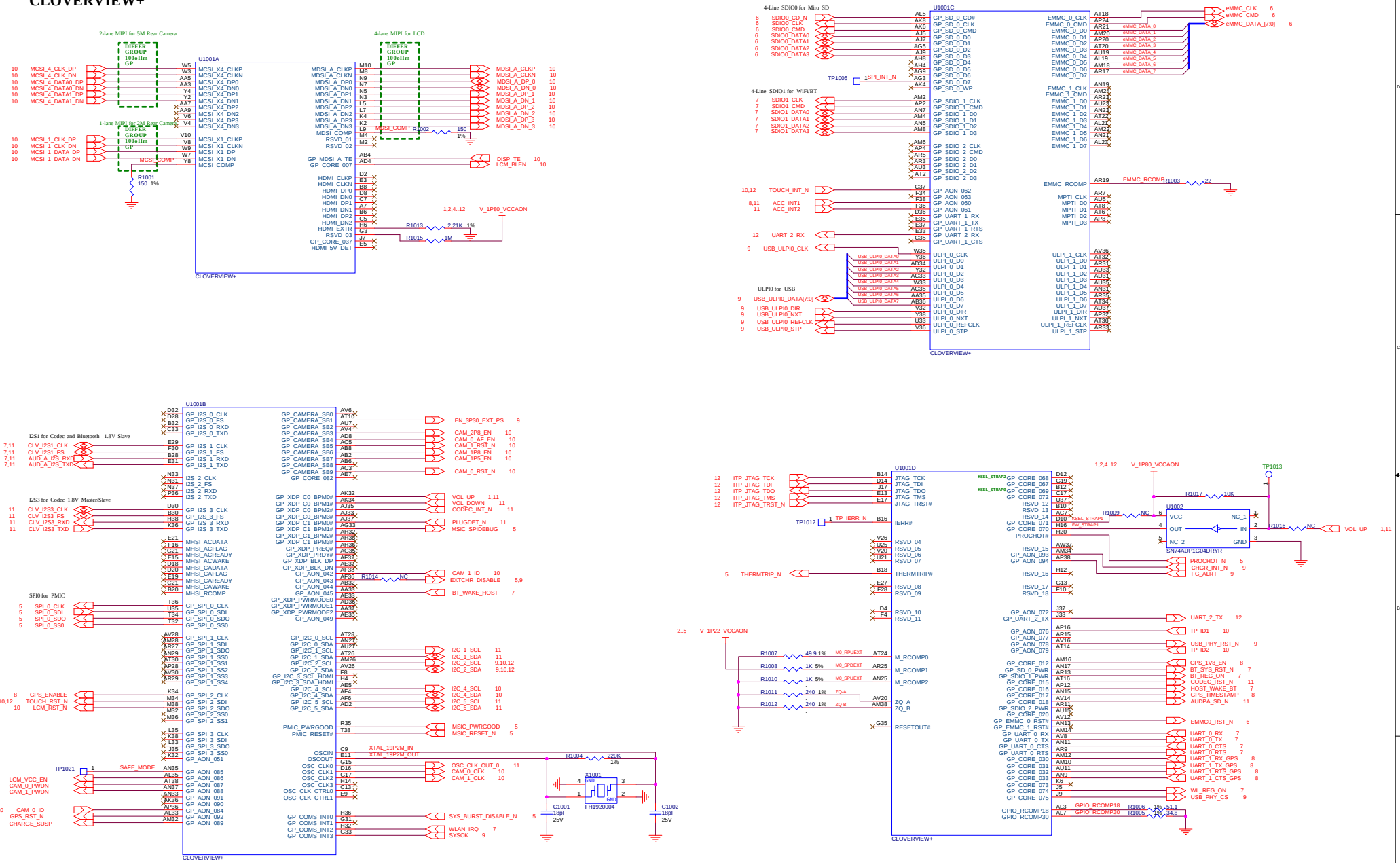


CLOVERVIEW+

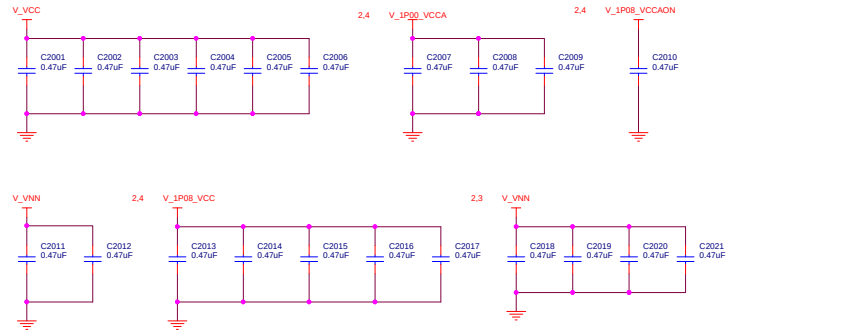


Design Note:
 1. U1001 is CLV+ and 1GB LP-DDR2 POP (Add in BOM)
 2. 1GB LP-DDR2, 220Ball POP, 1V8/1V2, 2Channel, x32
 EDB8164B3PD-1D-FELPIDA
 K3PE7E00D-XGC2 SAMSUNG
 H9TKNN8KDMRMR-NGMHYNIX

