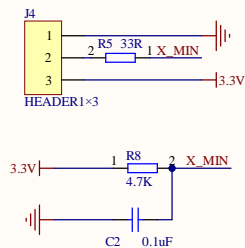
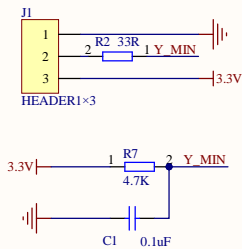


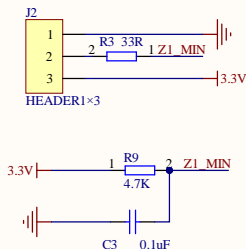
X_Min



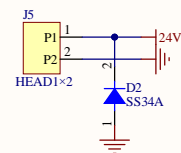
Y_Min



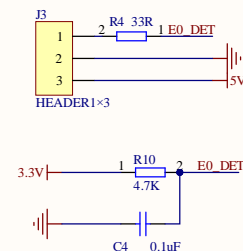
Z1_Min



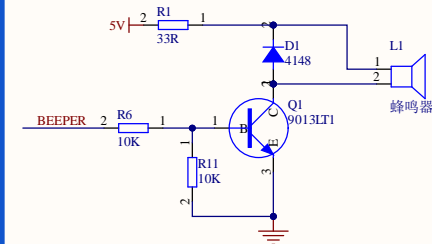
Fan4



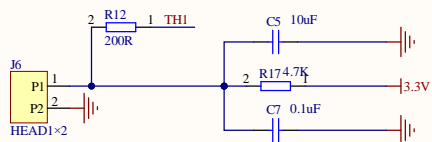
Filament Sensor



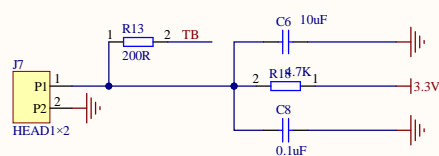
Buzzer



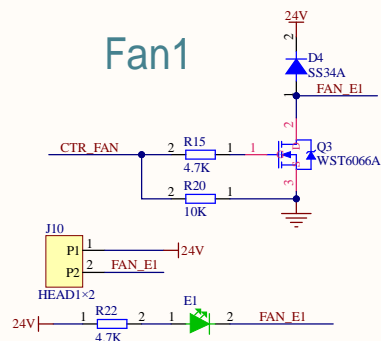
Hotend Thermistor



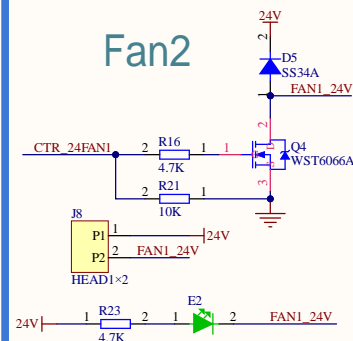
Hotbed Thermistor



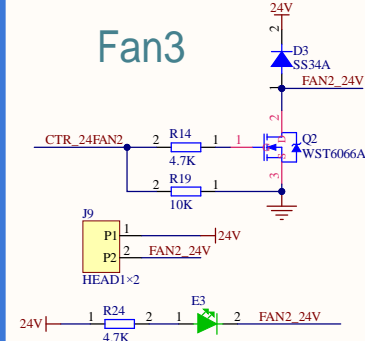
