

RZ/A1LU搭載 カメラ付きmbedボード「GR-LYCHEE」

# GR-LYCHEE仕様概要

エンベデッドソリューションカンパニー  
デバイスソリューション部ものづくり推進担当  
URL: <http://www.core.co.jp>

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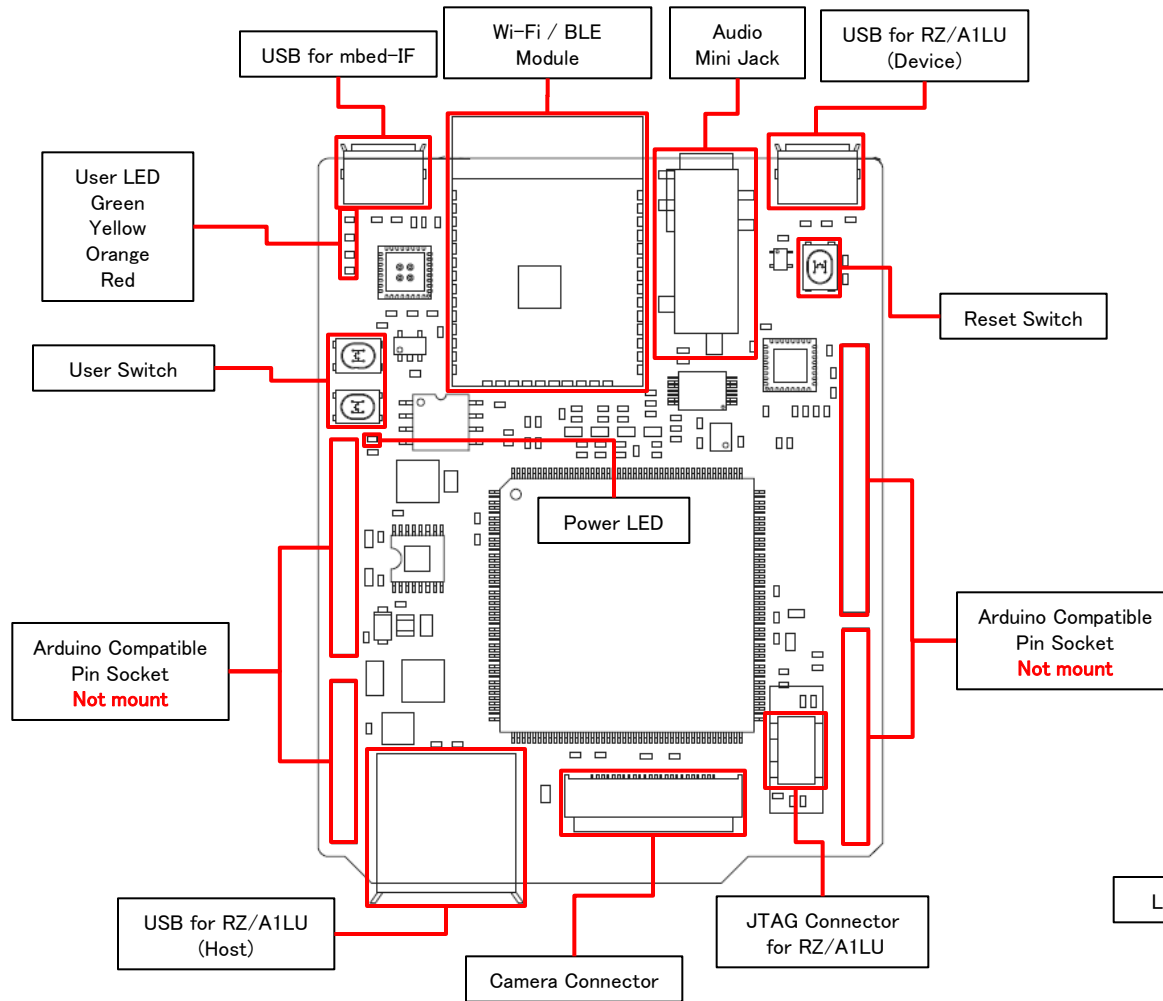
# GR-LYCHEE Specification Rev.B



