

SeeedStudio BeagleBone Green Gateway

Revision History

SHEET	SHEET NAME
01	Title/Revision History
02	Power / LED / Button
03	OSD3358 Power / System
04	OSD3358 PinOut
05	eMMC Flash
06	100M Ethernet / USB Host
07	Wi-Fi / Bluetooth 1/2
08	Wi-Fi / Bluetooth 2/2
09	USB Device / RTC / Grove
10	EXP Header / uSD / Debug

DATE	REVISION	DESCRIPTION
2019/06/03	SeeedStudio BeagleBone Green Gateway_v1.0_SCH_190603	Frist prototype.
2019/12/03	SeeedStudio BeagleBone Green Gateway_v1.0_SCH_191203	Second prototype, Release.

Change List:

SeeedStudio BeagleBone Green Gateway_v1.0_SCH_191203

Page 02: Added FB13=120R@100MHz, R186=1M, D13, R187=10K, R100=DNP(10K).

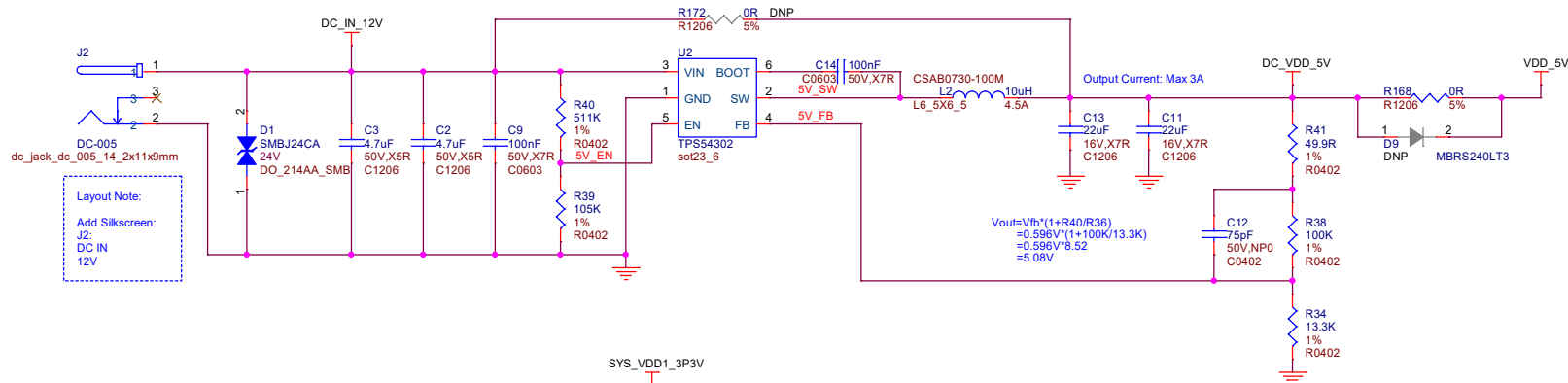
Page 03: Added R185=DNP(4.7K).

Page 04: Added R188=R189=33R, C94=DNP(10pF).

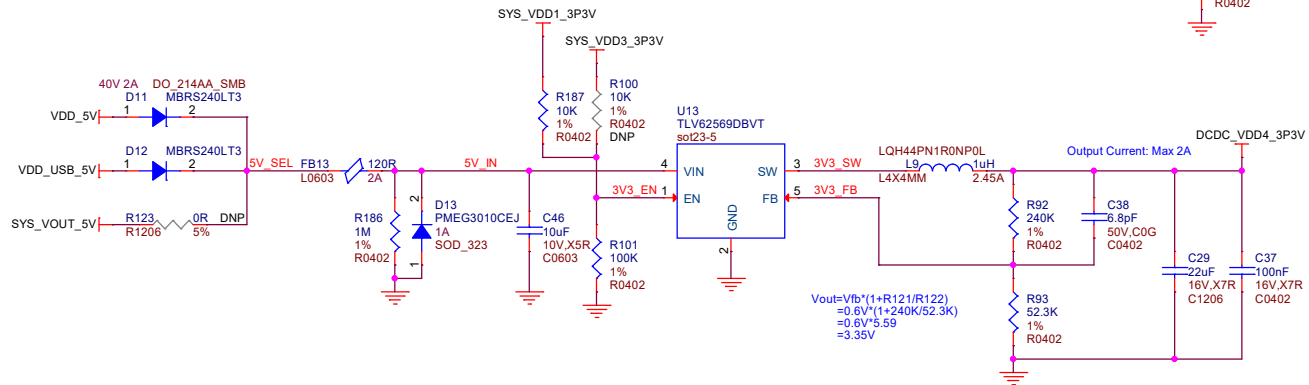
Page 06: Added FB8=FB9=FB10=FB11=120R@100MHz, L12=90R@100MHz, R182=R183=DNP(0R).

Page 09: Added R184=0R, D10=DNP(PMEG3010CEJ).

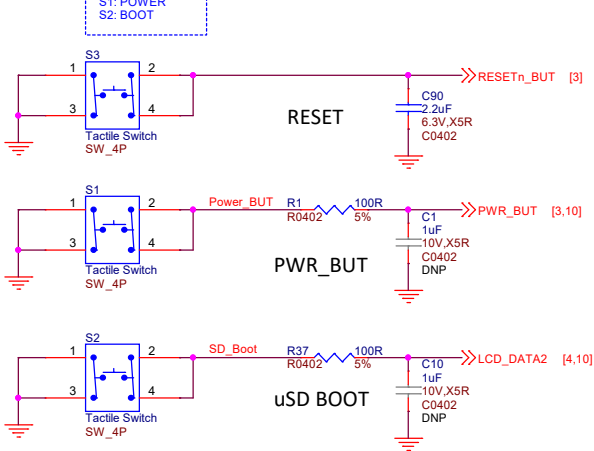
Changed R128(AM3_USB0_VBUS) from USB_5V to VDD_USB_5V.