Fan1



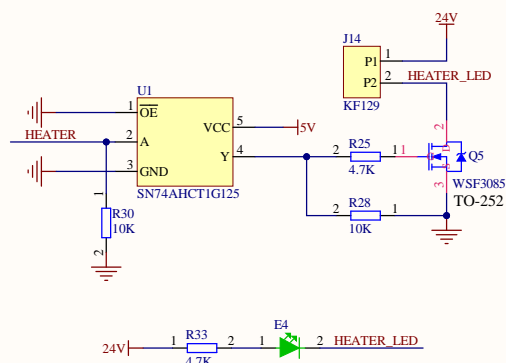
Fan2



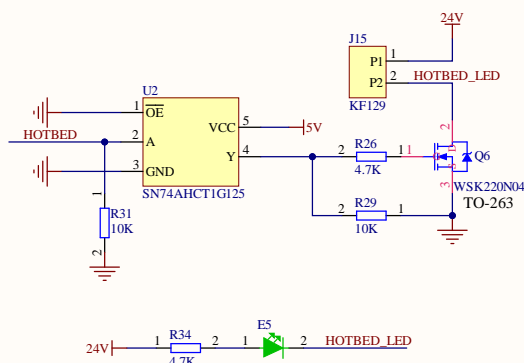
Fan3



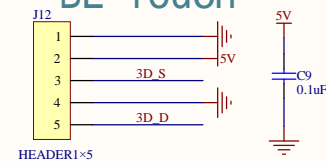
Hotend Heating Control



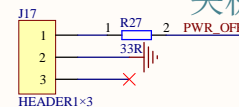
Hotbed Heating Control



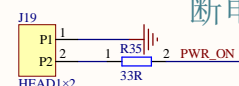
BL-Touch



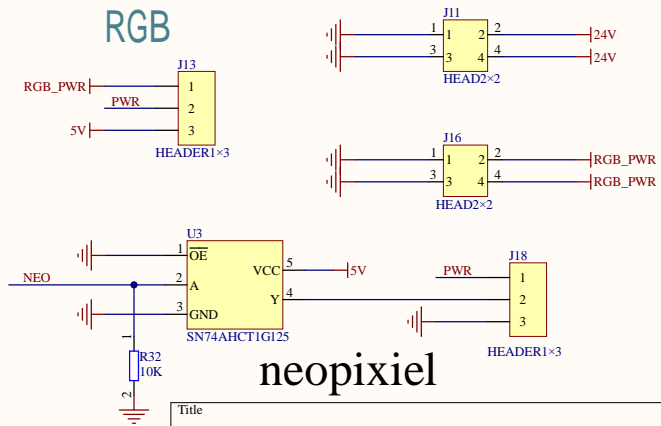
关机接口



断电续流



RGB



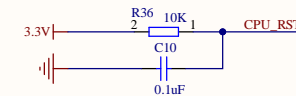
neopixel

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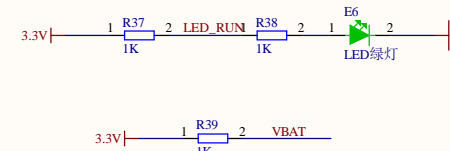
CPU(STM32F103VET6)

