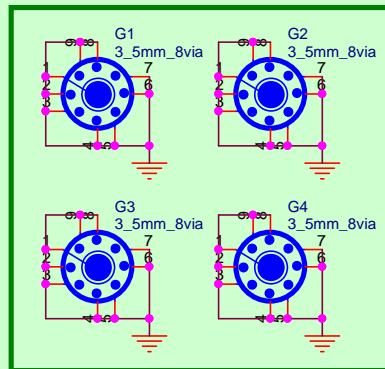


MG04-07

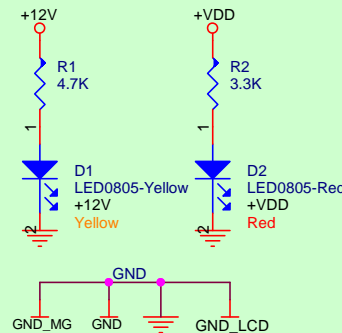
2024.08 GR10_2408A

MG32F02K/N STN LCD

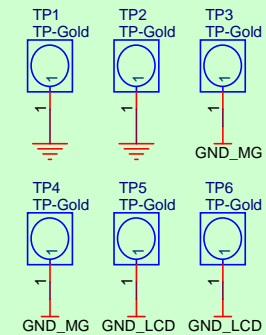
G5
Logo_Megawin_3_4



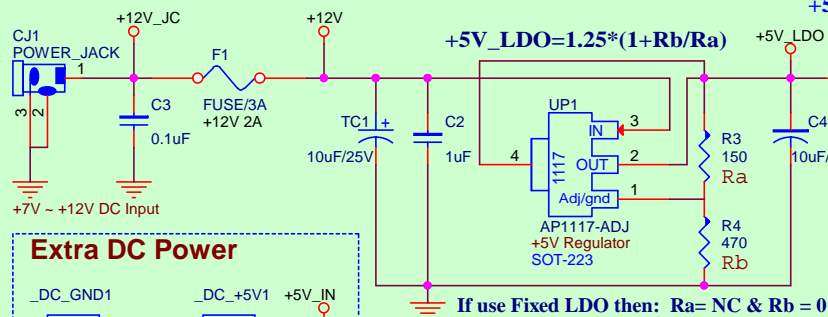
PCB Screw Position



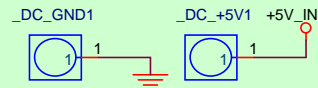
*Short these ground planes on PCB



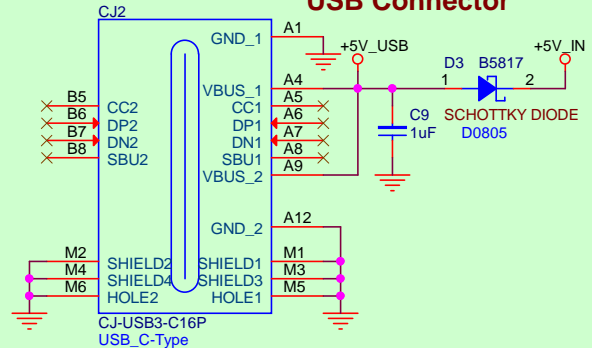
Power Jack DC 7~12V In



Extra DC Power

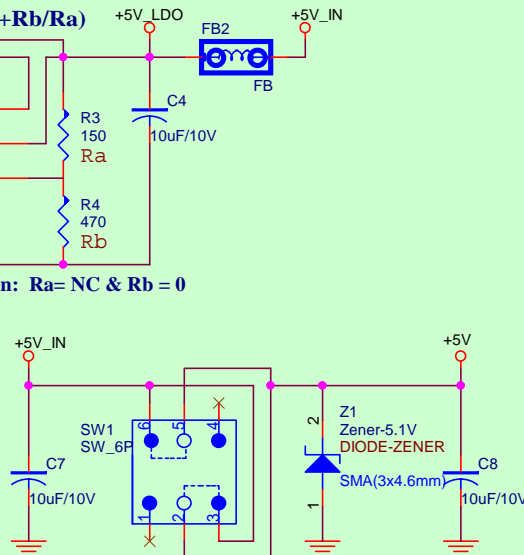


USB Connector

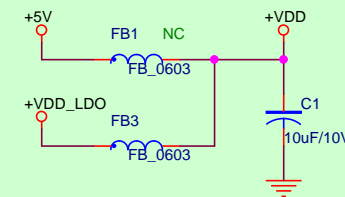


System Power (5V)

