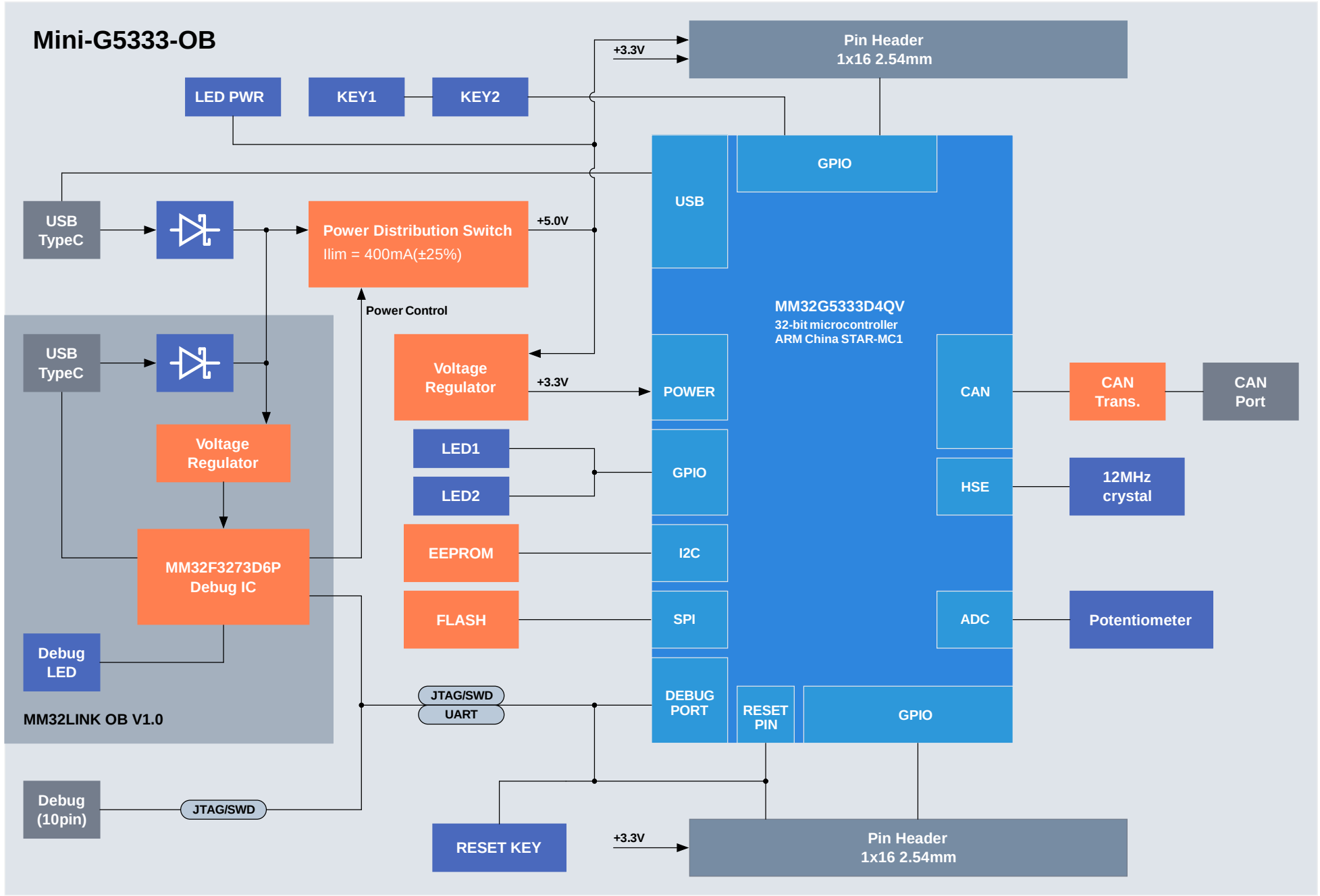
Mini-G5333-OB
Pin Header
1x16 2.54mm
+3.3V
LED PWR
KEY1
KEY2
USB
GPIO
USB
TypeC
Power Distribution Switch
Ilim = 400mA(±25%)
+5.0V
Power Control
MM32G5333D4QV
32-bit microcontroller
ARM China STAR-MC1
USB
TypeC
Voltage
Regulator
+3.3V
POWER
CAN
CAN
Trans.
CAN
Port
Voltage
Regulator
LED1
LED2
GPIO
HSE
12MHz
crystal
EEPROM
I2C
MM32F3273D6P
Debug IC
FLASH
SPI
ADC
Potentiometer