| | | |
|------------|----|--|
| U4 | | |
| FSMC_A0 | 58 | PD11/FSMC_A16/USART3_CTS |
| Z2_MIN | 59 | PD12/FSMC_A17/TIM4_CH1/USART3_RTS |
| FSMC_LIGHT | 60 | PD13/FSMC_A18/TIM4_CH2 |
| PWR_DET | 2 | PE3/TRACED0/FSMC_A19 |
| Z1_EN | 3 | PE4/TRACED1/FSMC_A20 |
| Y_DIR | 4 | PE5/TRACED2/FSMC_A21 |
| Y_STEP | 5 | PE6/TRACED3/FSMC_A22 |
| LED_RUN | 1 | PE2/TRACED4/FSMC_A23 |
| | | PA8/USART1_CK/TIM1_CH1/MCO |
| FSMC_D0 | 61 | PD14/FSMC_D0/TIM4_CH3 |
| FSMC_D1 | 62 | PD15/FSMC_D1/TIM4_CH4 |
| FSMC_D2 | 81 | PD0/OSC_IN/FSMC_D2/CANRX |
| FSMC_D3 | 82 | PD1/OSC_OUT/FSMC_D3/CANTX |
| FSMC_D4 | 38 | PE7/FSMC_D4/TIM1_ETR |
| FSMC_D5 | 39 | PE8/FSMC_D5/TIM1_CH1N |
| FSMC_D6 | 40 | PE9/FSMC_D6/TIM1_CH1 |
| FSMC_D7 | 41 | PE10/FSMC_D7/TIM1_CH2N |
| FSMC_D8 | 42 | PE11/FSMC_D8/TIM1_CH2 |
| FSMC_D9 | 43 | PE12/FSMC_D9/TIM1_CH3N |
| FSMC_D10 | 44 | PE13/FSMC_D10/TIM1_CH3 |
| FSMC_D11 | 45 | PE14/FSMC_D11/TIM1_CH4 |
| FSMC_D12 | 46 | PE15/FSMC_D12/TIM1_BKIN |
| FSMC_D13 | 55 | PD8/FSMC_D13/USART3_TX |
| FSMC_D14 | 56 | PD9/FSMC_D14/USART3_RX |
| FSMC_D15 | 57 | PD10/FSMC_D15/USART3_CK |
| FSMC_NOE | 85 | PD4/FSMC_NOE/USART2_RTS |
| FSMC_NWE | 86 | PD5/FSMC_NWE/USART2_TX |
| FSMC_NE4 | 88 | PD7/FSMC_NE1/FSMC_NCE2/USART2_CK |
| CTR_24FAN1 | 84 | PD3/FSMC_CLK/USART2_CTS |
| CTR_24FAN2 | 87 | PD6/FSMC_NWAIT/USART2_RX |
| E0_STEP | 93 | PB7/I2C1_SDA/FSMC_NADV/TIM4_CH2/USART1_RX |
| CTR_FAN | 98 | PE1/FSMC_NBL1 |
| Z1_STEP | 97 | PE0/RIM4_ETR/FSMC_NBL0 |
| LCD_CS | 29 | PA4/SPI1_NSS/DAC_OUT1/USART2_CK/ADC12_IN4 |
| A3 | 30 | PA5/SPI1_SCK/DAC_OUT2/ADC12_IN5 |
| LCD_EN | 31 | PA6/SPI1_MISO/TIM8_BKIN/ADC12_IN6/TIM3_CH1/TIM1_BKIN |
| X_MIN | 32 | PA7/SPI1_MOSI/TIM8_CH1N/ADC12_IN7/TIM3_CH2/TIM1_CH1N |
| Flash_CS | 51 | PB12/SPI2_NSS/I2S2_WS/I2C2_SMBAL/USART3_CK/TIM1_BKIN |
| SPI2_SCK | 52 | PB13/SPI2_SCK/I2S2_CK/USART3_CTS/TIM1_CH1N |
| SPI2_MISO | 53 | PB14/SPI2_MISO/TIM1_CH2N/USART3_RTS |
| SPI2_MOSI | 54 | PB15/SPI2_MOSI/I2S2_SD/TIM1_CH3N |
| CPU_RST | 14 | NRST |
| BOOT1 | 37 | PB2/BOOT1 |
| BOOT0 | 73 | NC |
| BOOT0 | 94 | BOOT0 |
| | 19 | VSSA |
| | 20 | VREF |
| | 21 | VREF+ |
| | 22 | VDDA |
| X1_IN | 12 | OSC_IN |
| X1_OUT | 13 | OSC_OUT |
| | | STM32F103VET6 |
| | | PB9/TIM4_CH4/SDIO_D5/I2C1_SDA/CANTX |
| | | PB8/TIM4_CH3/SDIO_D4/I2C1_SCL/CANRX |
| | | PB6/I2C1_SCL/TIM4_CH1/USART1_TX |