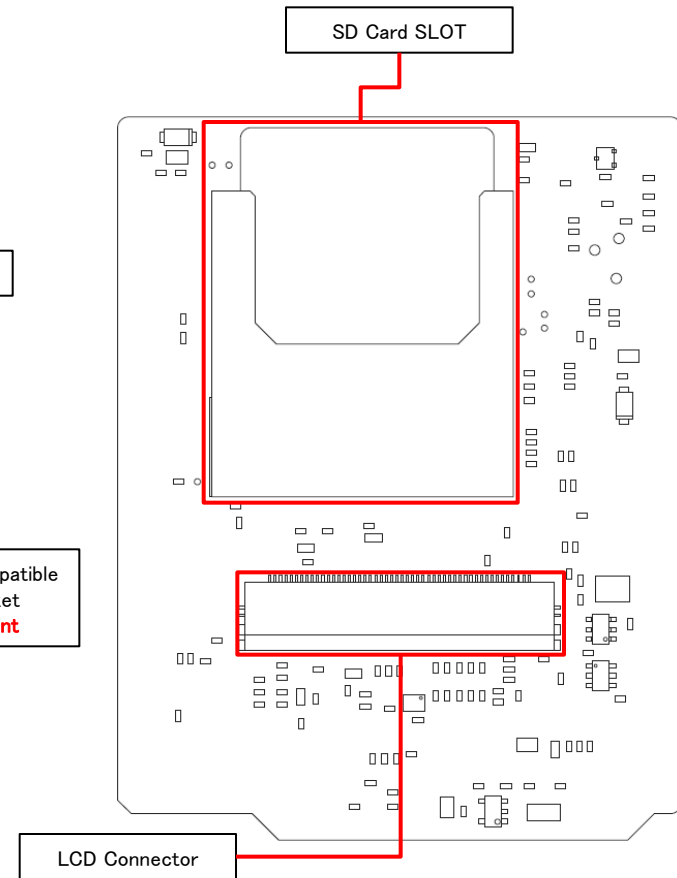
Parts	Manufacture	Model Number	Note
MPU	Renesas Electronics	R7S721030VCFP	Cortex-A9 RZ/A1LU QFP 176pin RAM3MB Max:384MHz
FLASH ROM	Winbond	W25Q64JVSSIM	8MByte SOP 8pin (SPI Multi I/O)
External Memory	KYOCERA	145638009511859+	SD Card SLOT (SPI:default / SDIO:Option)
Communication I/F USB	JST	UB-MC5BR3-SD204-4S	mbed-IF side Debug/Programming MicroB USB Connector RZ/A1LU side Ch.0 MicroB USB Connector(Device)
	Cvilux	CU01SAH1S00	RZ/A1LU side Ch.1 USB Type A Connector(Host)
Wireless Module	Espressif Systems	ESP-WROOM-32	Wi-Fi + BLE Module (UART) WiFi:802.11 b/g/n Bluetooth:Classic , BLE 4.2 (Dual Mode)
Audio Codec	Maxim	MAX9867ETJ+	Stereo Audio CODEC (Stereo Line Out / Monoral Mic In) 4P 3.5mmφMini Jack (CTIA Pinassign)
Arduino Connector	Hirosugi-keiki	FSS-41085-06 x1 FSS-41085-08 x2 FSS-41085-10 x1	Arduino Compatible Pin Socket( <b>Not Mount</b> ) 6pin x1 / 8pin x2 / 10pin x1
Camera I/F	molex	505110-2491	24pin FFC Connector (Pinassign for Shikino High-Tech KBCR-M04VG)
Camera Module	Shikino High-Tech	KBCR-M04VG	640x480 / 60fps ¼-inch (Omnivision OV7725)
LCD I/F	modex	054104-5033	50pin FFC Connector (Pinassign for AMPIRE AM-320240LKTMQW-51H)
Debug Connector	Hirosugi-keiki	PSS-720303-05	10pin JTAG Connector(CoreSight10)
Switch	ALPS	SKRPABE010	System Reset Switch x1
			User Switch x2
LED	ROHM	SML-P11MTT86R	User LED x1 (Green) (Uncontrollable)
		SML-P11UTT86R	User LED x1 (Red)
		SML-P11DTT86R	User LED x1 (Orange)
		SML-P11YTT86R	User LED x1 (Yellow)
		SML-P11MTT86R	User LED x1 (Green)
Power Supply	VBUS 1	DC 5V MicroB USB Connector(Connected mbed-IF)	
	VBUS 2	DC 5V MicroB USB Connector(Connected RZ/A1LU)	
	Vin	DC 5.5~16V(Arduino Compatible Pin –Vin-)	
Board Size	53.34(W) x 67.58(D) (mm)		