+5V about 5.17 volt

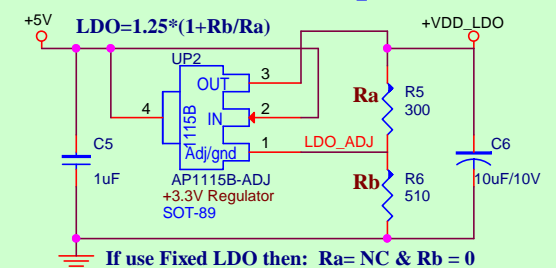


VDD Power

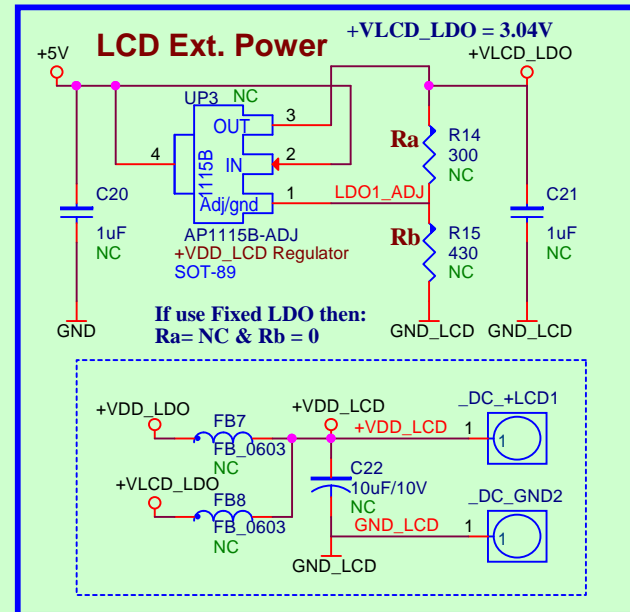
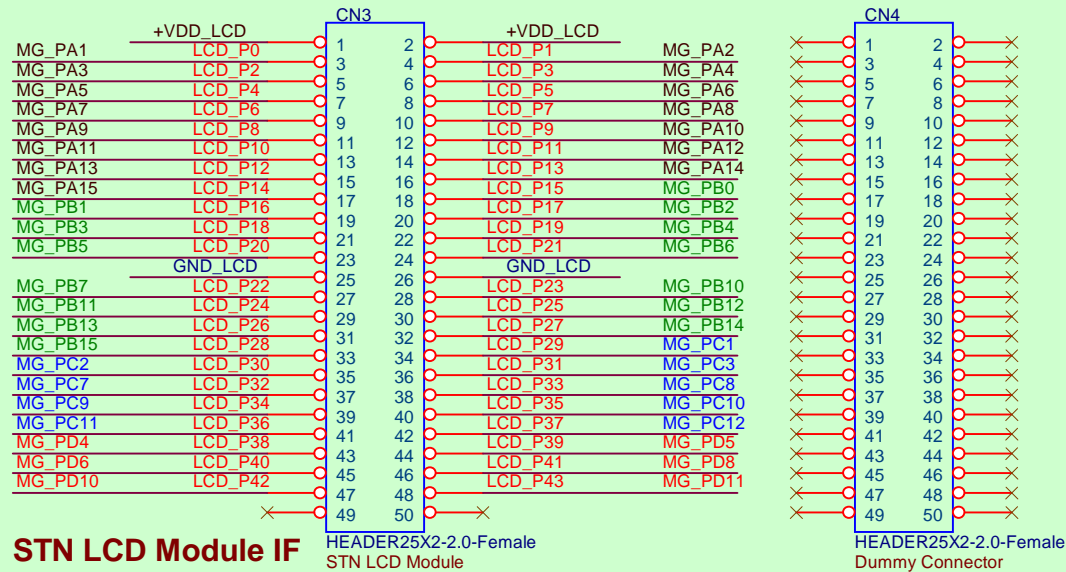