| | | PB5/I2C1_SMBAL/SPI3_MOSI/I2S3_SD/TIM3_CH2/SPI1_MOSI |
| | | PB1/ADC12_IN9/TIM3_CH4/TIM8_CH3N/TIM1_CH3N |
| | | PB0/ADC12_IN8/TIM3_CH3/TIM8_CH2N/TIM1_CH2N |
| | | PC9/TIM8_CH4/SDIO_D1/TIM3_CH4 |
| | | PC8/TIM8_CH3/SDIO_D0/TIM3_CH3 |
| | | PC7/I2S3_MCK/TIM8_CH2/SDIO_D7/TIM3_CH2 |
| | | PC6/I2S2_MCK/TIM8_CH1/SDIO_D6/TIM3_CH1 |
| | | PC5/ADC12_IN15 |
| | | PC4/ADC12_IN14 |
| | | PC3/ADC123_IN13 |
| | | PC2/ADC123_IN12 |
| | | PC1/ADC123_IN11 |
| | | PC0/ADC123_IN10 |
| | | PD2/TIM3_ETR/UART5_RX/SDIO_CMD |
| | | PC12/UART5_TX/SDIO_CK/USART3_CK |
| | | PC11/USART4_RX/SDIO_D3/USART3_RX |
| | | PC10/USART4_TX/SDIO_D2/USART3_TX |
| | | PB11/I2C2_SDA/USART3_RX/TIM2_CH4 |
| | | PB10/I2C2_SCL/USART3_TX/TIM2_CH3 |
| | | PA3/USART2_RX/TIM5_CH4/ADC123_IN3/TIM2_CH4 |
| | | PA2/USART2_TX/TIM5_CH3/ADC123_IN2/TIM2_CH3 |
| | | PA1/USART2_RTS/ADC123_IN1/TIM5_CH2/TIM2_CH2 |
| | | PA0/WKUP/USART2_CTS/ADC123_IN0/TIM2_CH1ETR/TIM5_CH1/TIM8_ETR |
| | | PA12/USART1_RTS/USBDP/CANTX/TIM1_ETR |
| | | PA11/USART1_CTS/CANRX/TIM1_CH4/USBDM |
| | | PA10/USART1_RX/TIM1_CH3 |
| | | PA9/USART1_TX/TIM1_CH2 |
| | | VBAT |
| | | PC13/TAMPER/RTC |
| | | PC14/OSC32_IN |
| | | PC15/OSC32_OUT |
| | | JNTRST/PB4/SPI3_MISO/TIM3_CH1/SPI1_MISO |
| | | JTDO/PB3/TRACESWO/SPI3_SCK/I2S3_CK/TIM2_CH2/SPI1_SCK |
| | | JTD1/PA15/SPI3_NSS/I2S3_WS/TIM2_CH1_ETR/SPI1_NSS |
| | | JTCK/SWCLK/PA14 |
| | | JTMS/SWDIO/PA13 |
| | | VDD1 |
| | | VDD2 |
| | | VDD3 |
| | | VDD4 |
| | | VDD5 |
| | | VSS1 |
| | | VSS2 |
| | | VSS3 |
| | | VSS4 |
| | | VSS5 |
| | | 96 Z1_DIR |
| | | 95 E0_EN |
| | | 92 E0_DIR |
| | | 91 Z1_MIN |
| | | 36 A1 |
| | | 35 BTN-ENC |
| | | 67 3D_S |
| | | 66 SD_DI |
| | | 65 SD_MISO |
| | | 64 Z2_DIR |
| | | 63 LCD_RST |
| | | 34 NEO |
| | | 33 3D_D |
| | | 18 X_STEP |
| | | 17 HOTBED |
| | | 16 TH1 |
| | | 15 TB |
| | | 83 SD_MOSI |
| | | 80 SD_SCK |
| | | 79 SD_CS |
| | | 78 SD_D2 |
| | | 48 RXD3 |
| | | 47 TXD3 |
| | | 26 RXD2 |
| | | 25 TXD2 |
| | | 24 X_EN |
| | | 23 HEATER |
| | | 71 SD_CD |
| | | 70 E0_DET |
| | | 69 RXD1 |
| | | 68 TXD1 |
| | | 6 VBAT |
| | | 7 Y_EN |
| | | 8 X_DIR |
| | | 9 Y_MIN |
| | | 90 PWR_OFF |
| | | 89 PWR_ON |
| | | 77 BEEPER |
| | | 76 SW_CLK |
| | | 72 SW_DIO |
| | | 50 |
| | | 75 |
| | | 100 |
| | | 28 |
| | | 11 |
| | | 49 |
| | | 74 |
| | | 99 |
| | | 27 |
| | | 10 |