Debug
LED
JTAG/SWD
UART
DEBUG
PORT
RESET
PIN
GPIO
MM32LINK OB V1.0
Debug
(10pin)
JTAG/SWD
RESET KEY
+3.3V
Pin Header
1x16 2.54mm
Connector
General Component
Chip
Target MCU
Project Title
Mini-G5333-OB
Sheet Title
System Block Diagram
Size A3
Rev A
Sheet 1 / 9
Data 2023-05-11
Drawn Lu Weiwei
Checked Li Hongpeng
Approved Chen Do
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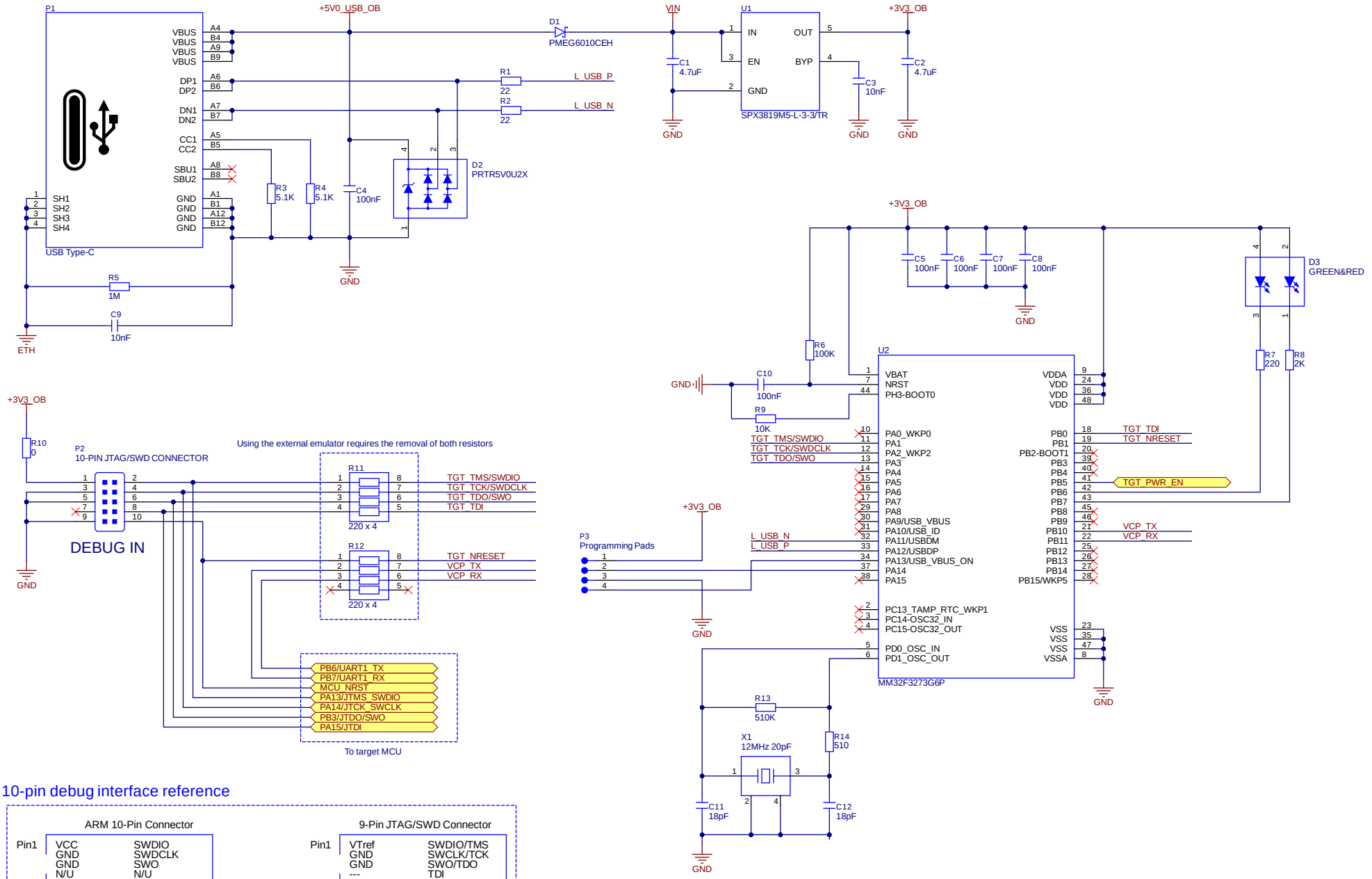