# Interface

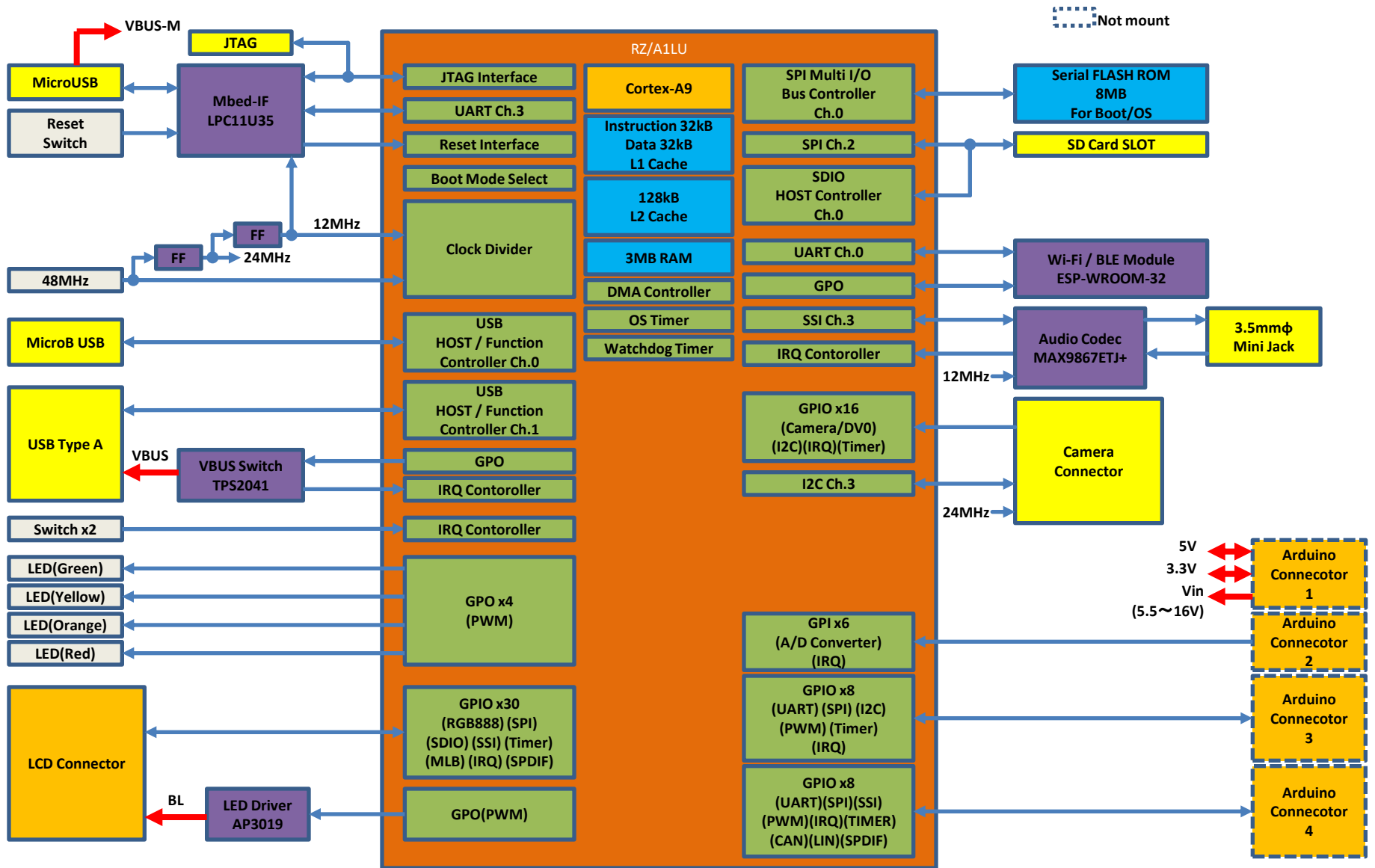
## Component Side



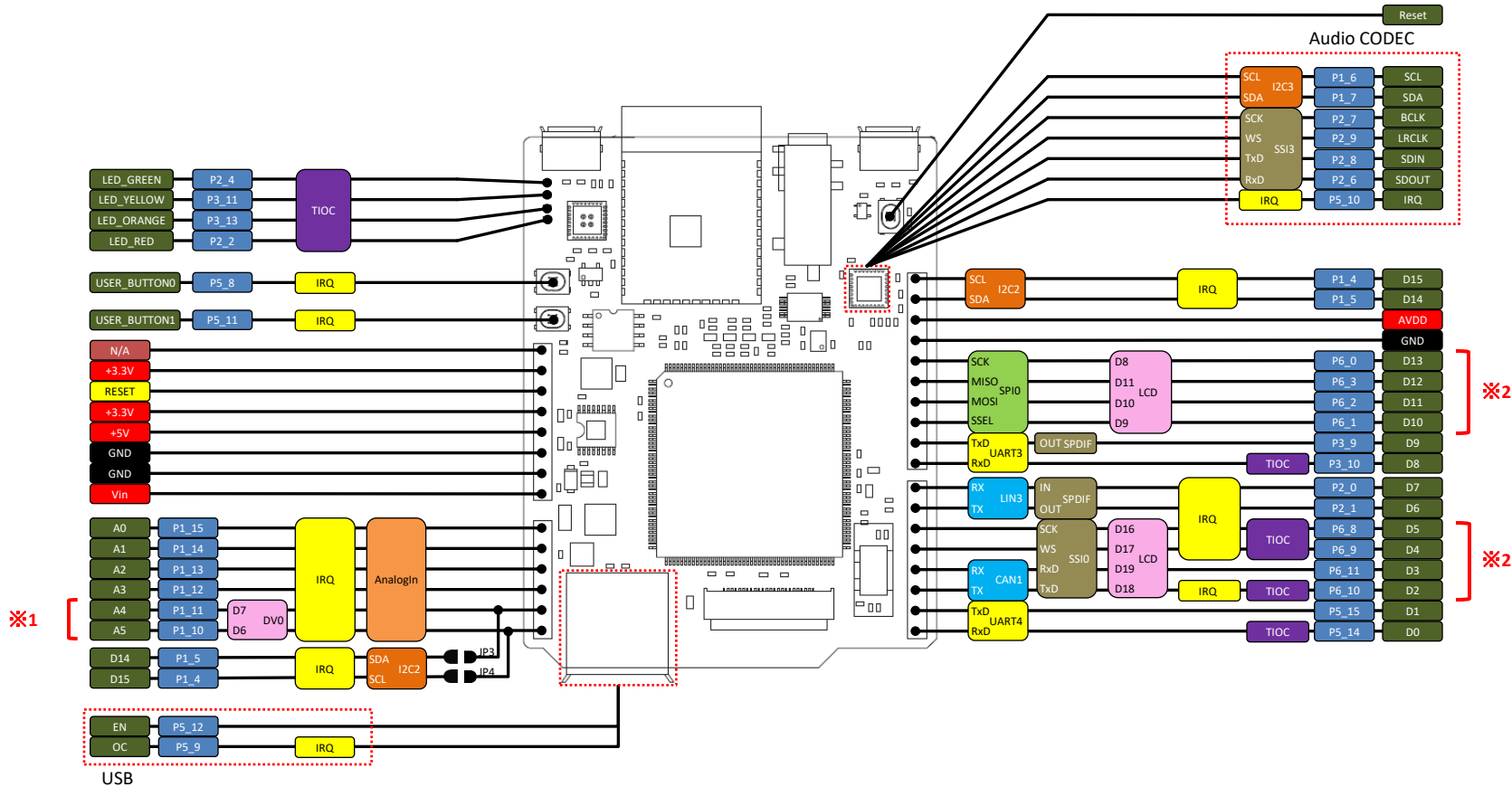