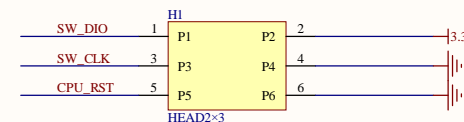
Reset



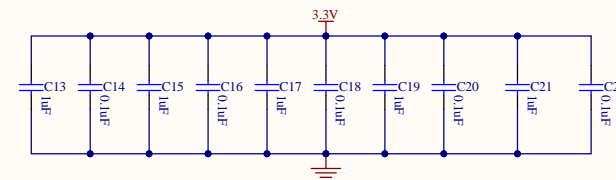
Operating State



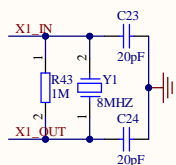
Debugging



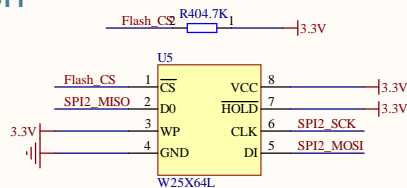
3.3V Filtering



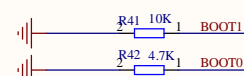
Crystl



Flash

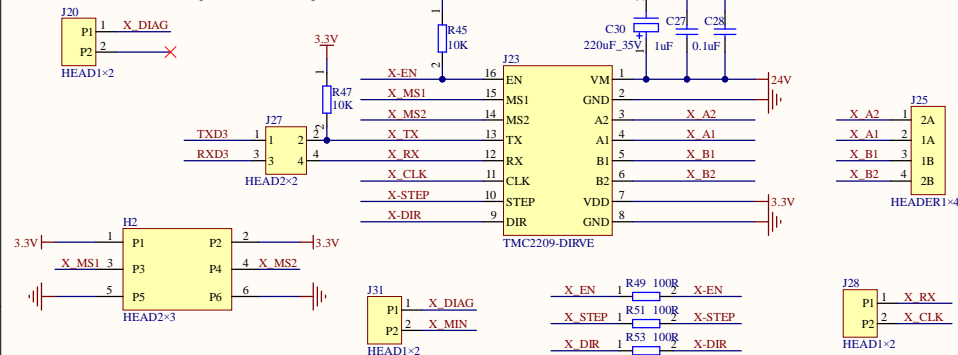