10-pin debug interface reference

ARM 10-Pin Connector			9-Pin JTAG/SWD Connector		
Pin1	VCC	SWDIO	Pin1	VTref	SWDIO/TMS
	GND	SWDCLK		GND	SWCLK/TCK
	GND	SWO		GND	SWO/TDO
	N/U	N/U		---	TDI
	GND	RESET		NC	nRESET
	1.27mm/50mil			1.27mm/50mil	

DNP : DO NOT PLACE

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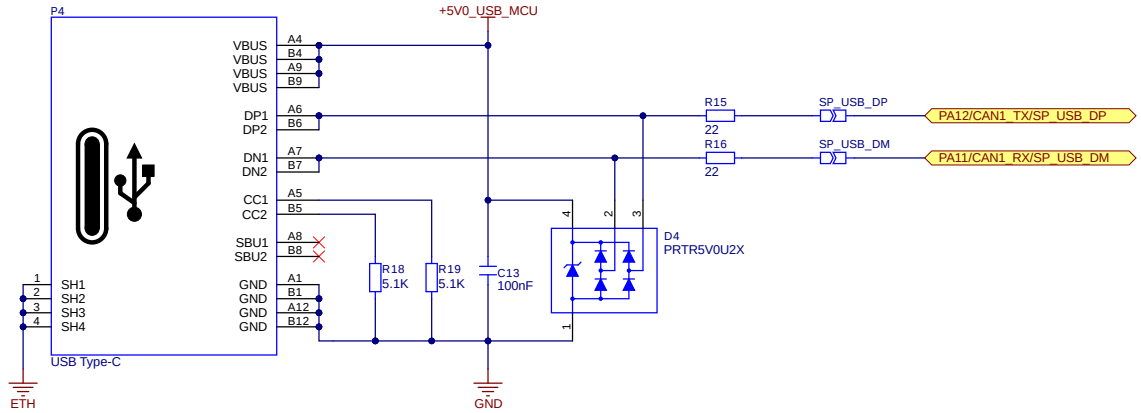

