_CH2 / UART2_RTS / UART4_RX / I3C_SDA / ADC12_IN1 / COMP12_INP1
PIN10---PA2 / TIM2_CH3 / TIM5_CH3 / UART2_TX / COMP2_OUT / LPUART_TX / ADC12_IN2 / COMP12_INP2 / COMP2_INM2 / WKP2
PIN11---PA3 / TIM2_CH4 / TIM5_CH4 / I2S1_MCK / UART2_RX / LPUART_RX / ADC12_IN3 / COMP12_INP3
PIN12---PA4 / TIM5_ETR / SPI1_NSS / I2S1_WS / SPI3_NSS / I2S3_WS / USART_TX / ADC12_IN4 / COMP12_INM0 / DAC1_OUT
PIN12---PC8---TIM3_CH3---I2C2_SCL
PIN13---PA5---TIM2_CH1---TIM2_ETR---TIM8_CH1N---SPI1_SCK---I2S1_CK---USART_RX---ADC12_IN5---COMP12_INM1
PIN14---PA6---TIM1_BKIN1---TIM3_CH1---TIM8_BKIN1---SPI1_MISO---I2S1_MCK(extSD)---COMP1_OUT---ADC12_IN6
PIN15---PA7---TIM1_CH1N---TIM3_CH2---TIM8_CH1N---SPI1_MOSI---I2S1_SD---COMP2_OUT---CRS_SYNC---MDSW_IN1---ADC12_IN7
PIN30---PA8 / MCO1 / TIM1_CH1 / TIM3_ETR / I2C1_SCL / USART_CK
PIN31---PA9 / TIM1_CH2 / I2C1_SCL / UART1_TX / USB_FS_VBUS / USART_TX
PIN32---PA10 / TIM1_CH3 / I2C1_SDA / UART1_RX / USB_FS_ID / USRAT_RX
PIN33---PA11 / TIM1_CH4 / I2C1_SMBA / UART1_CTS / COMP1_OUT / CAN1_RX / USART_CTS / USB_FS_DM
PIN34---PA12 / TIM1_ETR / UART1_RTS / COMP2_OUT / CAN1_TX / USART_RTS / USB_FS_DP
PIN36---PA13 / JTMS_SWCLK / I2C1_SMBA / USB_FS_VBUSON / MDSW_OUT2
PIN37---PA14 / JTCK_SWCLK / I2C1_SDA / I2S3_MCK / UART4_CTS / MDSW_IN4
PIN38---PA15 / JTDI / TIM2_CH1 / TIM2_ETR / I2C1_SCL / SPI1_NSS / I2S1_WS / SPI3_NSS / I2S3_WS / UART4_RTS