## Solder Side



# Block Diagram

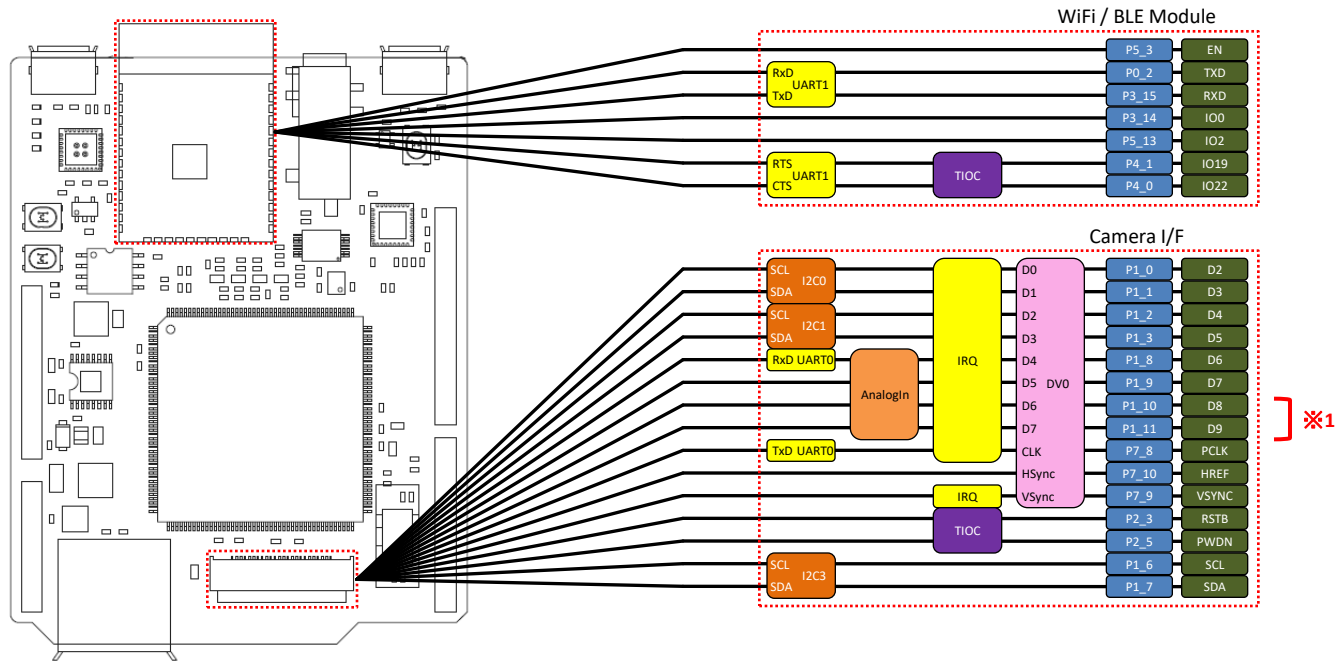


# Pinassign(Arduino