BOOT

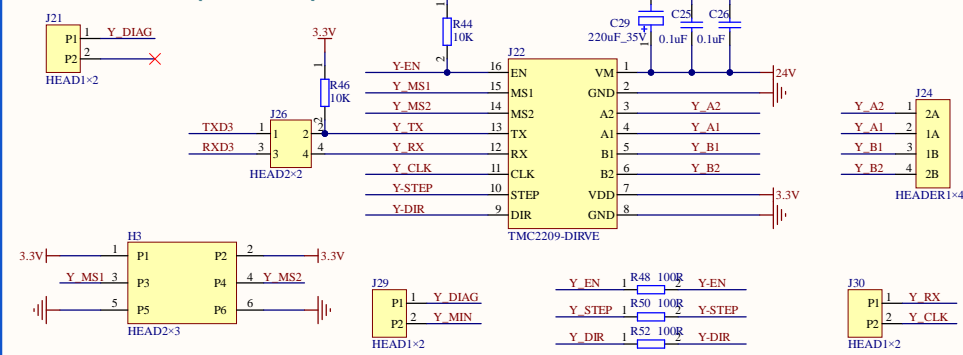


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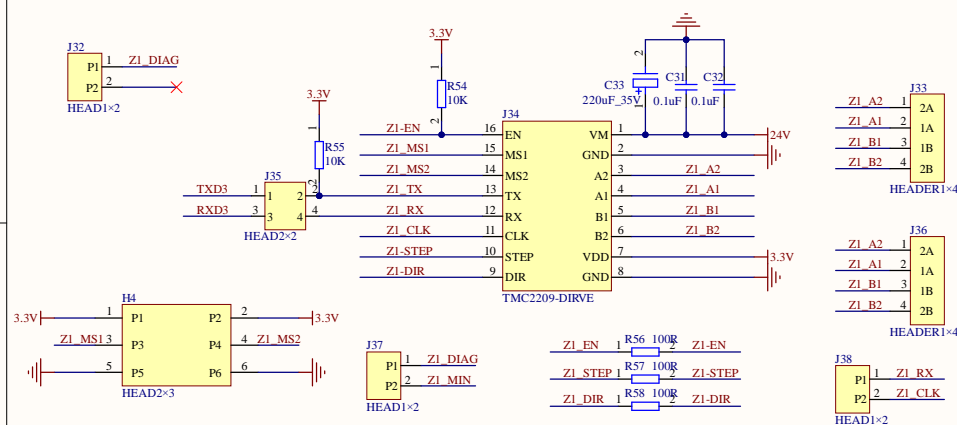
X-MOTOR (2209)



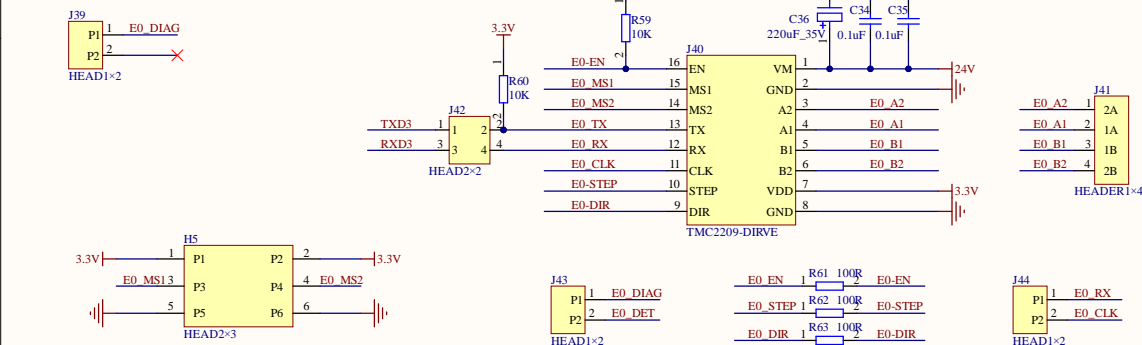
Y-MOTOR (2209)



Z1-MOTOR (2209)

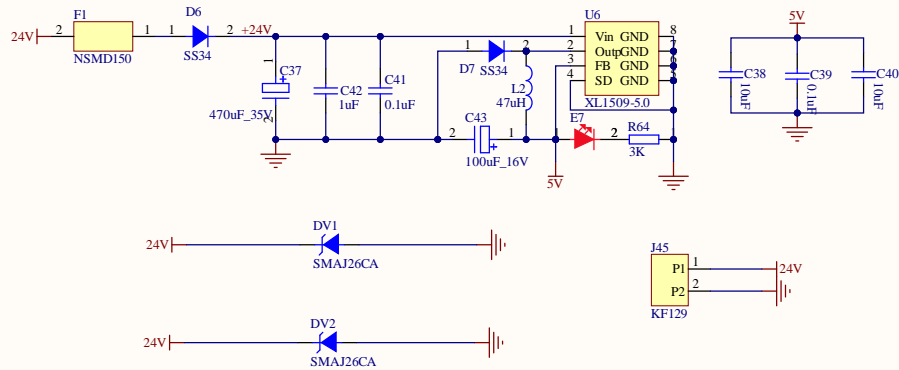


E0-MOTOR (2209)