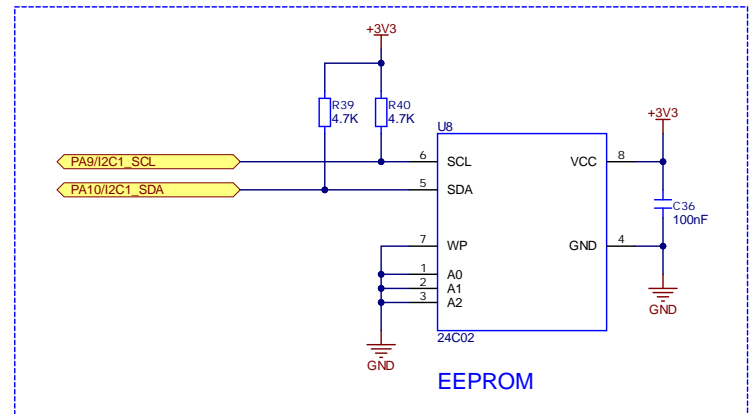
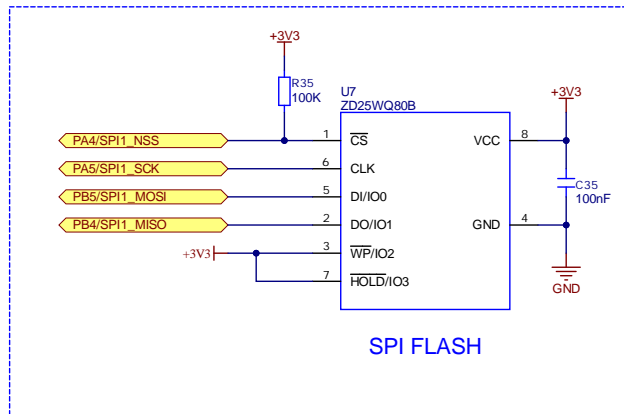
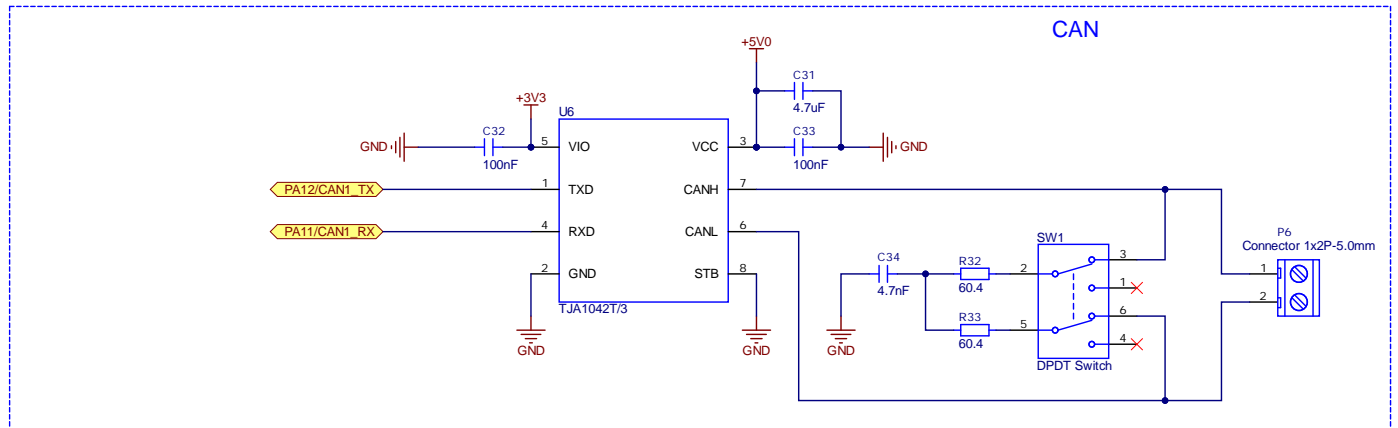
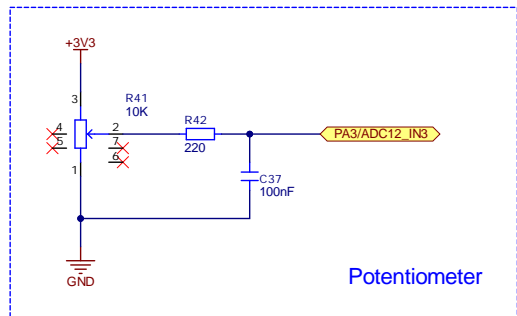
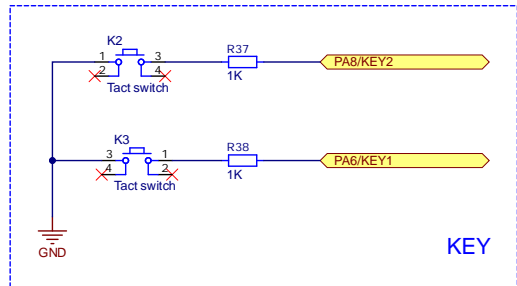
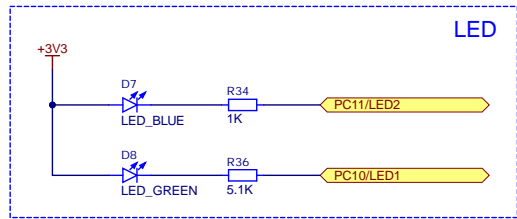
PIN17---PB0 / TIM1_CH2N / TIM3_CH3 / TIM8_CH2N / ADC12_IN9
PIN17---PC7 / TIM3_CH2 / TIM8_CH2 / I2C1_SDA / SPI3_MISO / I2S3_MCK(extSD) / SPI3_MISO / I2S3_MCK(extSD)
PIN18---PB1 / TIM1_CH3N / TIM3_CH4 / TIM8_CH3N / ADC12_IN9
PIN19---PB2 / TIM1_CH4N / TIM8_CH4N / BOOT1
PIN19---PC5 / UART1_RX / USART_RX / ADC2_IN15 / WKP3
PIN41---PB3 / JTDO / TRACESWO / TIM2_CH2 / TIM4_ETR / SPI1_SCK / I2S1_CK / SPI3_SCK / I2S3_CK / I3C_SCL / USART_CTS
PIN42---PB4 / NJTRST / TIM3_CH1 / SPI1_MISO / I2S1_MCK(extSD) / SPI3_MISO / I2S3_MCK(extSD) / I3C_SDA / USART_RTS
PIN43---PB5 / TIM3_CH2 / TIM8_CH3N / I2C1_SMBA / SPI1_MOSI / I2S1_SD / SPI3_MOSI / I2S3_SD / LPTIM_CH1 / WKP4
PIN44---PB6 / TIM4_CH1 / TIM8_CH4N / I2C1_SCL / SPI1_NSS / I2S1_WS / SPI3_NSS / I2S3_WS / UART1_TX / LPTIM_ETR / USART_TX