Compatible Pinsocket)



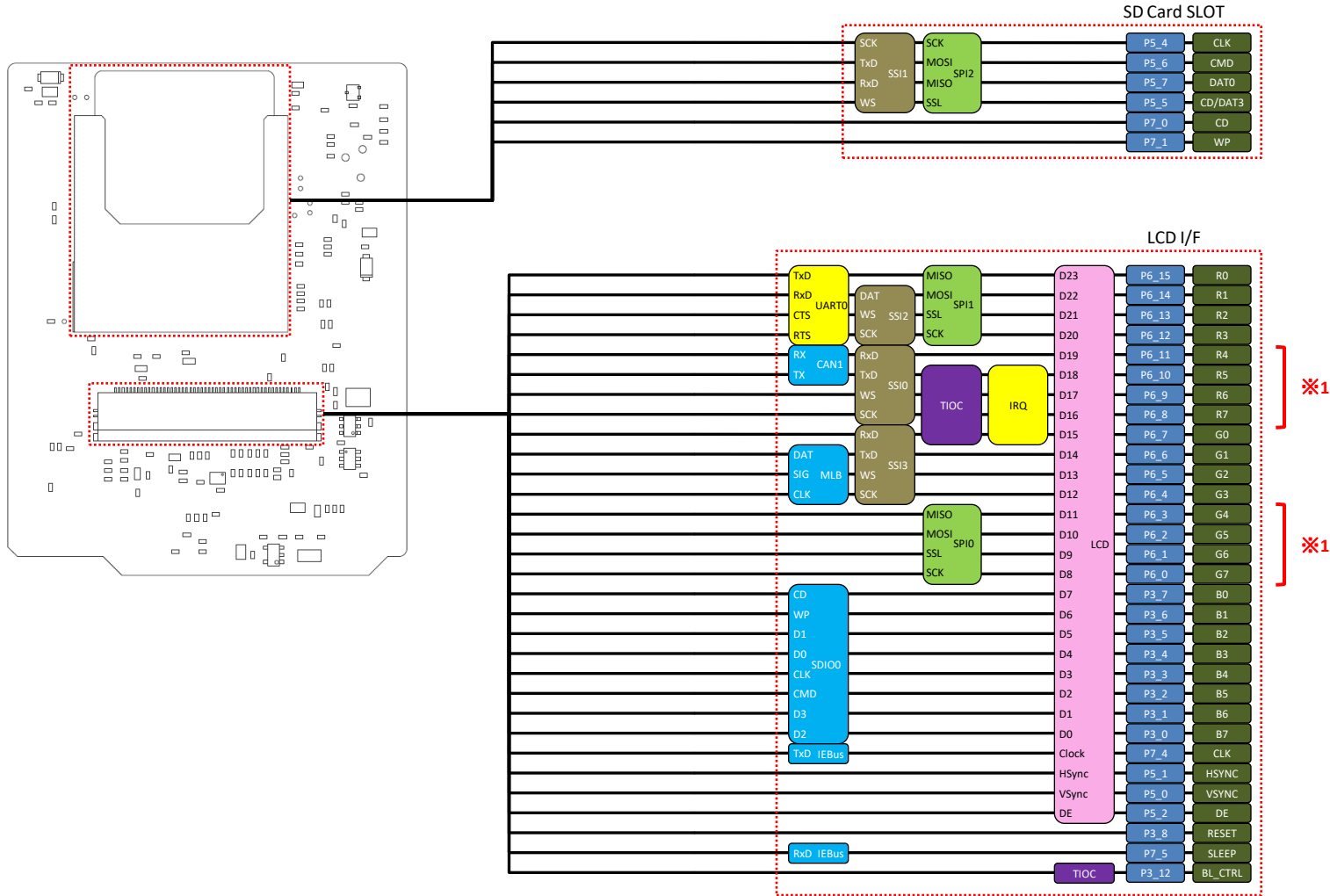
※1.カメラを使用すると使用できません。  
 ※2.LCDを使用すると使用できません。

