

RT Vision Board

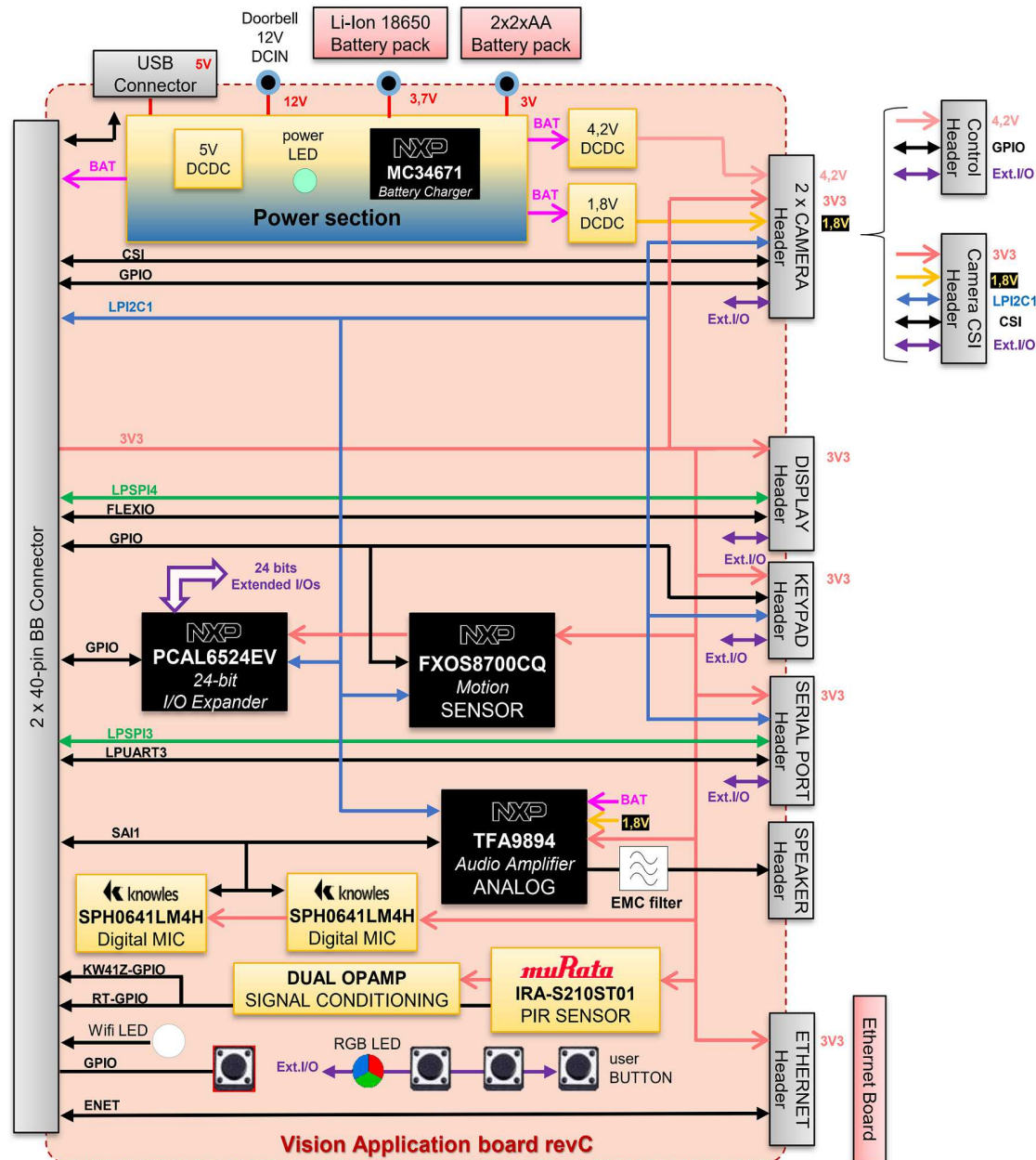
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REVISION HISTORY