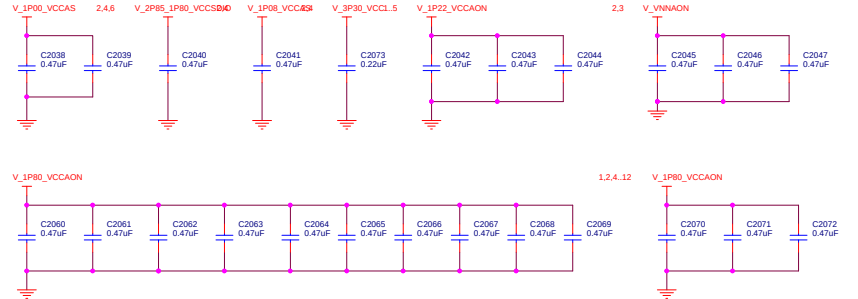
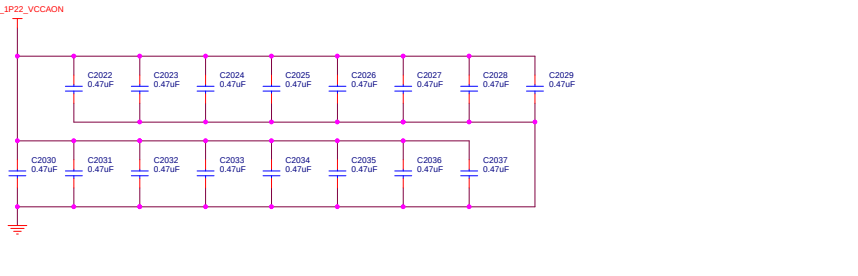
U1001
 POP TYPE
 CLV+ LPDDR2

DUCATI_MB_V4P0			
01 AP_Clv+1_MAIN_IO			
File	Document Number	Rev	
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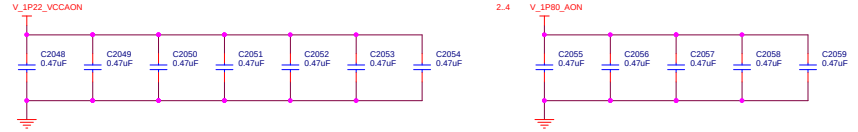
CLOVERVIEW+



CAD Note: Place caps near package edge.