# Pinassign(WiFi/BLE Module / Camera)

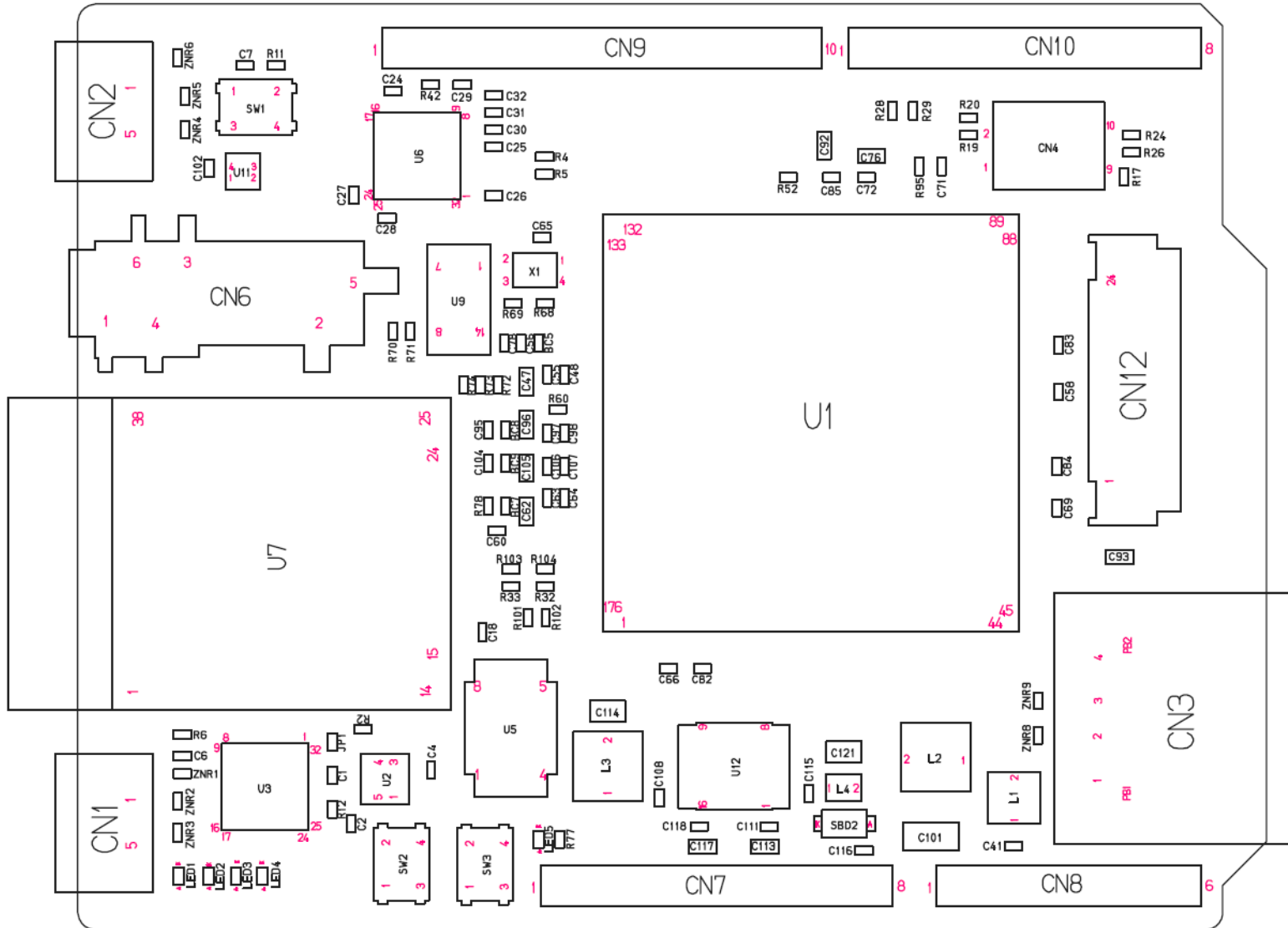


※1.ArduinoコネクタA4,A5を使用する場合、使用できません。

