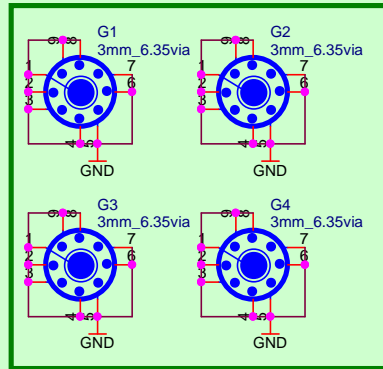


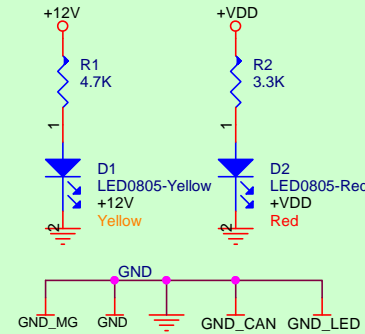
# MG04-08

2024.08 GR10\_2408A

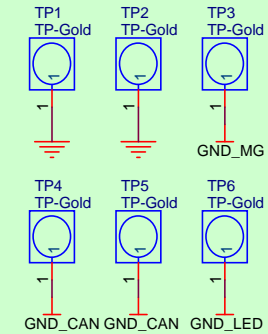
MG32F02N CAN



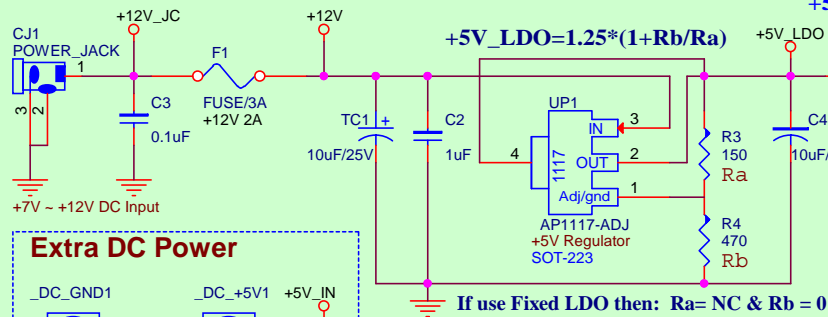
PCB Screw Position



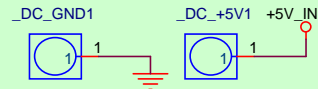
\*Short these ground planes on PCB



## Power Jack DC 7~12V In

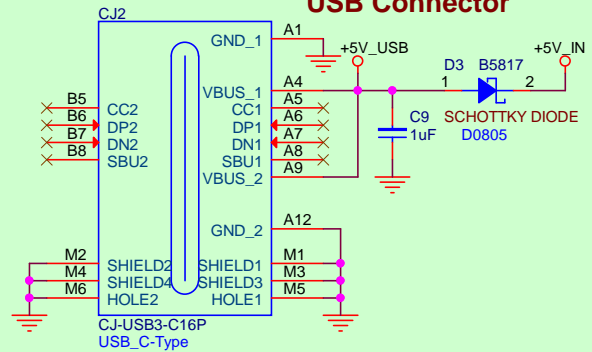