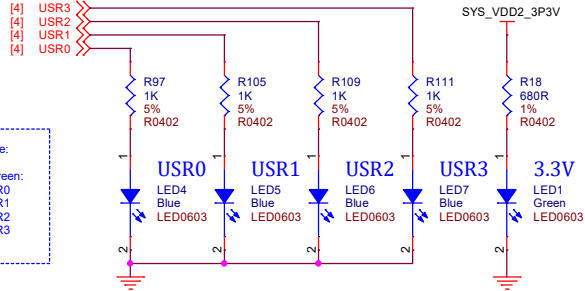
Layout Note:
Add Silkscreen:
J2: DC IN
12V

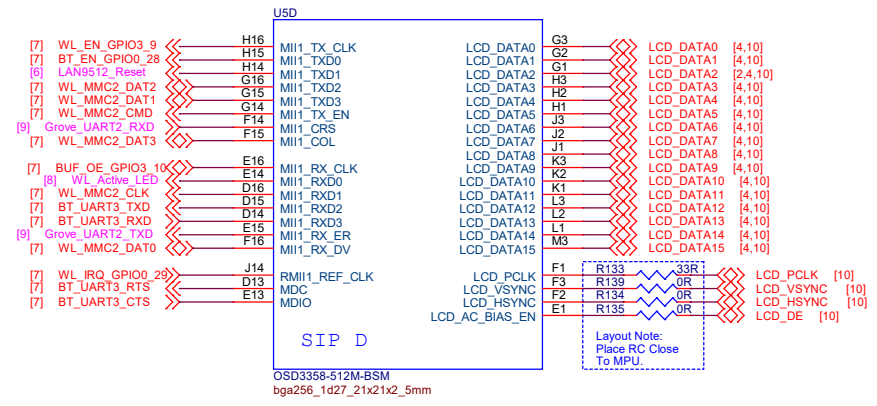
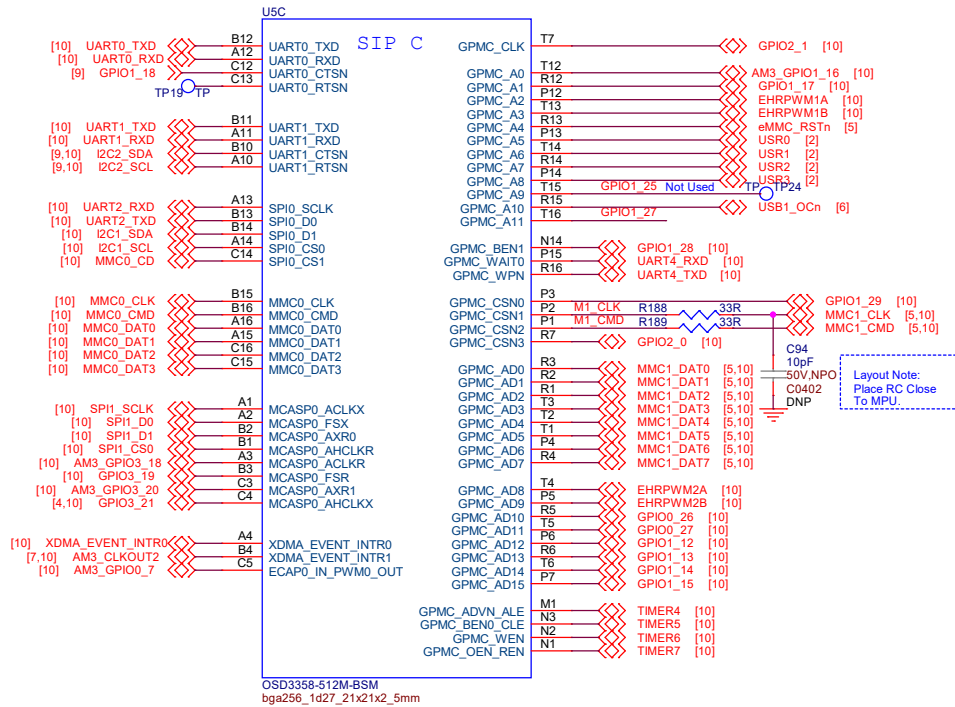