# Pinassign(SD Card SLOT / LCD)

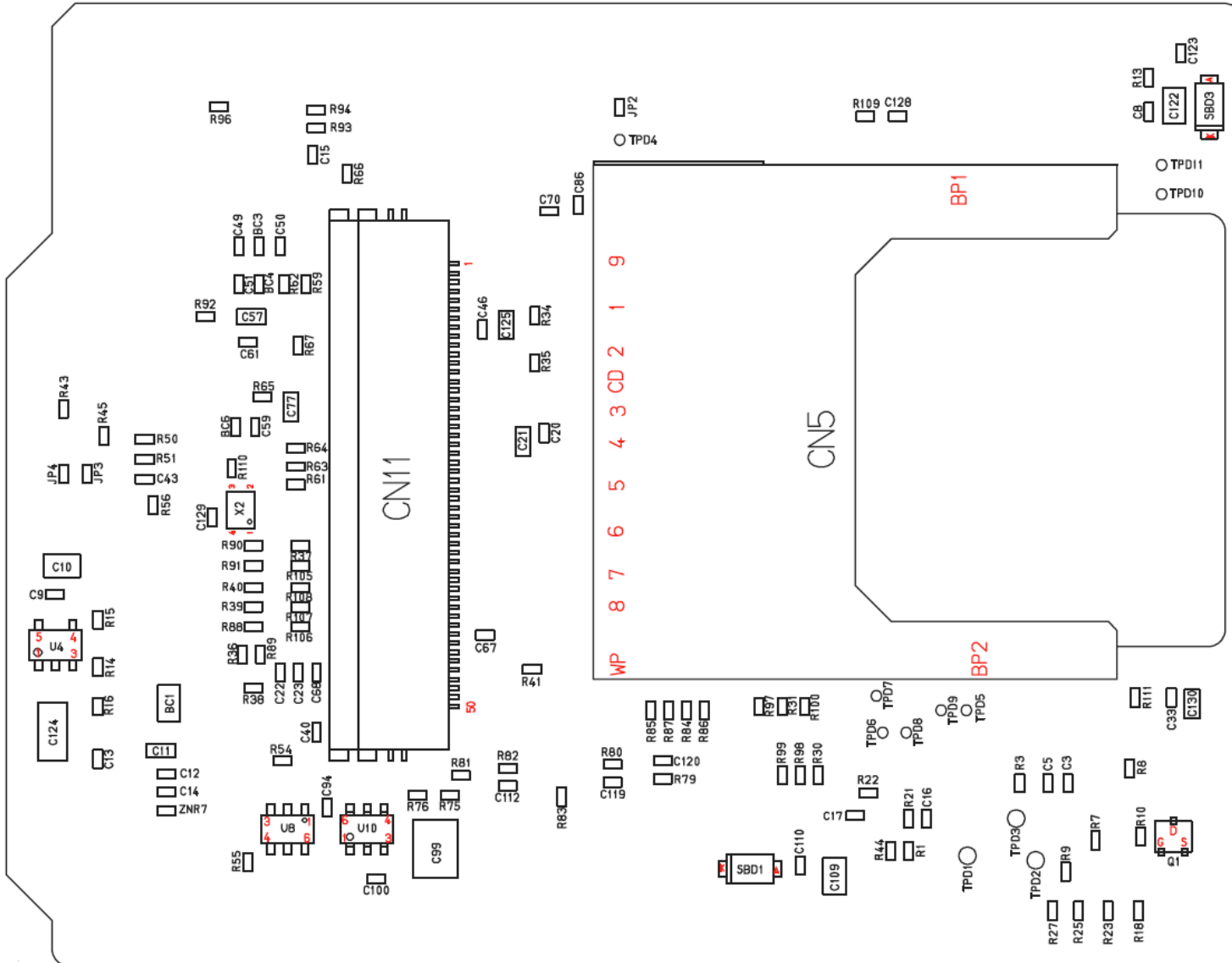


# Parts Location(Component Side)

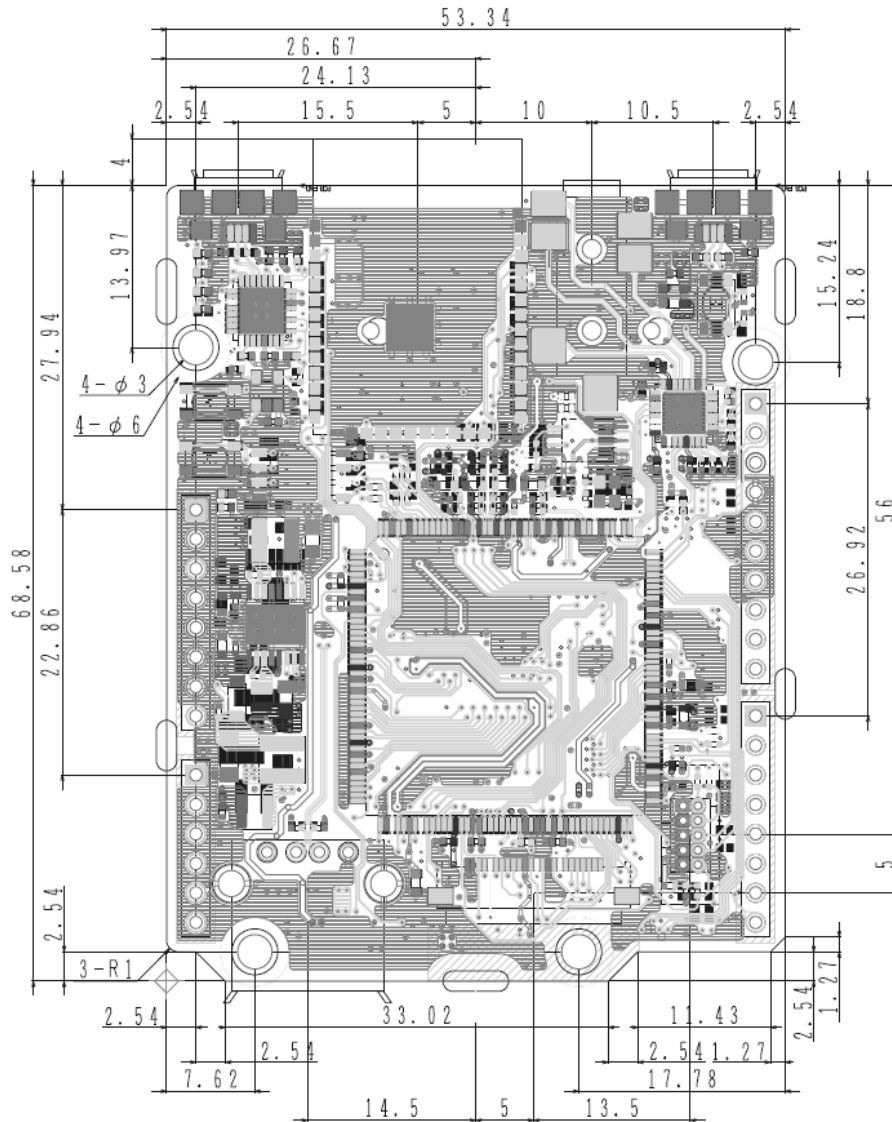