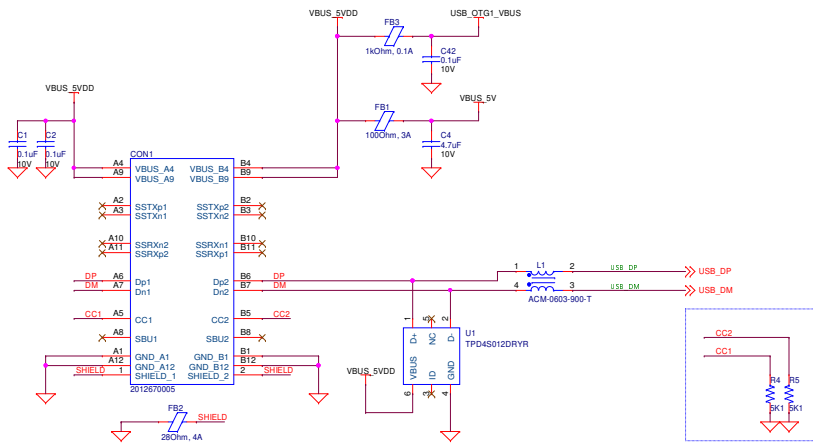
REVISION	DESCRIPTION OF CHANGE	DATE	Author	Reviewer
C2	Initial production version	09-Oct-20	-	-