Layout Note:
Add Silkscreen:
S3: RESET
S1: POWER
S2: BOOT



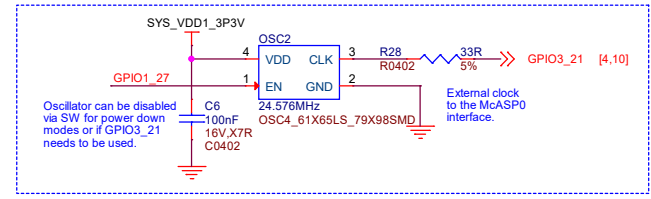
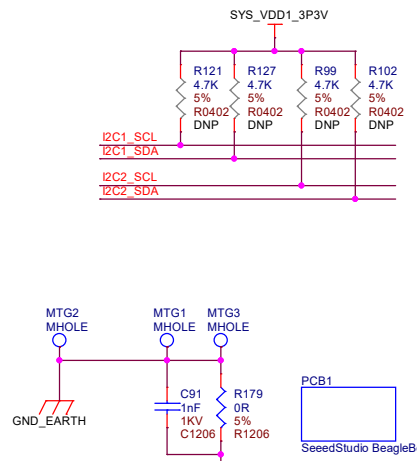
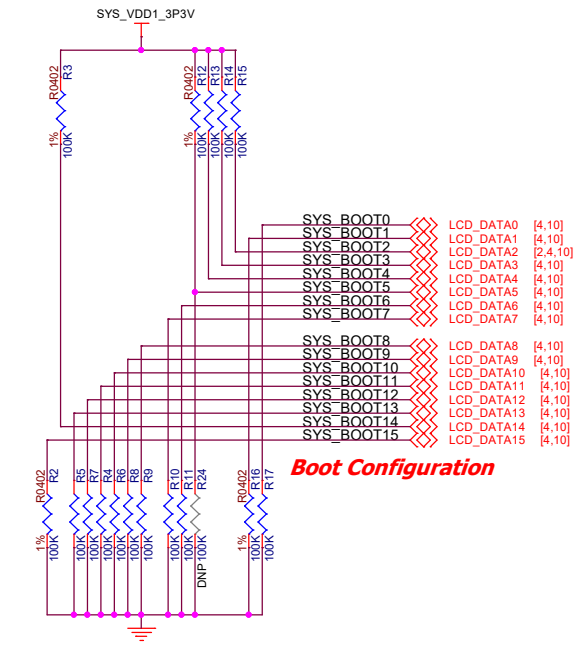
Layout Note:
Add Silkscreen:
LED4: USR0
LED5: USR1
LED6: USR2
LED7: USR3
LED1: 3V3





Layout Note:
Place RC Close
To MPU.

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Place RC Close
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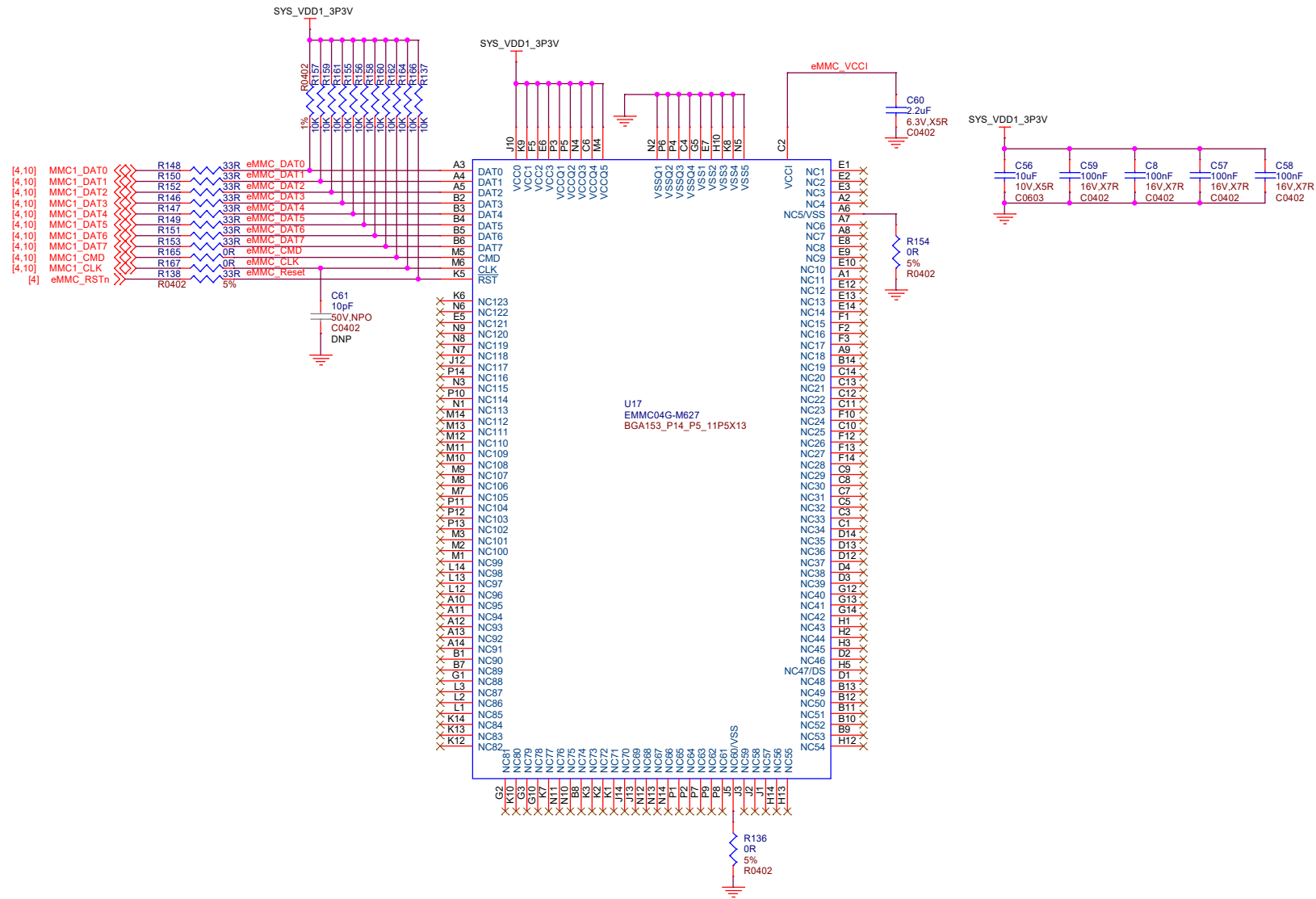