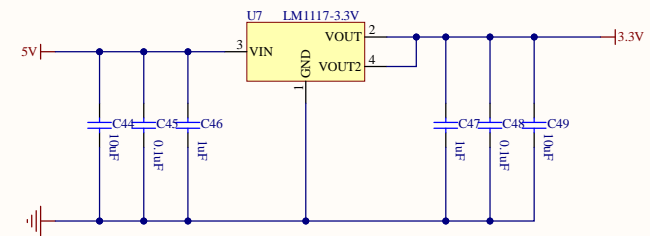


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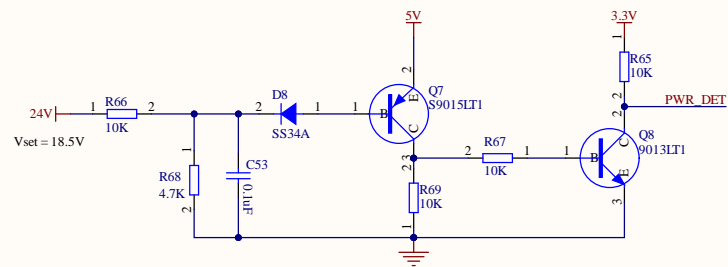
DC/24V To DC/5V



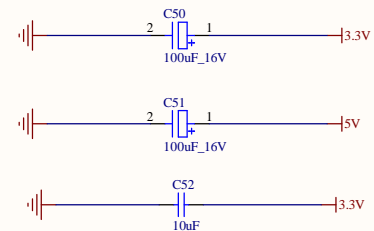
DC/5V To DC/3.3V



24V Power Failure Detection

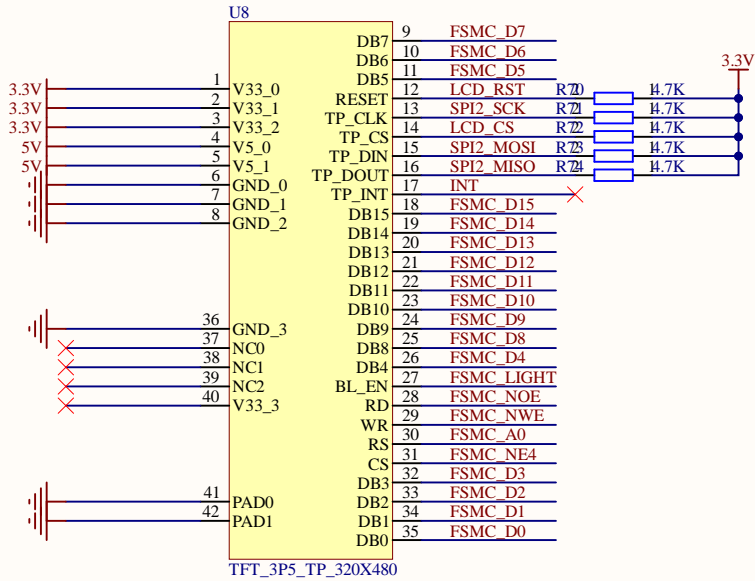
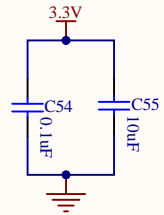


Filter Capacitor

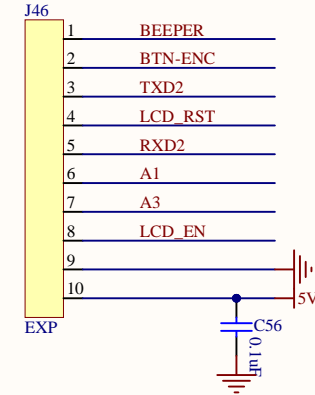


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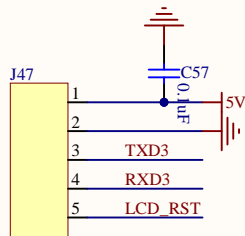
LCD