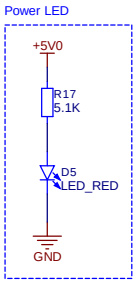

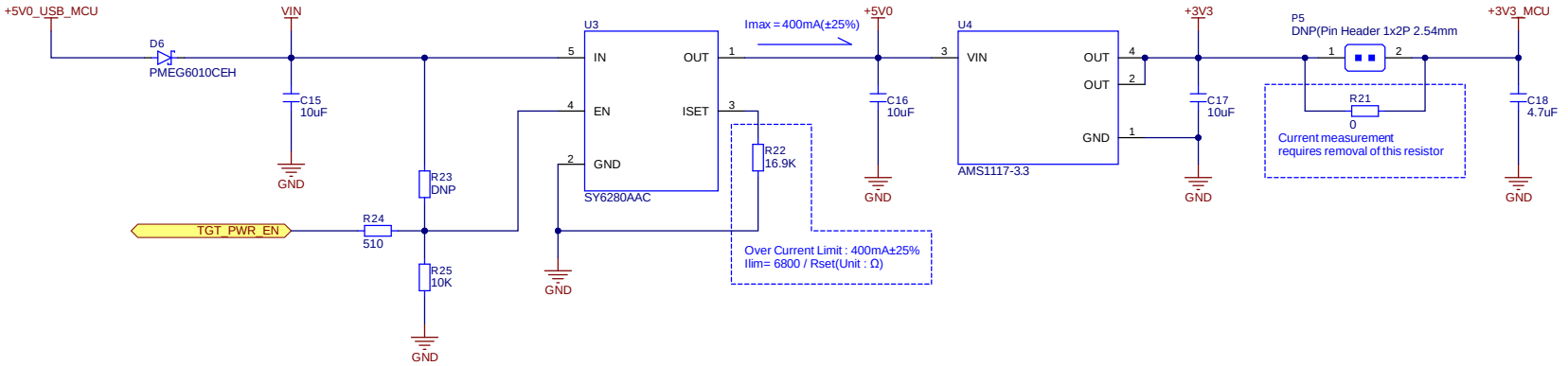

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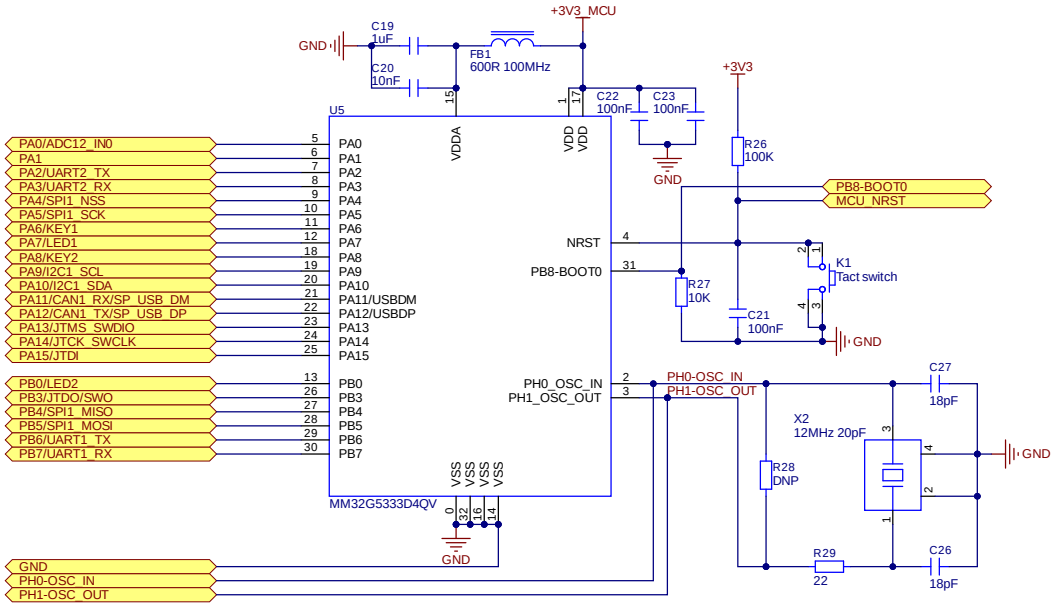

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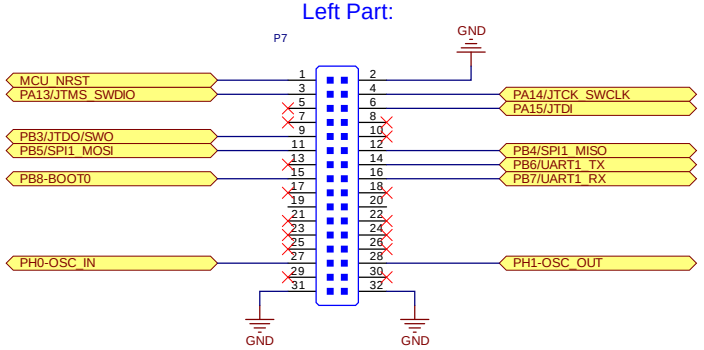
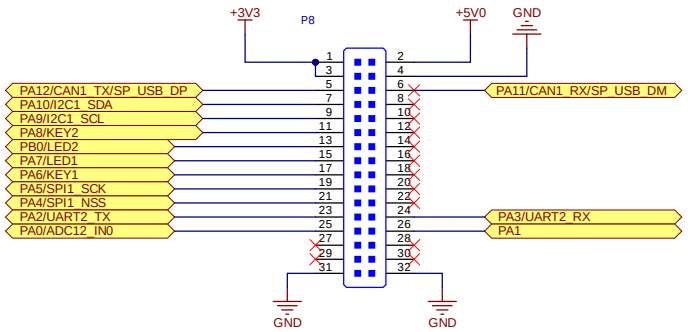
Left Part:



Right Part:



Pin assignment：

PIN5---PA0---TIM2_CH1---TIM2_ETR---TIM5_CH1---TIM8_ETR---UART2_CTS---UART4_TX---I3C_SCL---ADC12_IN0---COMP12_INP0---COMP1_INM2---WKP0
PIN6---PA1---TIM2_CH2---TIM5_CH2---UART2_RTS---UART4_RX---I3C_SDA---ADC12_IN1---COMP12_INP1
PIN7---PA2---TIM2_CH3---TIM5_CH3---UART2_TX---COMP2_OUT---LPUART_TX---ADC12_IN2---COMP12_INP2---COMP2_INM2---WKP2
PIN8---PA3---TIM2_CH4---TIM5_CH4---I2S1_MCK---UART2_RX---LPUART_RX---ADC12_IN3---COMP12_INP3
PIN9---PA4---TIM5_ETR---SPI1_NSS---I2S1_WS---SPI3_NSS---I2S3_WS---USART_TX---ADC12_IN4---COMP12_INM0---DAC1_OUT
PIN10---PA5---TIM2_CH1---TIM2_ETR---TIM3_ETR---TIM8_CH1N---SPI1_SCK---I2S1_CK---USART_RX---ADC12_IN5---COMP12_INM1
PIN11---PA6---TIM1_BKIN1---TIM3_CH1---TIM8_BKIN1---SPI1_MISO---I2S1_MCK(extSD)---COMP1_OUT---ADC12_IN6
PIN12---PA7---TIM1_CH1N---TIM3_CH2---TIM8_CH1N---SPI1_MOSI---I2S1_SD---COMP2_OUT---CRS_SYNC---MDSW_IN1---ADC12_IN7
PIN18---PA8---MCO1---TIM1_CH1---TIM3_ETR---I2C1_SCL---USART_CK
PIN19---PA9---TIM1_CH2---I2C1_SCL---UART1_TX---USB_FS_VBUS---USART_TX
PIN20---PA10---TIM1_CH3---I2C1_SDA---UART1_RX---USB_FS_ID---USART_RX
PIN21---PA11---TIM1_CH4---I2C1_SMBA---UART1_CTS---COMP1_OUT---CAN1_RX---USART_CTS---USB_FS_DM
PIN22---PA12---TIM1_ETR---UART1_RTS---COMP2_OUT---CAN1_TX---USART_RTS--USB_FS_DP
PIN23---PA13---JTMS_SWDIO---I2C1_SMBA---USB_FS_VBUSON---MDSW_OUT2
PIN24---PA14---JTCK_SWCLK---I2C1_SDA---I2S3_MCK---UART4_CTS---MDSW_IN3
PIN25---PA15---JTDI---TIM2_CH1---TIM2_ETR---I2C1_SCL---SPI1_NSS---I2S1_WS---SPI3_NSS---I2S3_WS---UART4_RTS