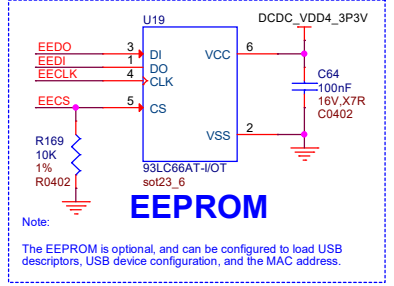
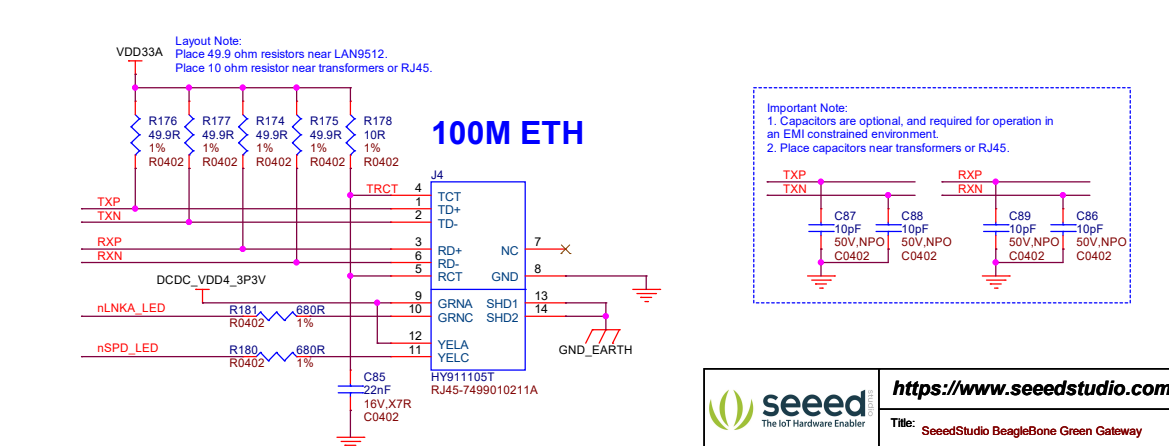
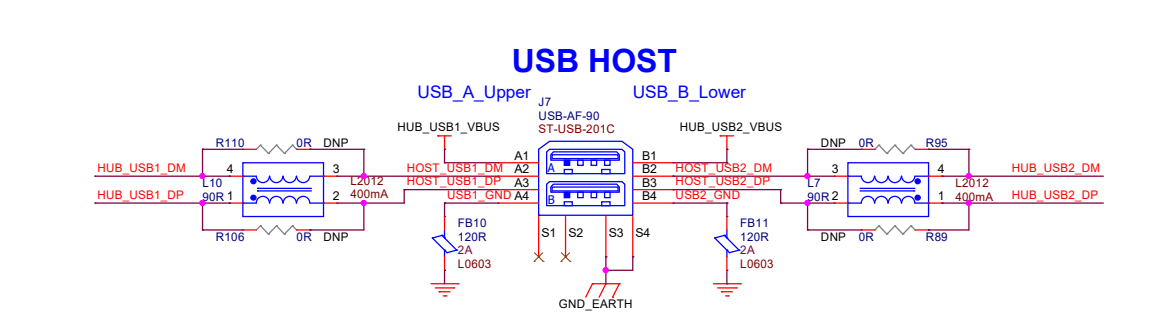
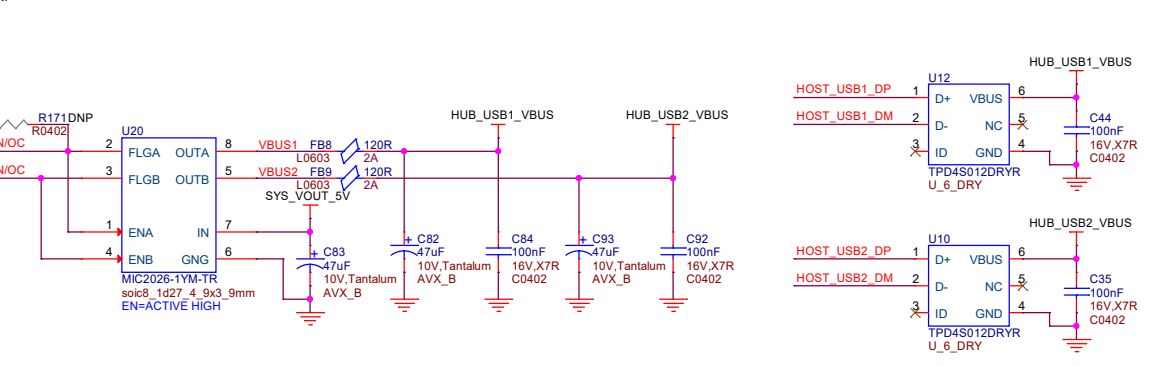