System Block Diagram

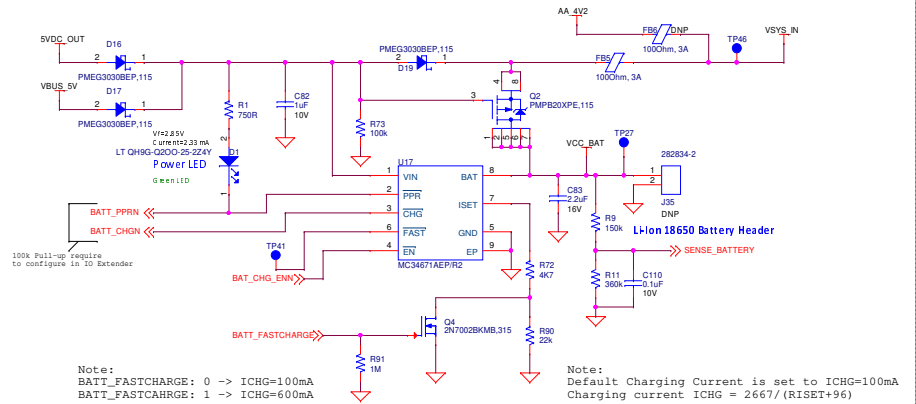


Power Supply Section

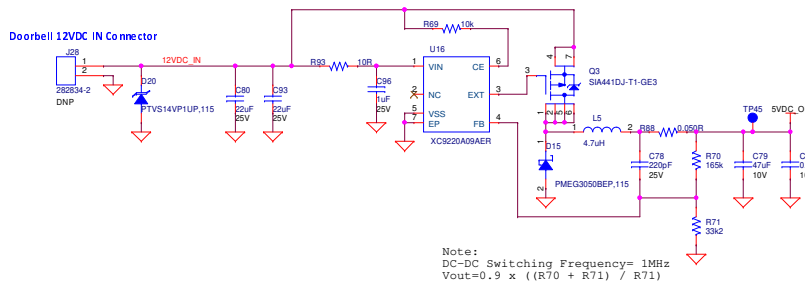
USB Type C Connector



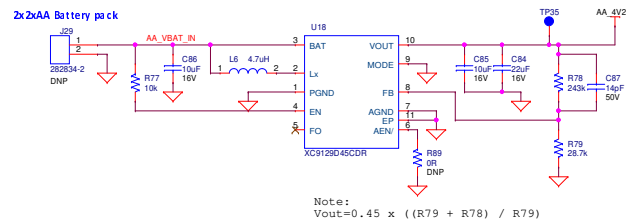
Li-ion Battery Charger & Power Oring



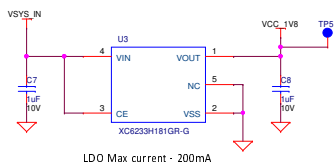
Door Bell 12VDC Input Section



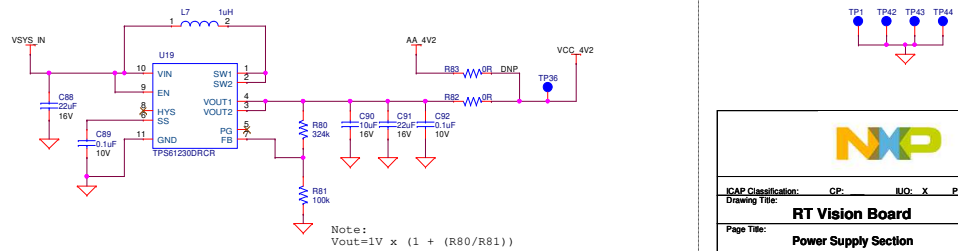
2 x 2AA Battery Input Section



1.8V LDO Power section

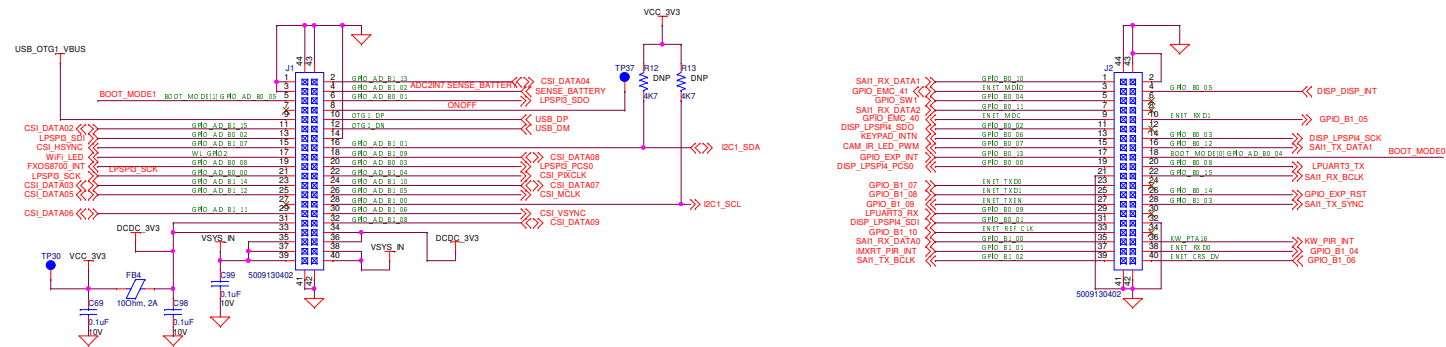


4.2V DC-DC Boost Converter for Camera Module

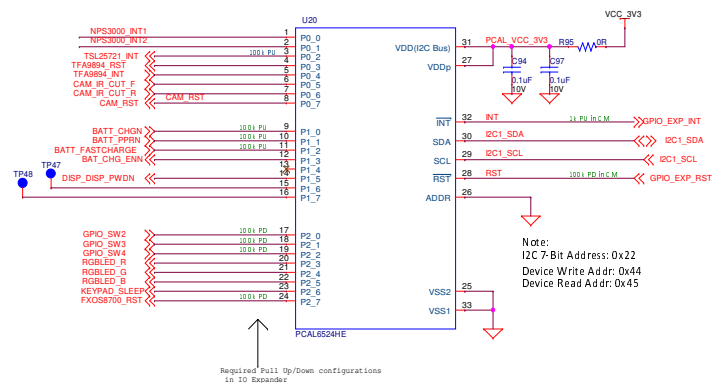


B2B Receptacles & Headers

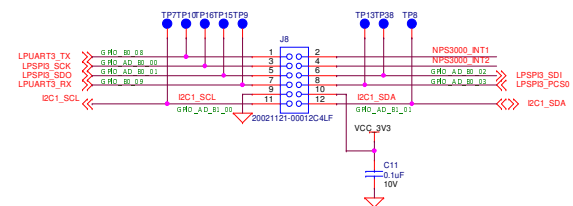