PIN13---PB0---TIM1_CH2N---TIM3_CH3---TIM8_CH2N---ADC12_IN8
PIN26---PB3---JTDO---TRACESWO---TIM2_CH2---TIM4_ETR---SPI1_SCK---I2S1_CK---SPI3_SCK---I2S3_CK---I3C_SCL---USART_CTS
PIN27---PB4---NJTRST---TIM3_CH1---SPI1_MISO---I2S1_MCK(extSD)---SPI3_MISO---I2S3_MCK(extSD)---USART_RTS
PIN28---PB5---TIM3_CH2---TIM8_CH3N---I2C1_SMBA---SPI1_MOSI---I2S1_SD---SPI3_MOSI---I2S3_SD---LPTIM_CH1
PIN29---PB6---TIM4_CH1---TIM8_CH4N---I2C1_SCL---SPI1_NSS---I2S1_WS---SPI3_NSS---I2S3_WS---UART1_TX---LPTIM_ETR---USART_TX
PIN30---PB7---TIM4_CH2---I2C1_SDA---I2S1_MCK---I2S3_MCK---UART1_RX---USART_RX---MDSW_OUT3
PIN31---PB8---TIM4_CH3---TIM8_CH1N---I2C1_SCL---UART1_CTS---COMP1_OUT---CAN1_RX--USART_CTS---BOOT0

PIN2---PH0---OSC_IN
PIN3---PH1---OSC_OUT

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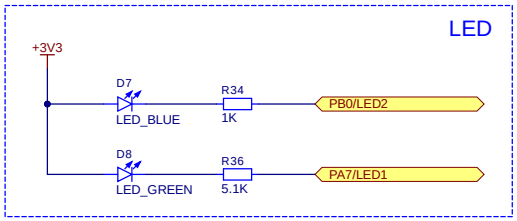