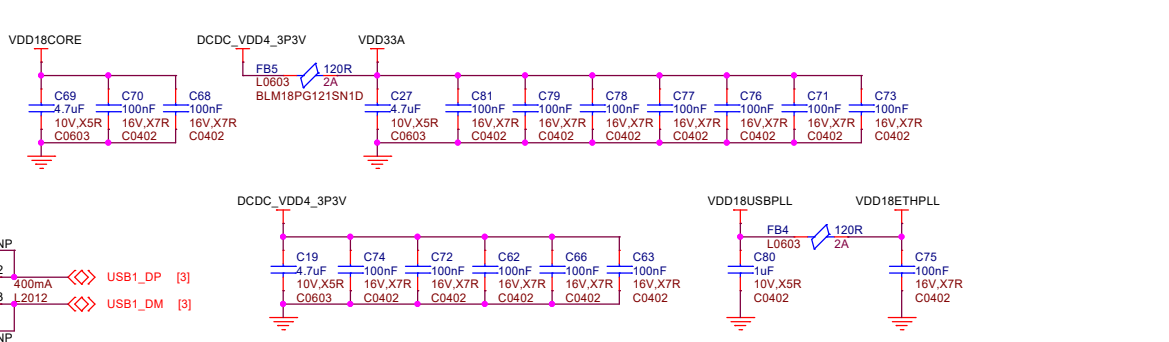
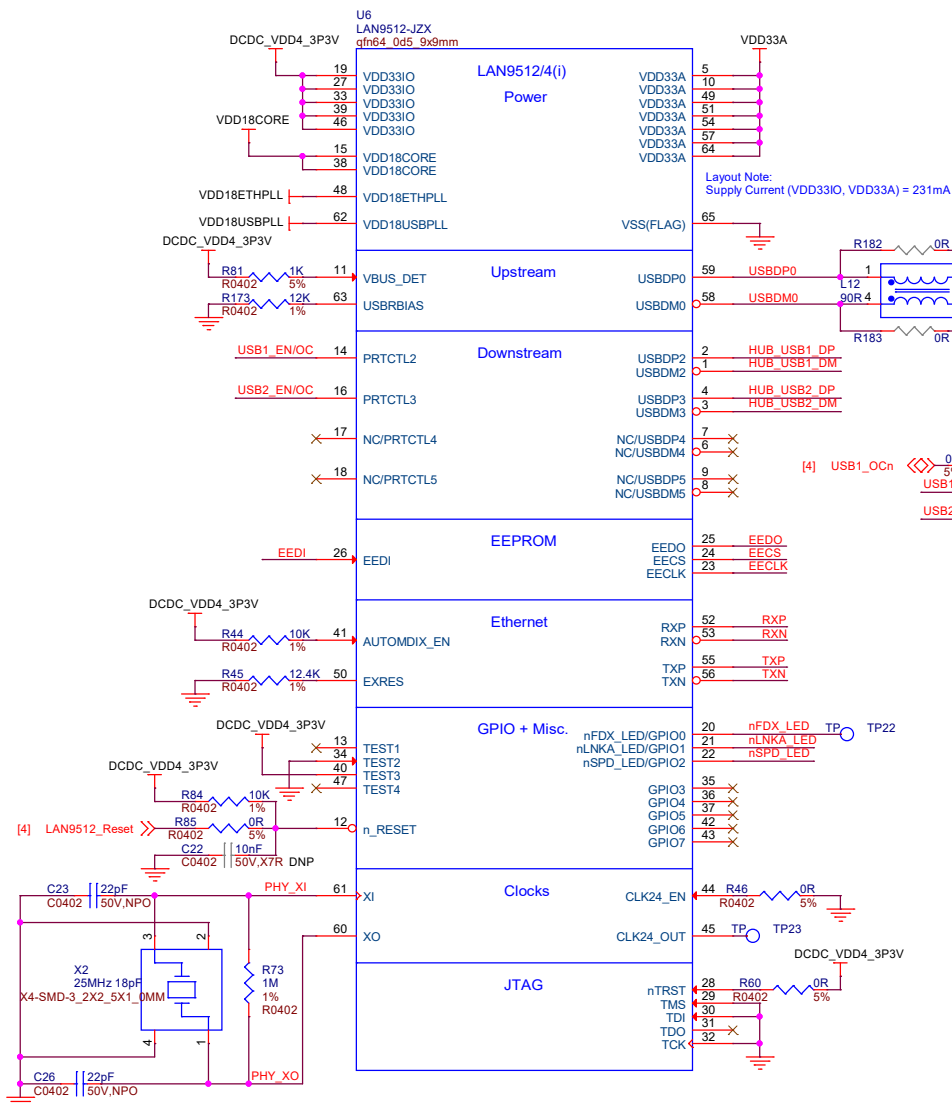
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The IoT Hardware Enabler