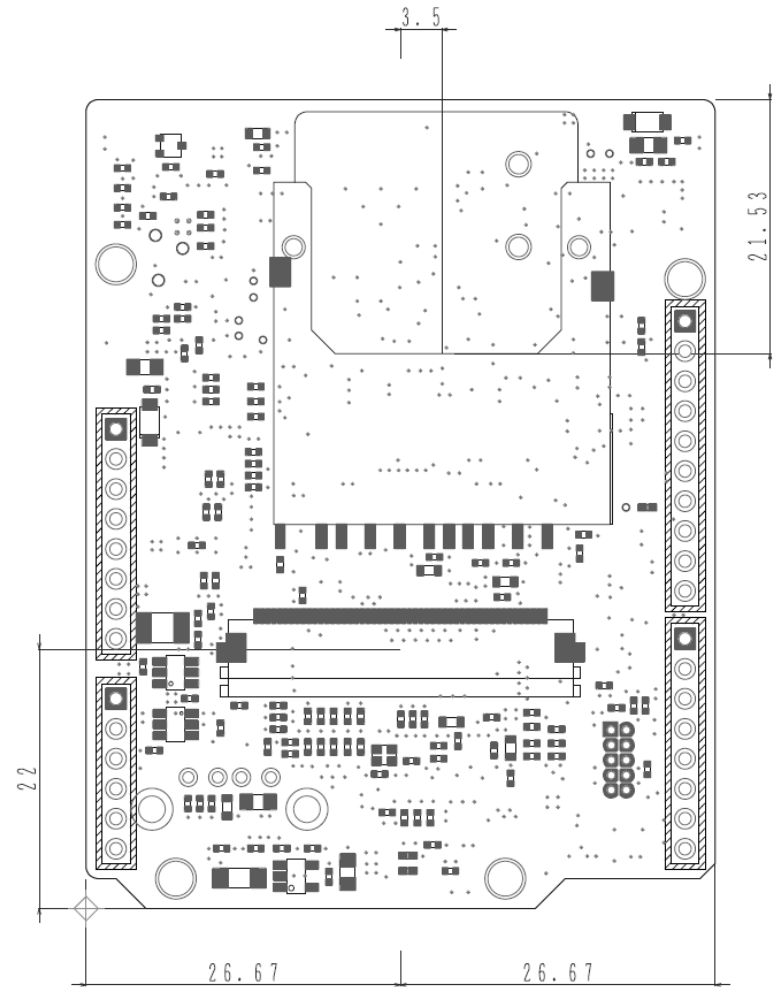
# Parts Location(Solder Side)



# Dimension



Component Side



Solder Side