PIN45---PB7 / TIM4_CH2 / I2C1_SDA / I2S1_MCK / I2S3_MCK / UART1_RX / USART_RX / MDSW_OUT3
PIN46---PB8 / TIM4_CH3 / TIM8_CH1N / I2C1_SCL / UART1_CTS / COMP1_OUT / CAN1_RX / USART_CTS
PIN46---PH3 / BOOT0
PIN47---PB9 / TIM4_CH4 / TIM8_CH2N / I2C1_SDA / SPI2_NSS / I2S2_WS / UART1_RTS / COMP2_OUT / CAN1_TX / USART_RTS
PIN22---PB10 / TIM2_CH3 / I2C2_SCL / SPI2_SCK / I2S2_CK / UART3_TX / LPTIM_CH1 / LPUART_RX
PIN22---PC0 / TIM1_BKIN3 / I2C1_SCL / UART4_TX / LPUART_RX / ADC12_IN11
PIN24---PB11 / TIM2_CH4 / I2C2_SDA / I2S2_MCK / UART3_RX / LPTIM_ETR / LPUART_TX / MDSW_OUT1
PIN24---PC3 / I2C2_SDA / SPI2_MOSI / I2S2_SD / UART4_RTS / ADC1_IN13
PIN25---PB12 / TIM1_BKIN2 / TIM5_ETR / I2C2_SMBA / SPI2_NSS / I2S2_WS
PIN25---PC2 / I2C2_SCL / SPI2_MISO / I2S2_MCK(extSD) / UART4_CTS / ADC1_IN12
PIN26---PB13 / TIM1_CH1N / TIM8_CH1N / SPI2_SCK / I2S2_CK / UART3_CTS
PIN27---PB14 / TIM1_CH2N / TIM8_CH2N / SPI2_MISO / I2S2_MCK(extSD) / UART3_RTS / MDSW_IN2
PIN27---PC1 / TIM8_BKIN2 / I2C1_SDA / UART4_RX / LPUART_TX / ADC12_IN11
PIN28---PB15 / TIM1_CH3N / TIM8_CH3N / SPI2_MOSI / I2S2_SD / WKP5