## Extra DC Power



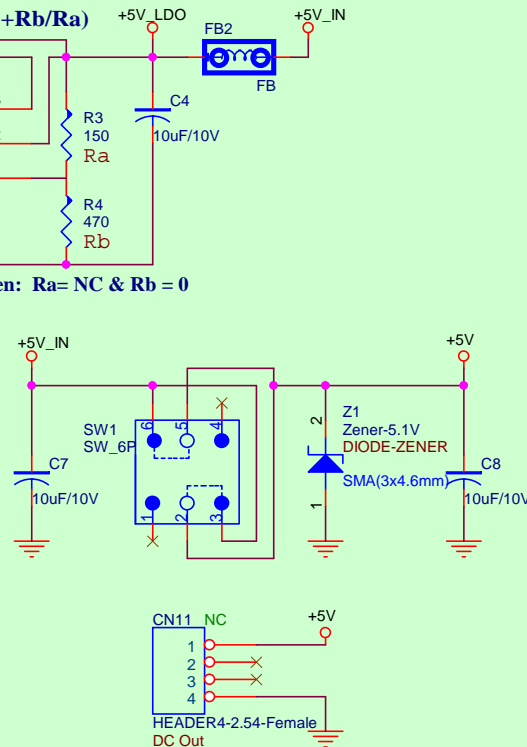
If use Fixed LDO then: Ra= NC & Rb = 0

## USB Connector

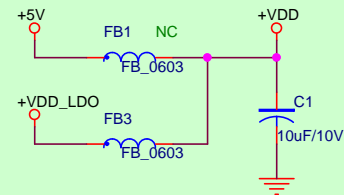


## System Power (5V)

+5V about 5.17 volt

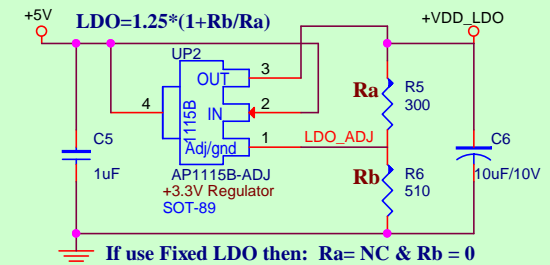


## VDD Power



## 3.3V IO Power

+VDD\_LDO about 3.37 volt

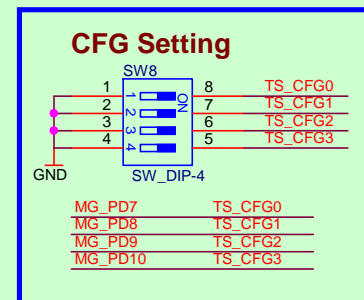