3.3V IO Power

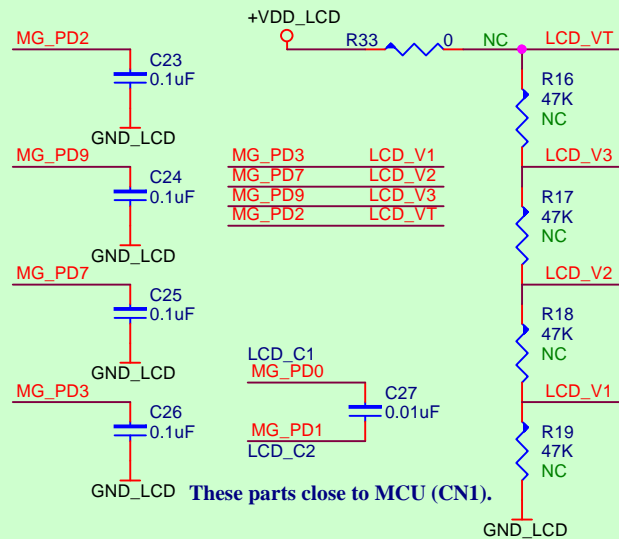
+VDD_LDO about 3.33 volt



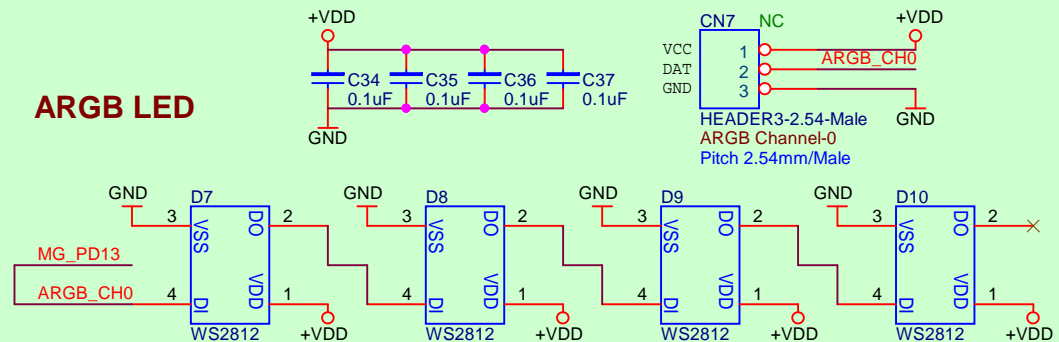
	Title		
	System Power		
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LCD Cap. and Ext. R-Ladder