PIN16---PC4 / UART1_TX / USART_TX / ADC2_IN14
PIN29---PC6 / TIM3_CH1 / TIM8_CH1 / I2C1_SCL / SPI2_MISO / I2S2_MCK(extSD)
PIN39---PC10 / SPI3_SCK / I2S3_CK / UART3_TX / UART4_TX / I3C_SCL
PIN40---PC11 / SPI3_MISO / I2S3_MCK(extSD) / UART3_RX / UART4_RX / I3C_SDA
PIN02---PC13 / TIM8_CH1 / MDSW_IN0 / WKP1 / BKP_TAMPER
PIN03---PC14 / TIM8_CH2 / OSC32_IN
PIN04---PC15 / TIM8_CH3 / OSC32_OUT

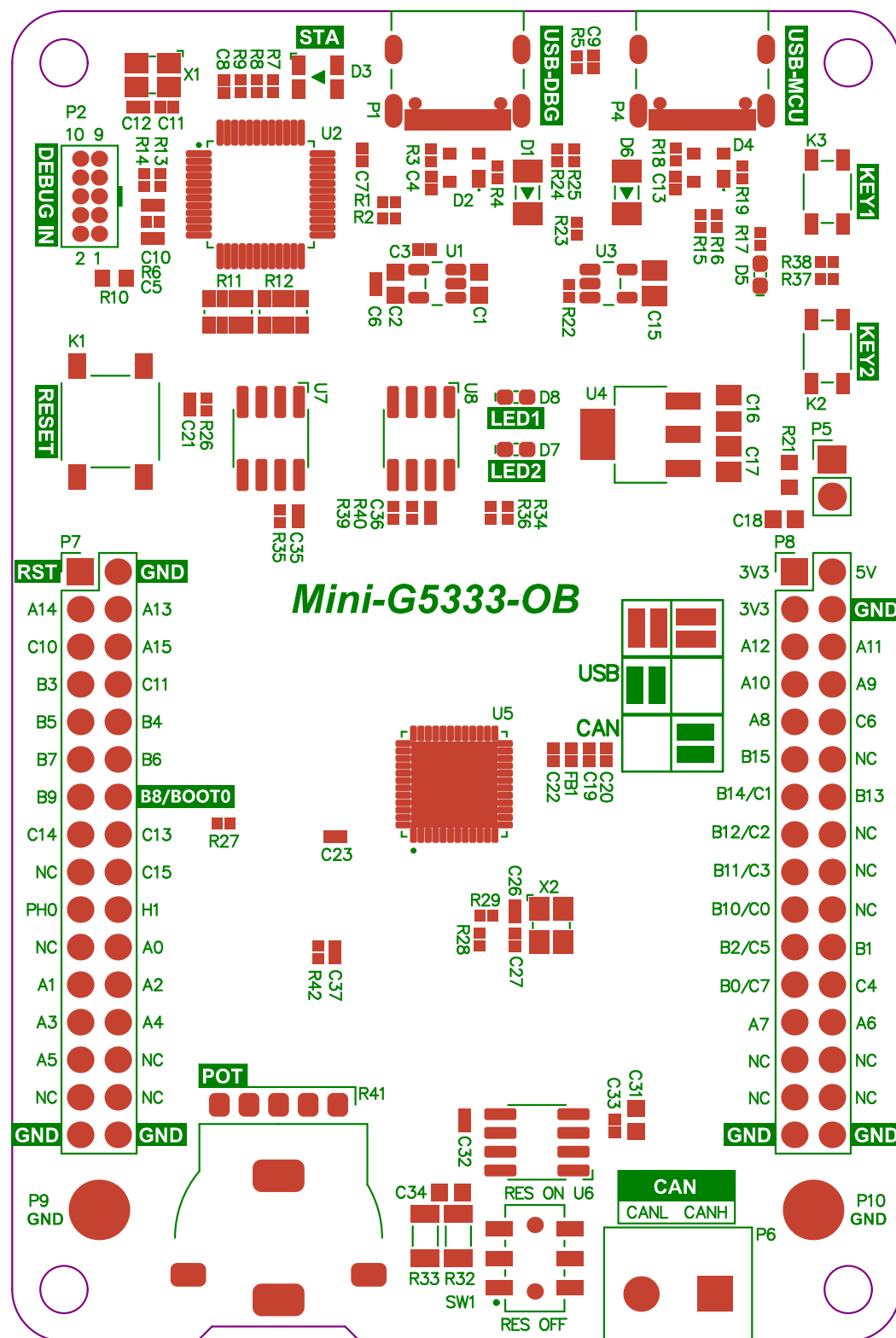
PIN05---PH0 / OSC_IN
PIN06---PH1 / OSC_OUT

Project Title		MB101-Mini-G5333-OB	
Sheet Title	05---Target MCU IO Expansion	Drawn	Lu Weiwei
Size	A3	Rev	A
Sheet	5	Checked	Li Hongpeng
Data	2023.07.03	Approved	Chen Do





DNP : DO NOT POPULATE





MM32G5333D6QV

Mini-G5333 | MB-101 | V2.0

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DEBUG IN

SWDIO/TMS	VCC
SWCLK/TCK	GND
TDO/SWO	GND
TDI	NC
nRESET	NC

1



Measuring Current

+  ← +3V3
↓
-  ← +3V3_MCU

5V  3V3

GND  3V3

A11  A12

A9  A10

C6  A8

NC  B15

B13  B14/C1

NC  B12/C2

NC  B11/C3

NC  B10/C0

B1  B2/C5

C4  B0/C7

A6  A7

NC  NC

NC  NC

GND  **GND**

GND  **RST**

A13  A14

A15  C10

C11  B3

B4  B5

B6  B7

B8/BOOT0  B9

C13  C14

C15  NC

H1  PH0

A0  NC

A2  A1

A4  A3

NC  A5

NC  NC

GND  **GND**

CANH
↓
CANL
↓