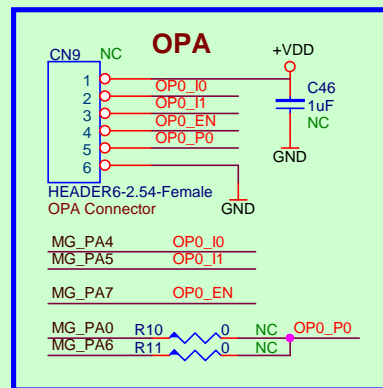
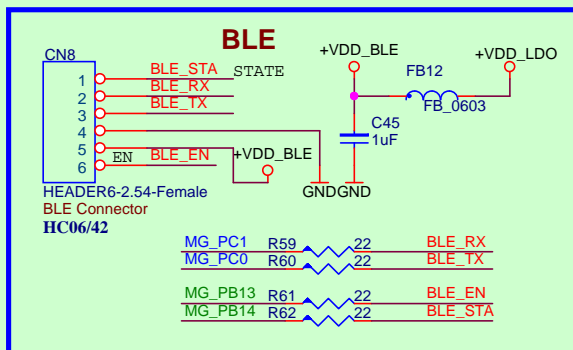
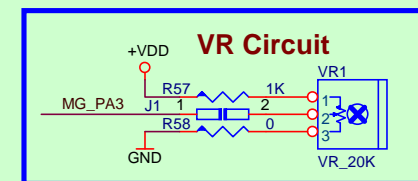
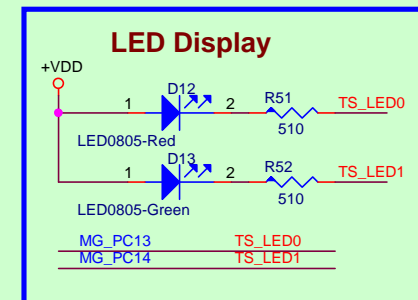
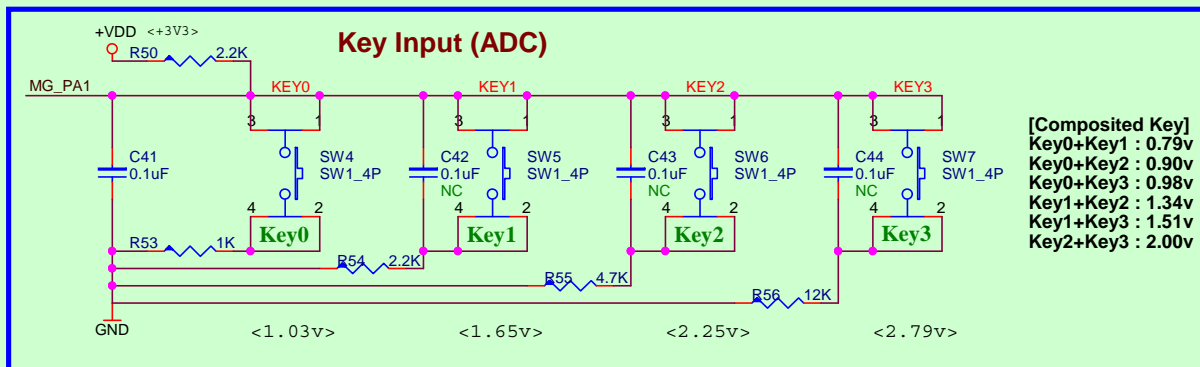
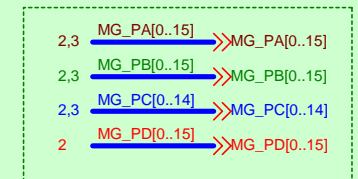
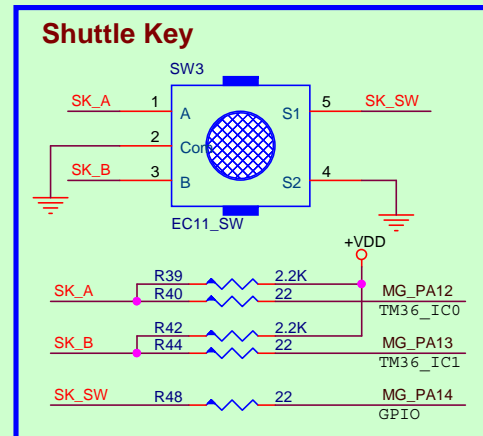
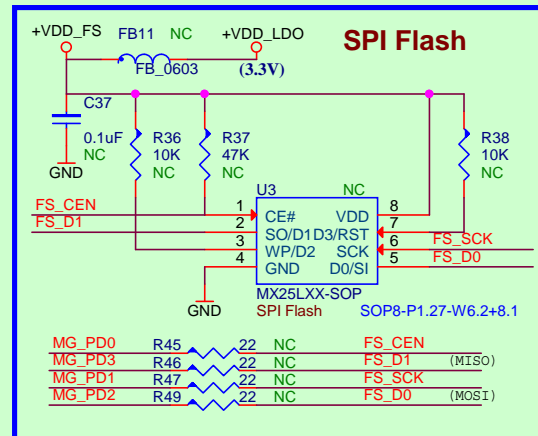
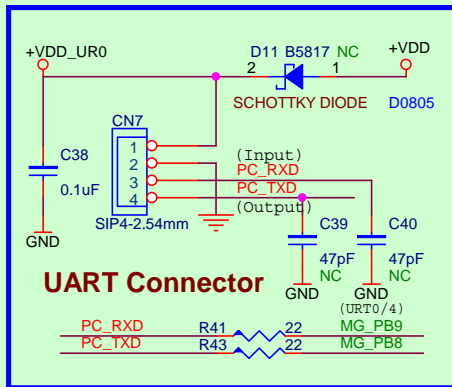