<https://www.seedstudio.com>

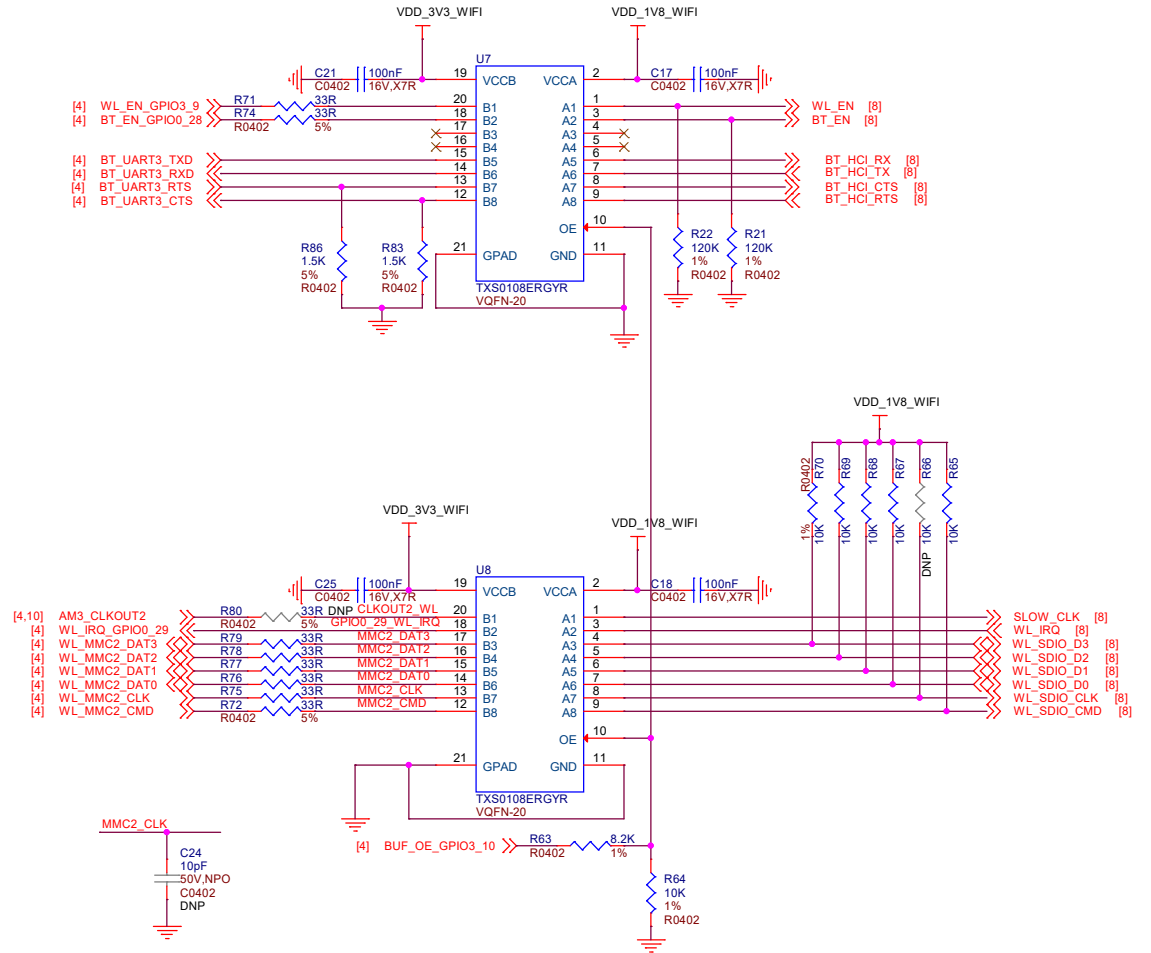
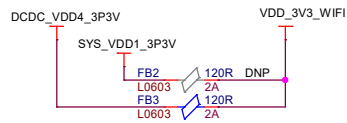
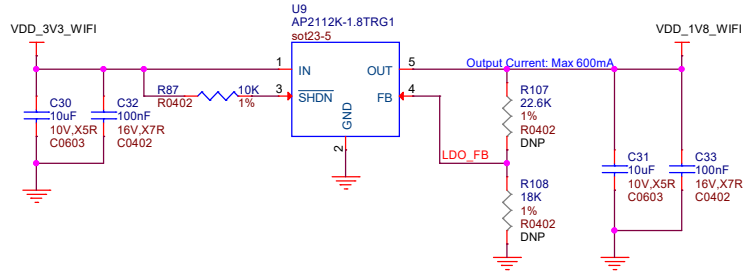
Title: SeedStudio BeagleBone Green Gateway

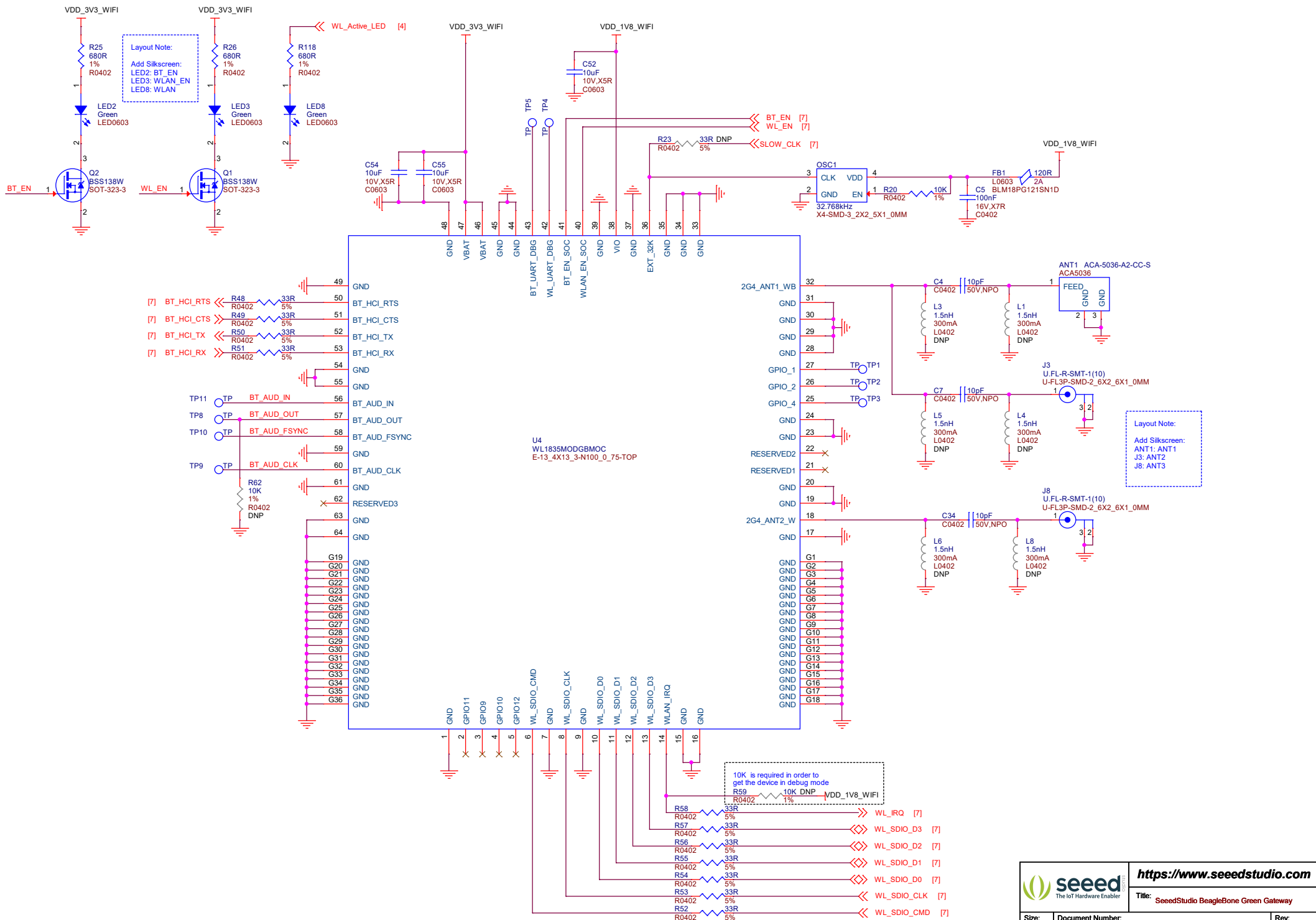
Size: A3	Document Number: 04 OSD3358 PinOut	Rev: v1.0
Draw By: XlnJQ	Date: Tuesday, December 03, 2019	Sheet: 4 of 10