Board To Board Receptacle Connector



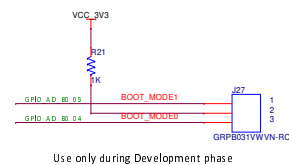
24-bit I/O Expander Interface



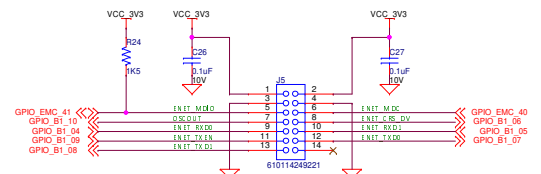
Serial Port Header



Boot Mode selection Header

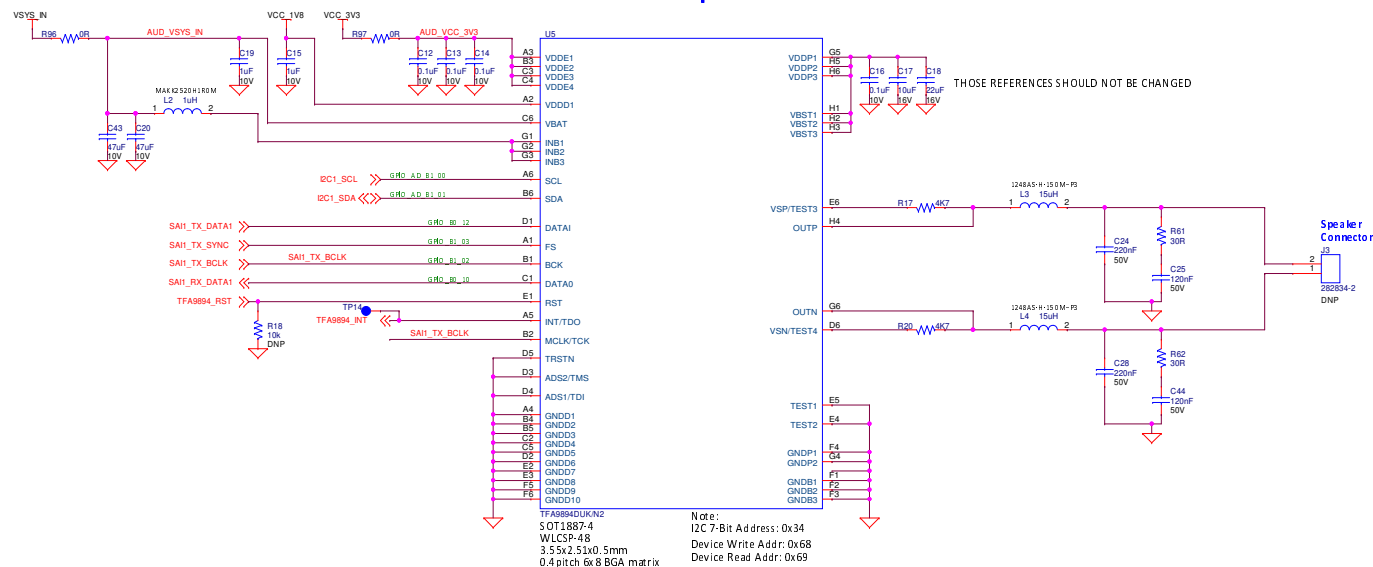


Ethernet Header



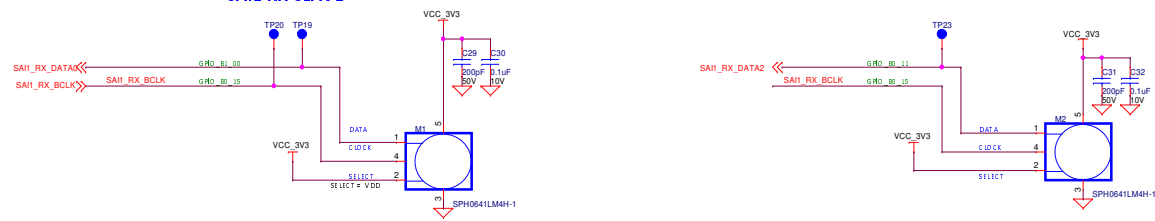
Audio Interface Section

Audio Amplifier



PDM MICROPHONE Interface

SAI1 RX SLAVE



Notes :

1. Decoupling capacitors mounted as close as possible are required for optimum SNR.
2. RF filter capacitors in the range of 20-200 pF may be needed depending upon the RF environment.