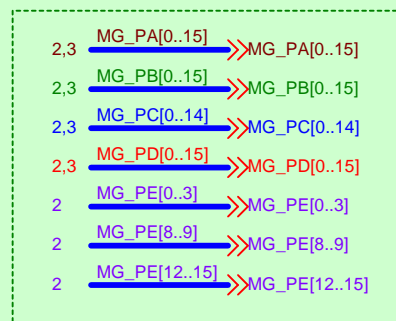
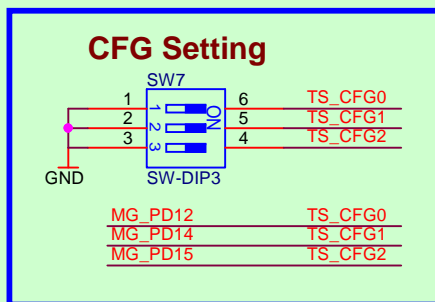
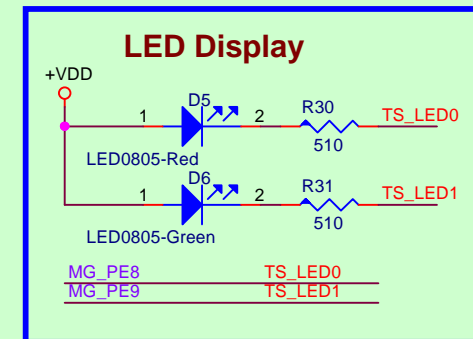
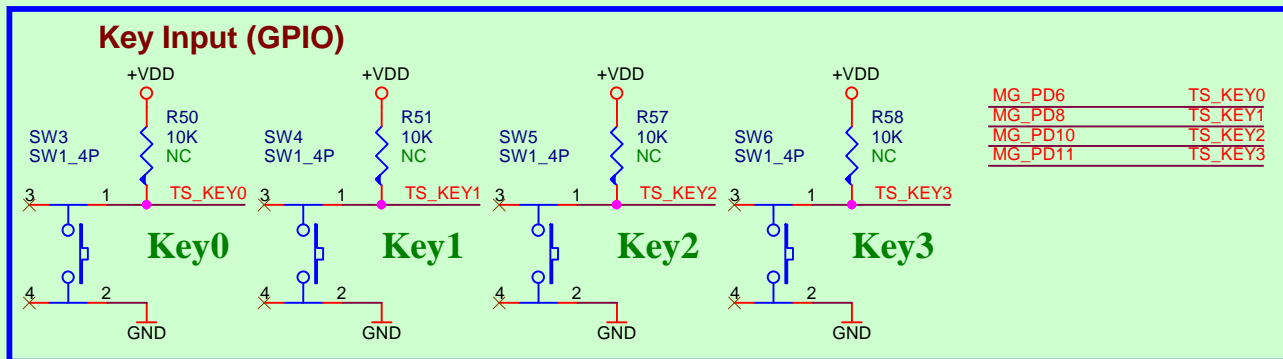
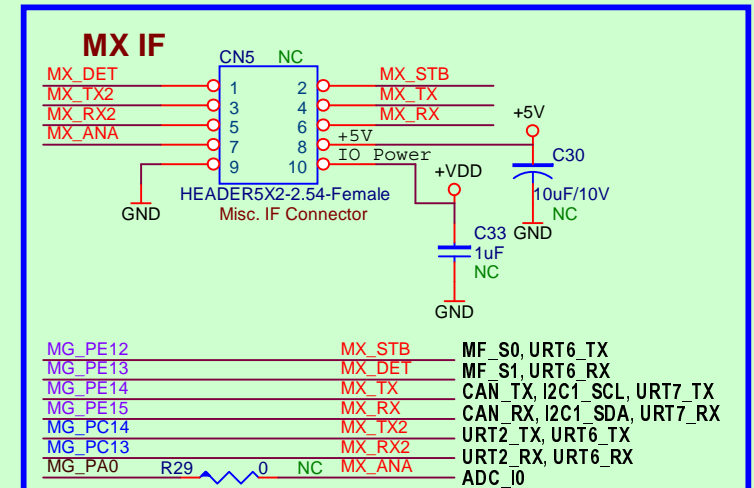
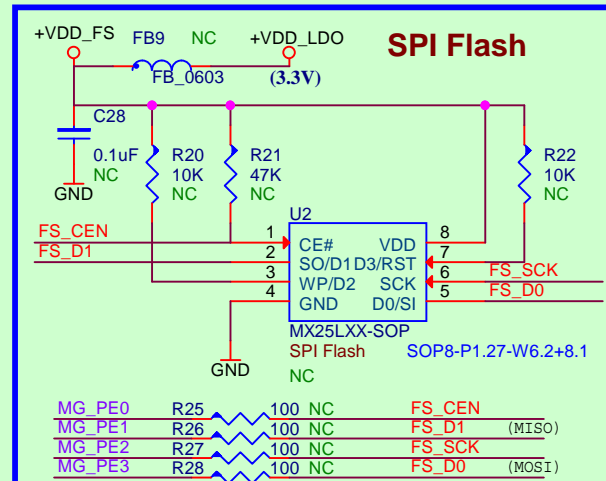
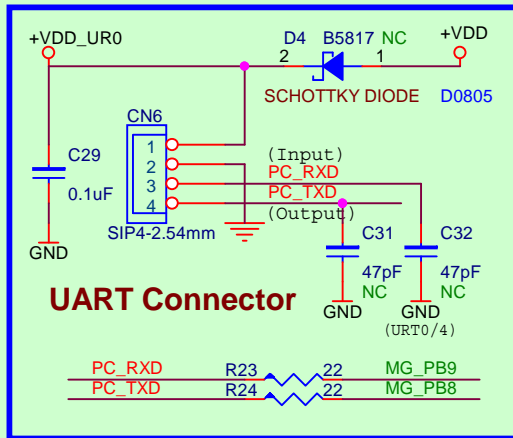
ARGB LED