Important Note:
 1. Capacitors are optional, and required for operation in an EMI constrained environment.
 2. Place capacitors near transformers or RJ45.





Grove Connector

- [4] Grove_UART2_RXD
- [4] Grove_UART2_TXD

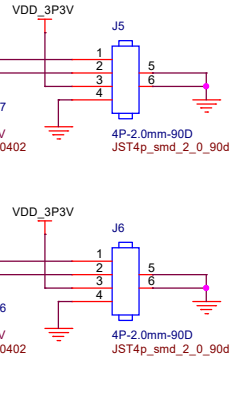
Layout Note:

Add Silkscreen:
 J5
 Pin1: RXD
 Pin2: TXD
 Pin3: 3V3
 Pin4: GND

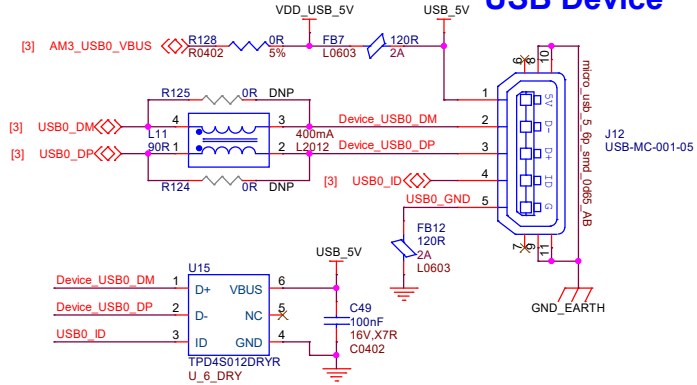
- [4,10] I2C2_SCL
- [4,10] I2C2_SDA

Layout Note:

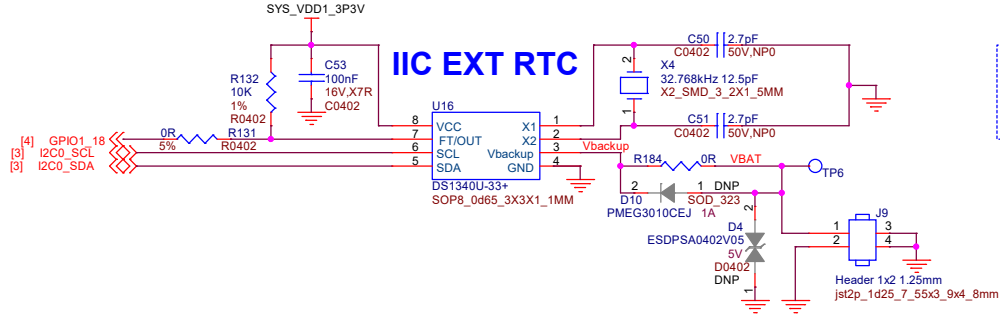
Add Silkscreen:
 J6
 Pin1: SCL
 Pin2: SDA
 Pin3: 3V3
 Pin4: GND