3. If both decoupling capacitors and RF filter capacitors are used, the RF filter capacitors should be close to the microphone.

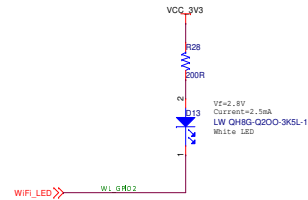


ICAP Classification:		CP:	IJO: X	PUBI:
Drawing Title:				
RT Vision Board				
Page Title:				
Audio Interface				
Size C	Document Number			Rev C1
	SCH-SOL0005, PDF: SPF-SOL0005			
Date:	Friday, October 25, 2019		Sheet 5 of 9	

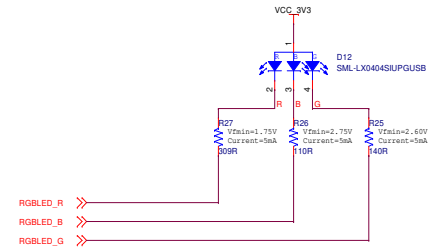
Input & Output Interface

User LED Interface

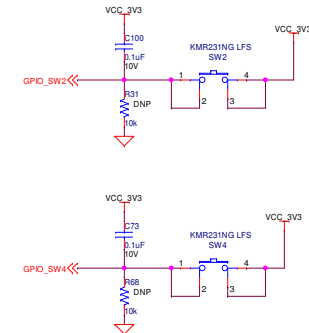
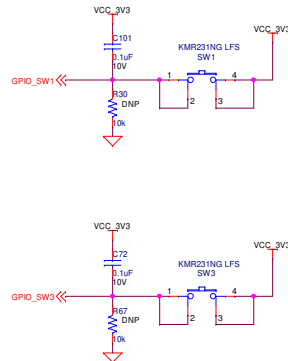
1DX Wi-Fi+BLE Status LED