If use Fixed LDO then: Ra= NC & Rb = 0

	Title		
	megawin		
	System Power		
	Size C	Document Number	Rev
		MG04-08	1.0
Date: Monday, September 09, 2024   Sheet 1 of 7			







## Board Features :

- \* MG32F02N CAN Demo Board
- \* SPI LCD Interface

## Power

- \* 12V DC Jack , External DC SIP-2.54 \*2 , USB C-Type Connector
- \* Built-in 12V-to-5V Adjustable LDO Circuit
- \* Built-in 5V-to-3.3V(+VDD\_LDO) Adjustable LDO Circuit

## Debug IF

- \* SWD IF Connector SIP6-2.54 \*1
- \* UART Connector SIP4-2.54 \* 1

## Module IF

- \* PKT84S MCU Board Connector
- \* SPI LCD Module Connector 9x1
- \* MX Module Connector (CAN/I2C/UART)
- \* ARGB Connector
- \* BLE Module Connector
- \* OPA Connector

## Component Circuit

- \* CAN Transceiver \*1
- \* SPI Flash SOP \*1
- \* ARGB LED \*6

## Others

- \* Trap DIP Switch 4x2 \*1
- \* Push Button \*1 (Reset)
- \* User Key \*4 (ADC input)
- \* User LED \*2
- \* Shuttle Key Circuit \*1

## Layout Rule :

### \* Impedance :

1. Single-end signals ~ 12 mil/124ohm(Coated MicroStrip)
2. Single-end signals ~ 10 mil/129ohm(Coated MicroStrip)
3. Single-end signals with ground shield ~ 12-6/61ohm(Coated Coplanar Strips)


### \* Power/Ground :

1. Bypass cap. need close to related power/ground pin
2. Using Copper for DC input source and LDO input/output path

## Board Note :

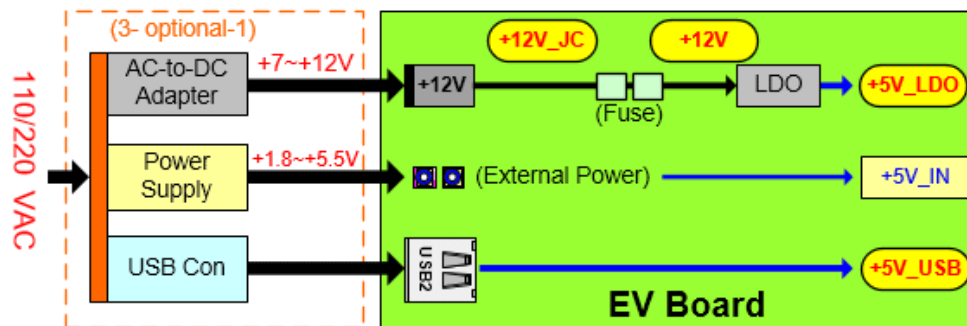
### \* Ferrite Beed Spec :

FB\_0603 : Rdc=0.15 , Z=120/100MHz , Idc=500mA ~ MCB1608S121H

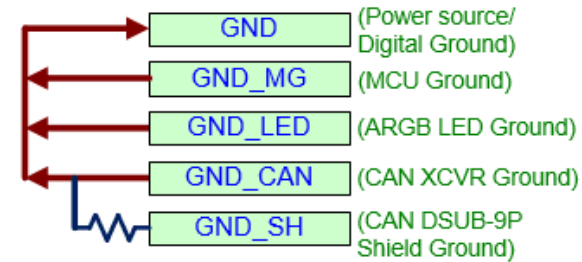
	megawin		
	Title		
	Board Comment		
	Size C	Document Number <b>MG04-08</b>	Rev <b>1.0</b>
Date: Monday, September 09, 2024   Sheet 5 of 7			



## Power Supply Source Diagram



### Ground Connection Diagram



## Power Connection Diagram