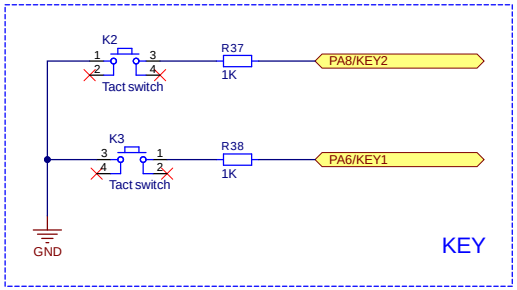

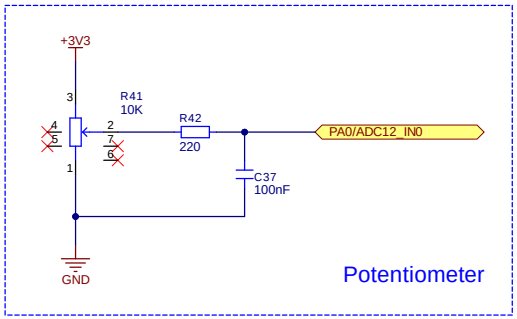

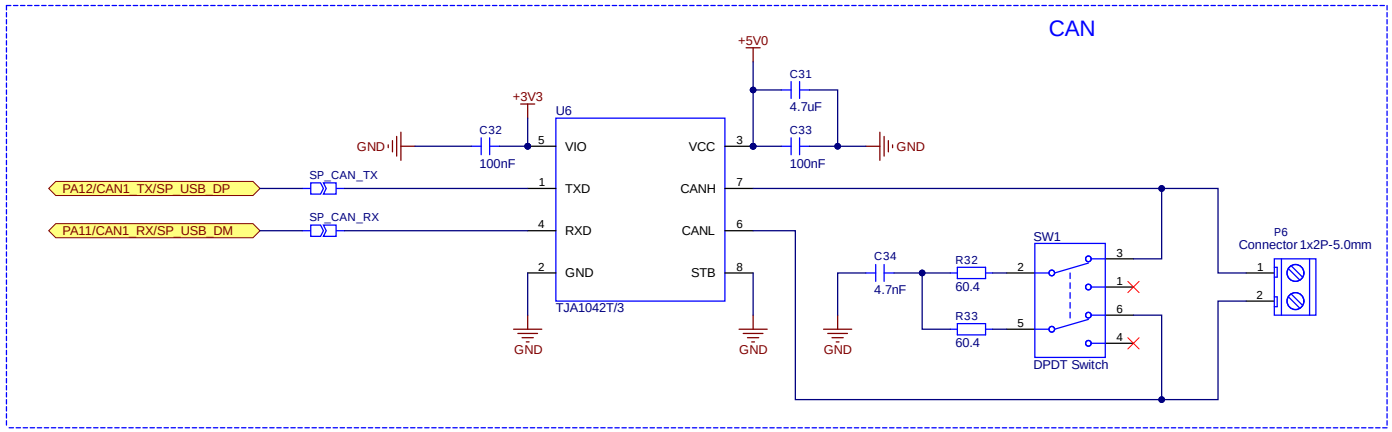

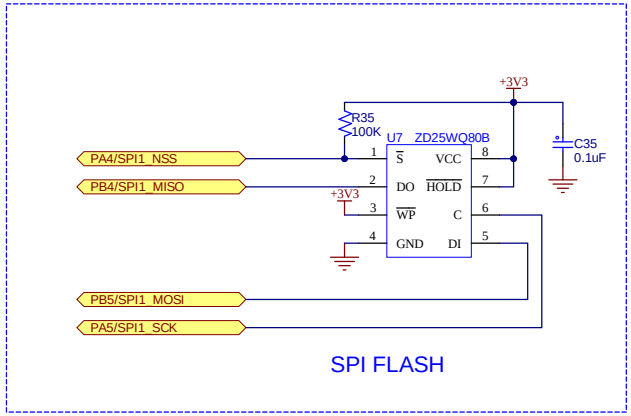

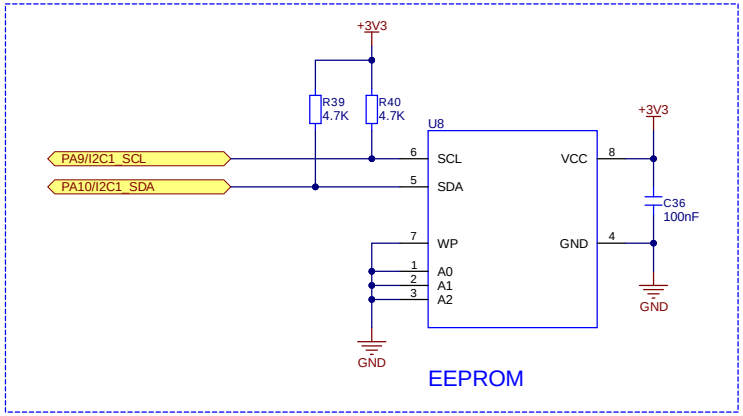