RGB LED Interface

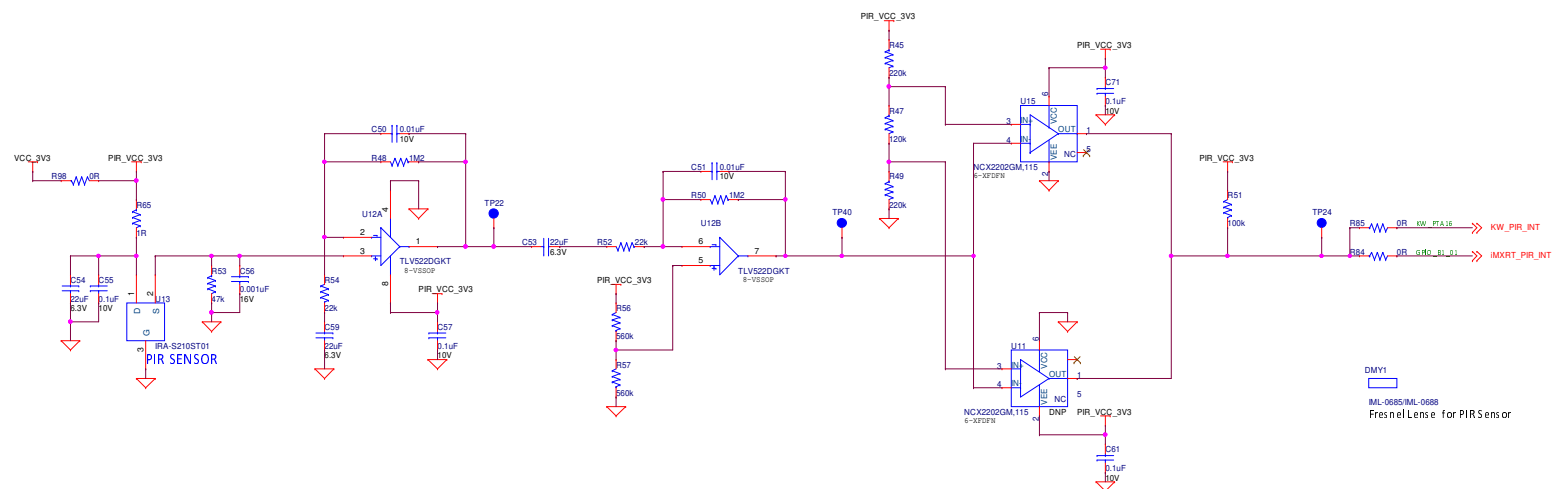


User Switch interface



IAP Classification: CP		BUC: X	PUBL
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PIR Sensor Interface

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ICAP Classification: CP: IUO: X PUB

Drawing Title: _____

RT Vision Board

Page Title: **Sensor Interface**

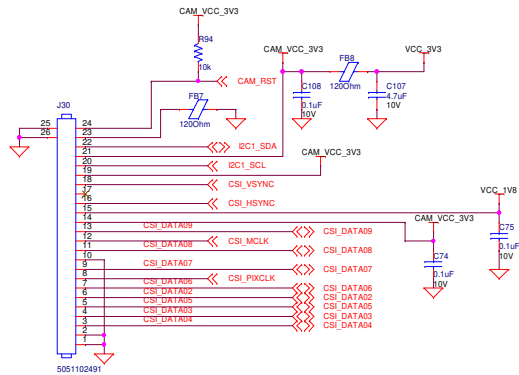
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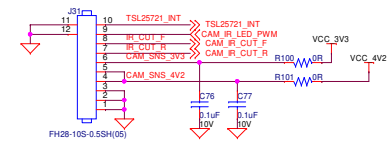
Camera and Display Interface

Camera Interface

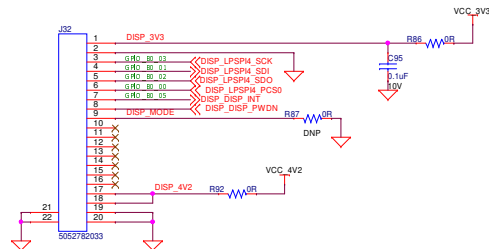
Camera Parallel Interface



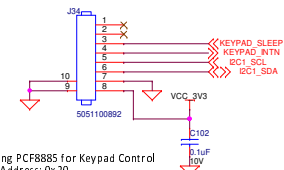
Camera Sense & Control



Display Interface



Keypad Interface









Note:
Considering PCF8885 for Keypad Control
I2C 7-Bit Address: 0x20
Device Write Addr: 0x40
Device Read Addr: 0x41



ICAP Classification:		CP:	I/Q: X	PUB:
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Camera and Display Interface				
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Miscellaneous

- DMY2  RT Vision Board RevC PCB
- DMY3  2-Pin Shunt jumper_1.27MM pitch
- DMY4  CABLE FFC 24POS 0.50MM 2"
- DMY5  CABLE FFC 20POS 0.50MM 2"
- DMY6  CABLE FFC 8POS 0.50MM 2"



IAP Classification:		CP:	BUO: X	PUBL:
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MISCELLANEOUS				
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