12864 Display

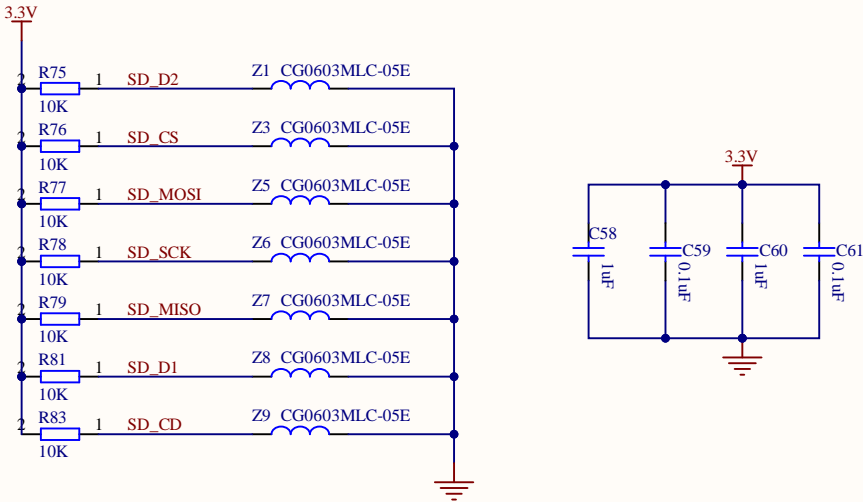


Serial Screen Interface

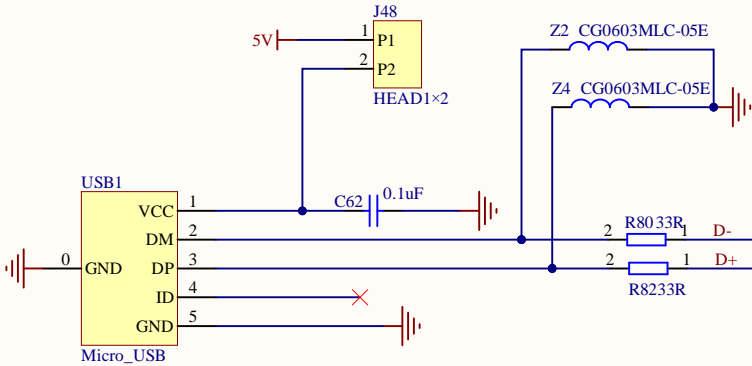


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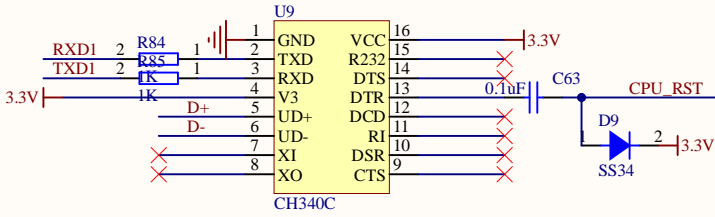
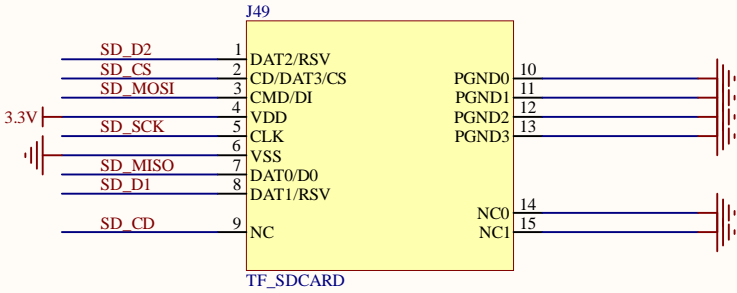
Port Protection



Micro USB



SD Card



| Title | | |
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| Date: | 4/28/2023 | Sheet of |
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