USB Device

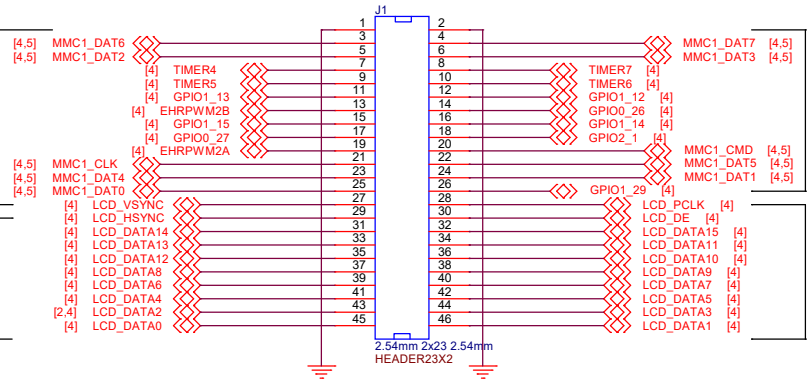


IIC EXT RTC



Layout Note:
 Place TP To Bottom.
 Add Silkscreen:
 TP6: VBAT

CAUTION: USED ON BOARD

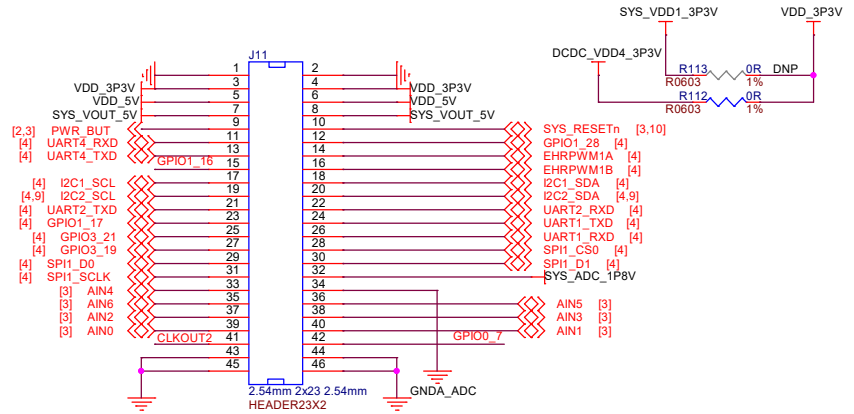


CAUTION: USED ON BOARD

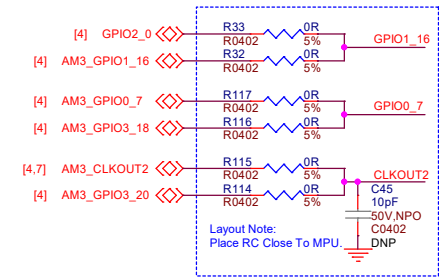
EXPANSION HEADER P8

Layout Note:
 The MMC1, MMC0, LCD signals must be length-matched :
 That is:
 The MMC1_* group should be matched within 300 MII (7.62 mm).
 The MMC0_* group should be matched within 300 MII (7.62 mm).

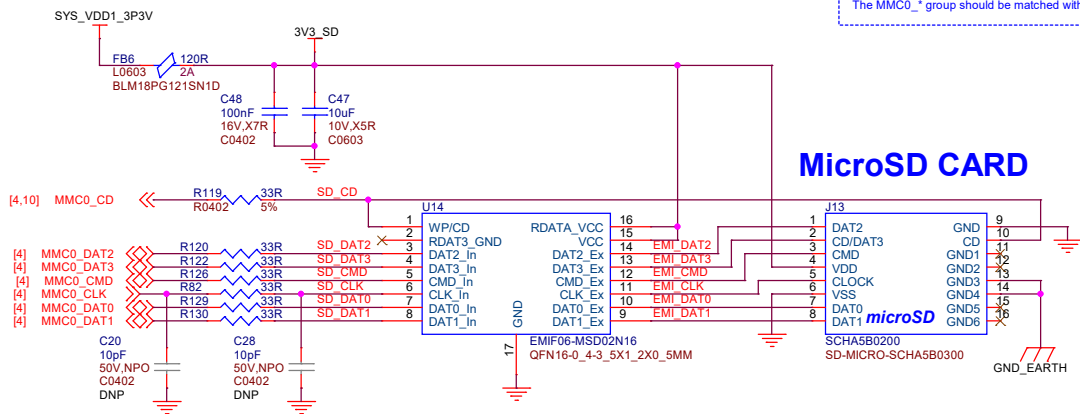
CAUTION: USED ON BOARD



EXPANSION HEADER P9



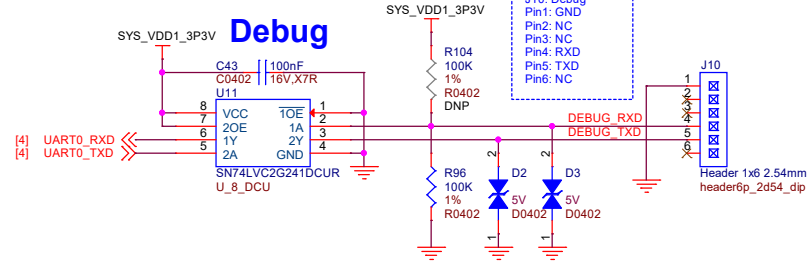
MicroSD CARD



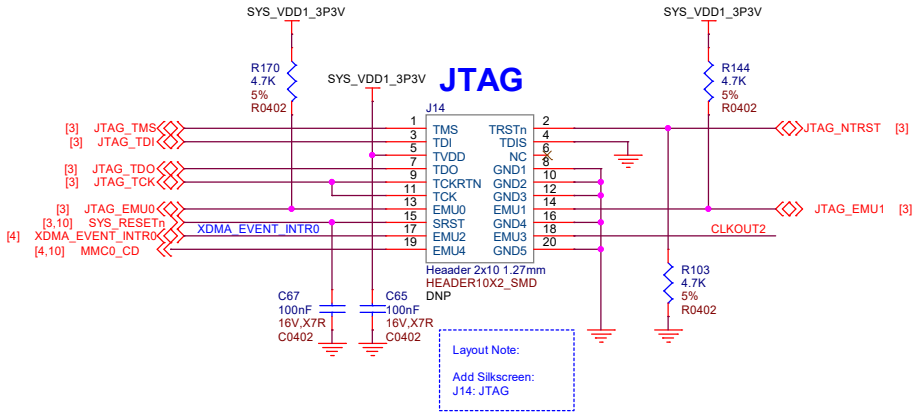
Layout Note:
 Place C20 R82 C28 Close To MPU.

Layout Note:
 Add Silkscreen:
 J10: Debug
 Pin1: GND
 Pin2: NC
 Pin3: NC
 Pin4: RXD
 Pin5: TXD
 Pin6: NC

Debug



JTAG



Layout Note:
 Add Silkscreen:
 J14: JTAG