2,4 MG_PA[0..15] >>> MG_PA[0..15]
2,4 MG_PB[0..15] >>> MG_PB[0..15]
2,4 MG_PC[0..14] >>> MG_PC[0..14]
2,4 MG_PD[0..15] >>> MG_PD[0..15]



	megawin		
	STN LCD/ARGB Interface		
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Board Features :

- * MG32F02K/N LCD Demo Board
- * STN 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
- * Built-in 5V-to-3.0V(+VLCD_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
- * STN LCD Module Connector
- * MX Module Connector (CAN/I2C/UART)

Component Circuit

- * SPI Flash SOP *1
- * ARGB LED *4

Others

- * Trap DIP Switch 3x2 *1
- * Push Button *1 (Reset)
- * User Key *4 (GPIO input)
- * User LED *2

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 :

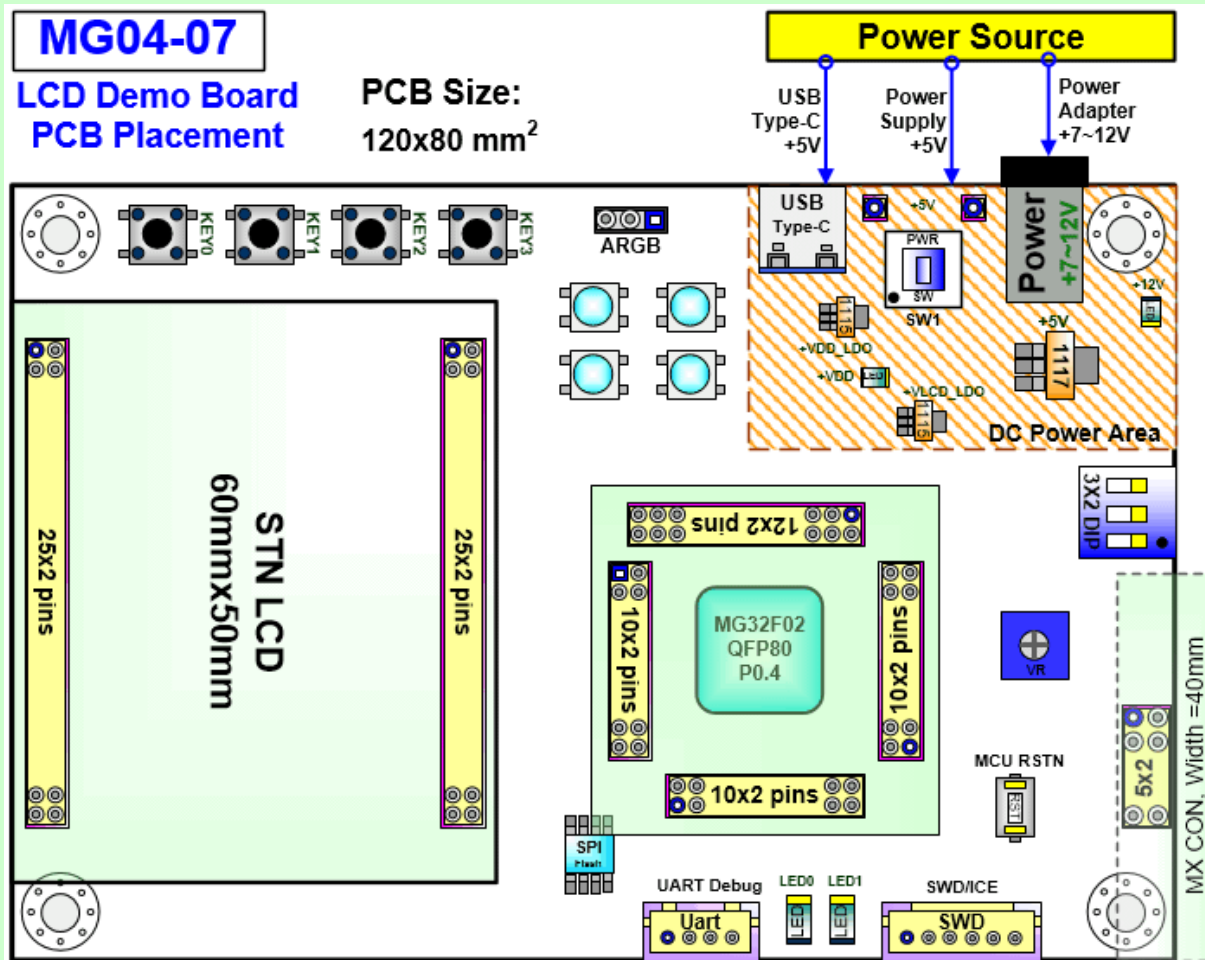
FB_0603 : Rdc=0.15 , Z=120/100MHz , Idc=500mA ~ MCB1608S121H

	megawin		
	Title		
	Board Comment		
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MG04-07

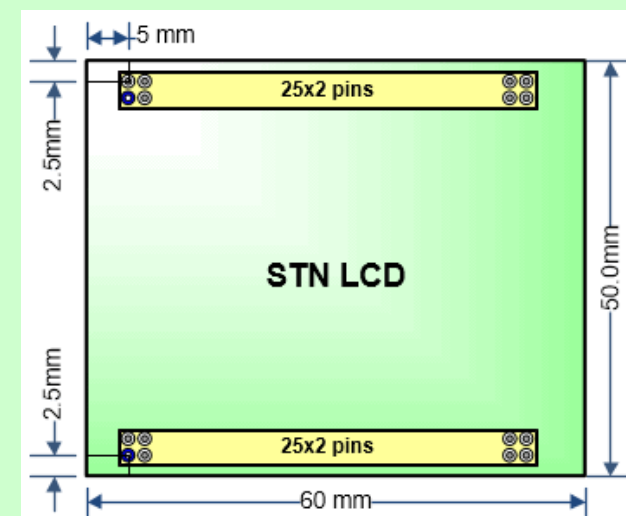
LCD Demo Board PCB Placement

PCB Size:
120x80 mm²

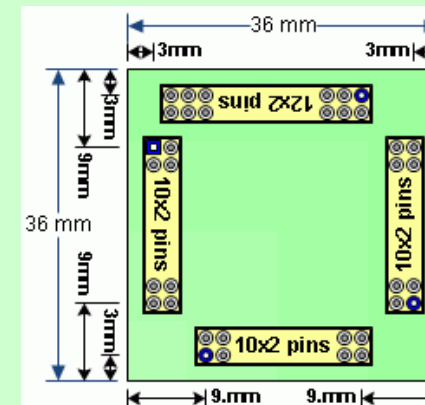



Module PCB Dimension:

STN LCD Module

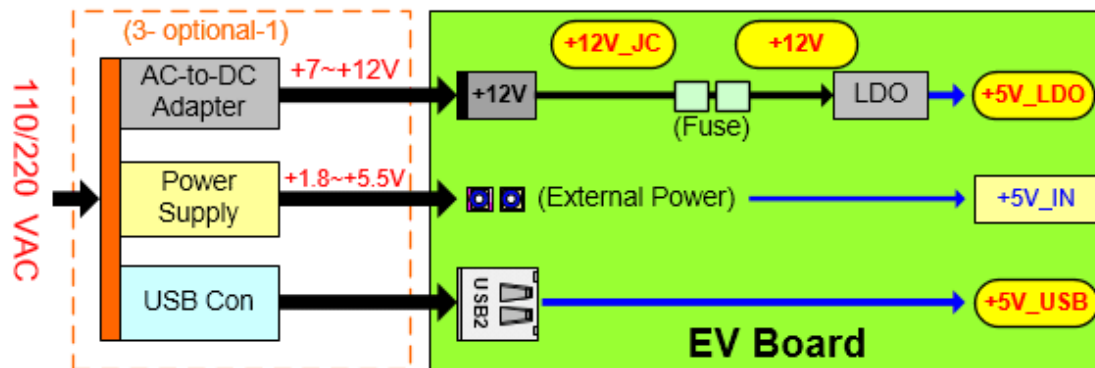


MCU Package Board (PKT84S)

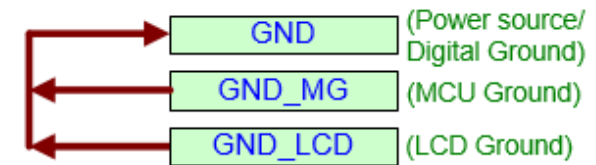


	megawin		
	Title		
	PCB Placement Plan		
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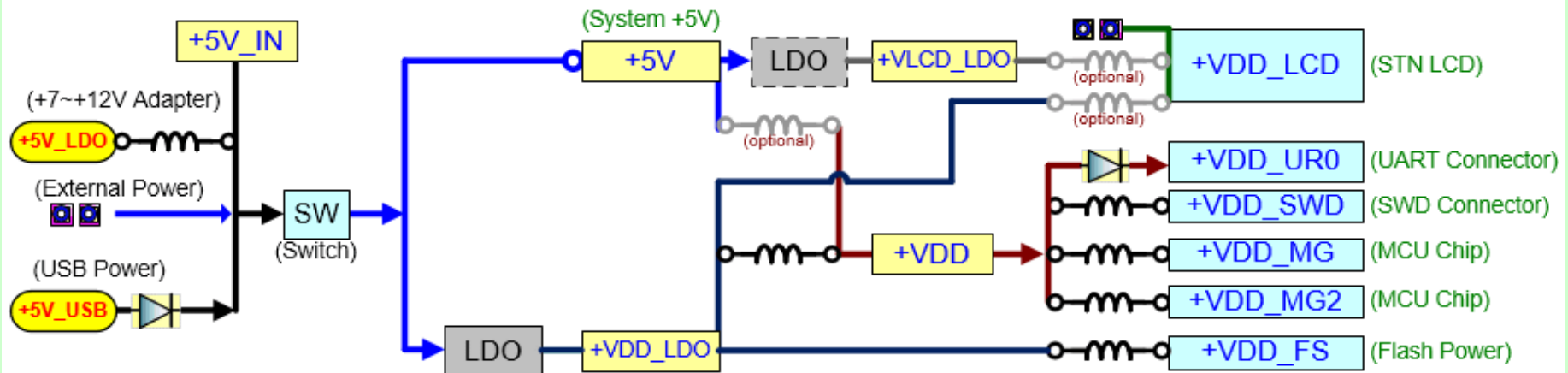
Power Supply Source Diagram




Ground Connection Diagram



Power Connection Diagram



	megawin		
	Title		
	Power System		
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