DNP : DO NOT POPULATE

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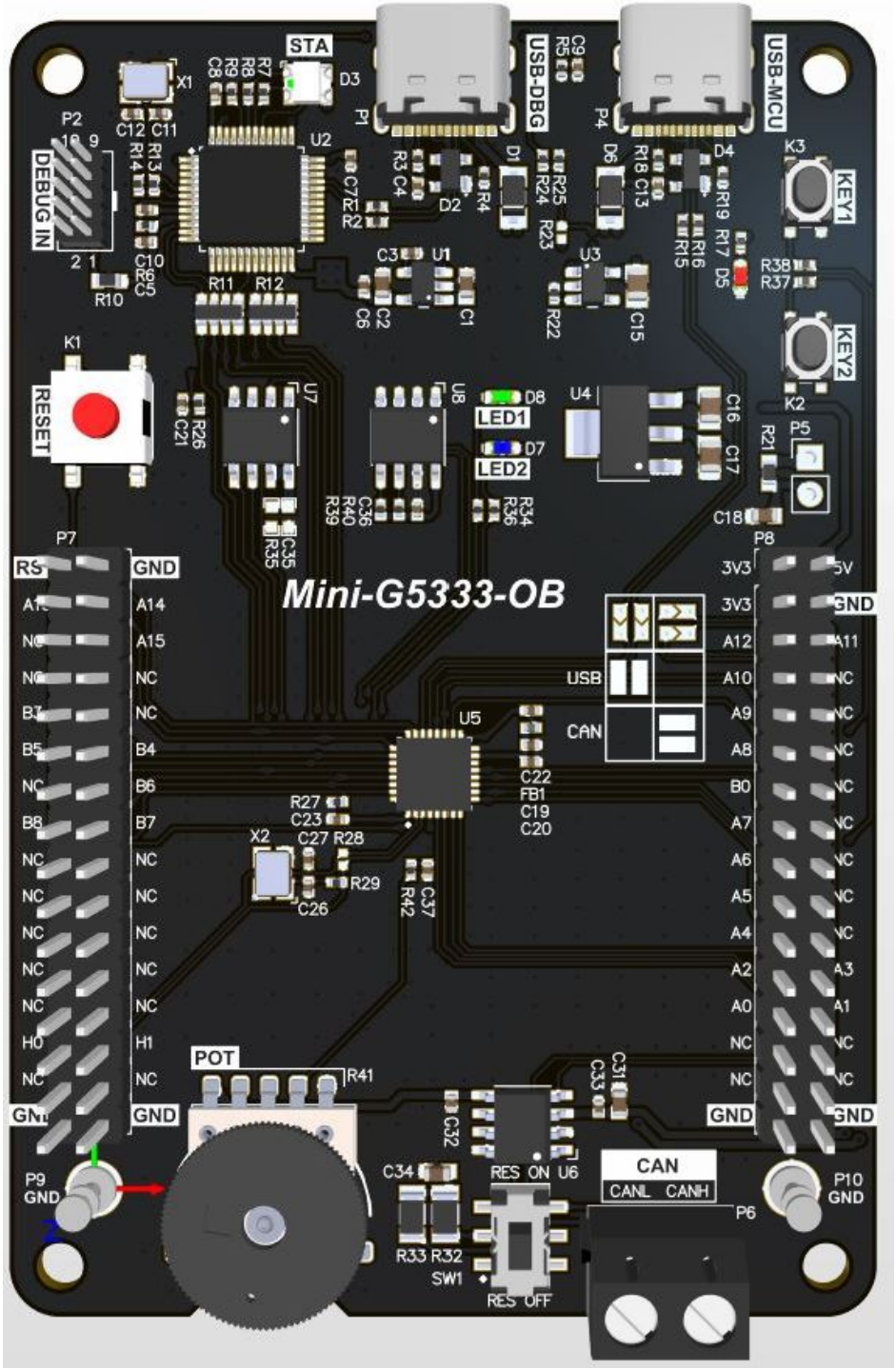

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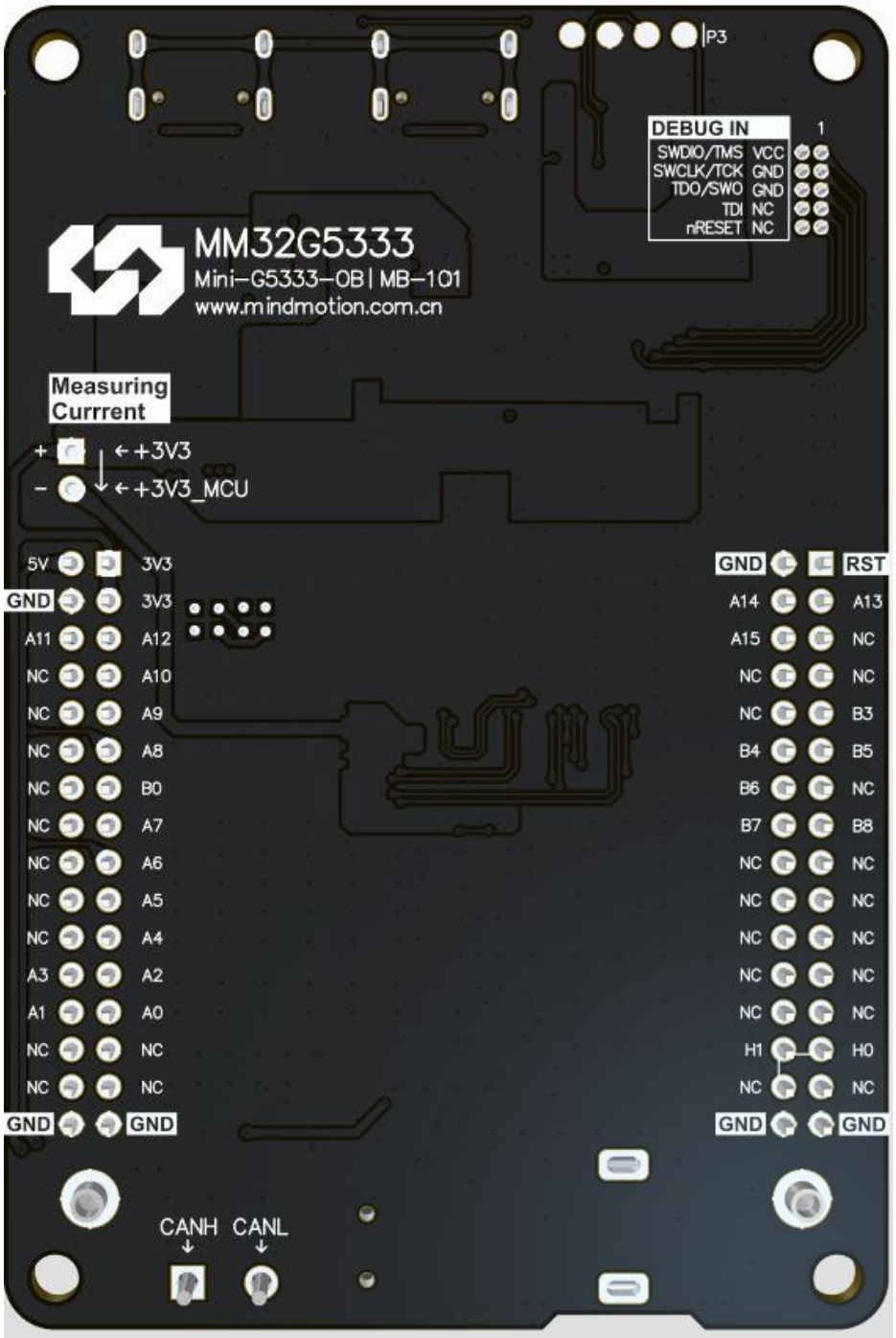

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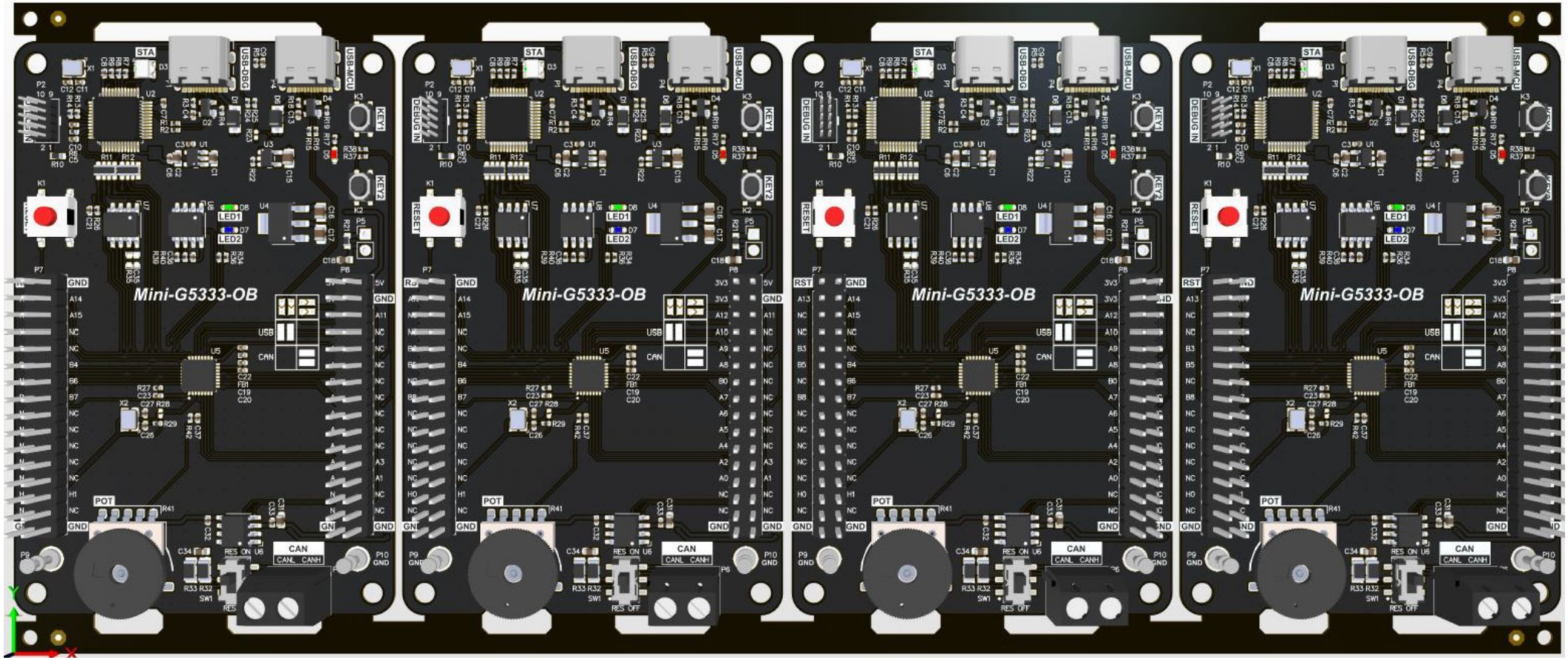

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