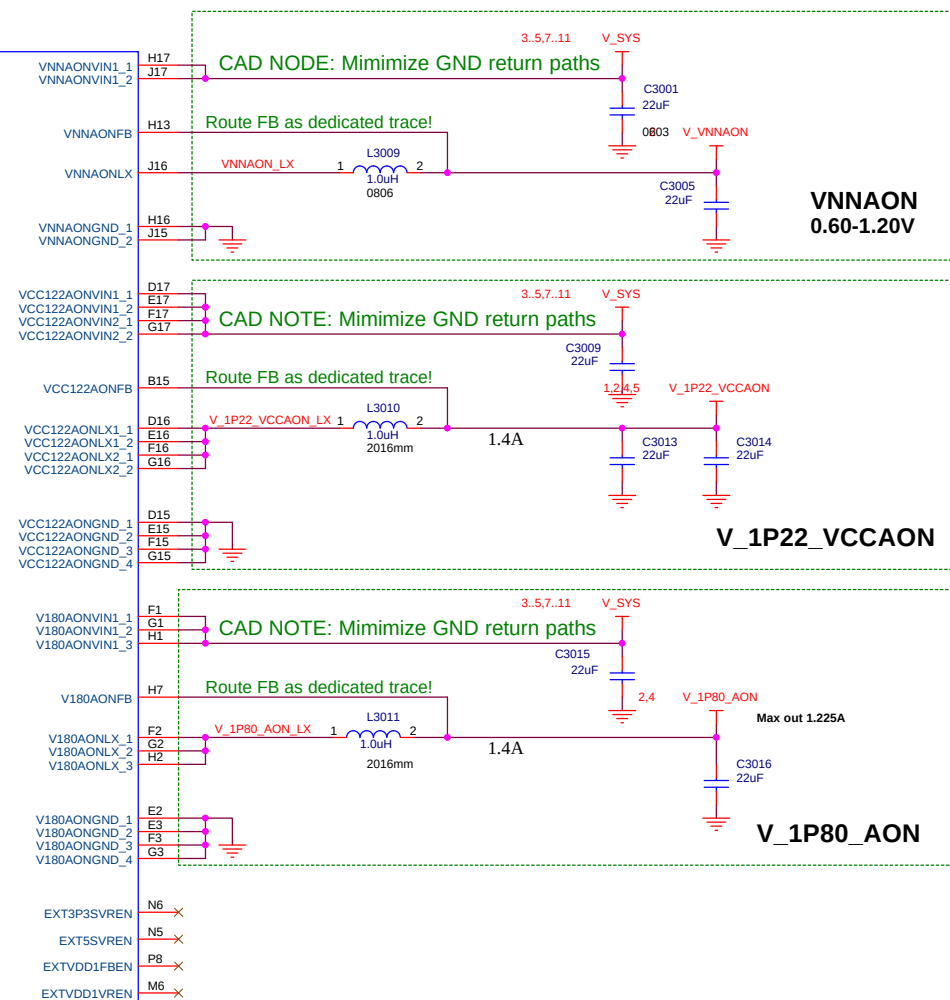
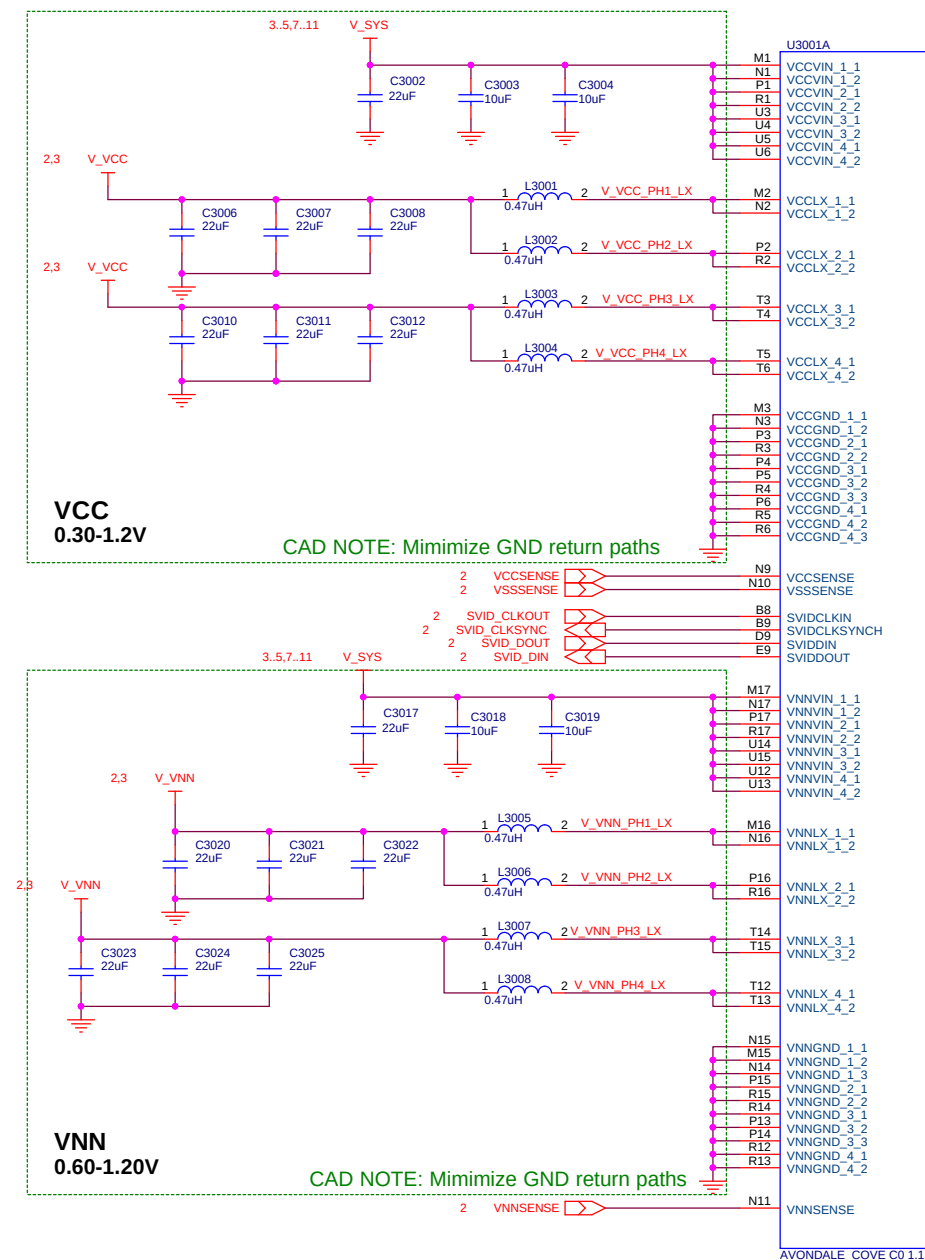
LPDDR2 Decoupling CAPS



ECAD NOTE:

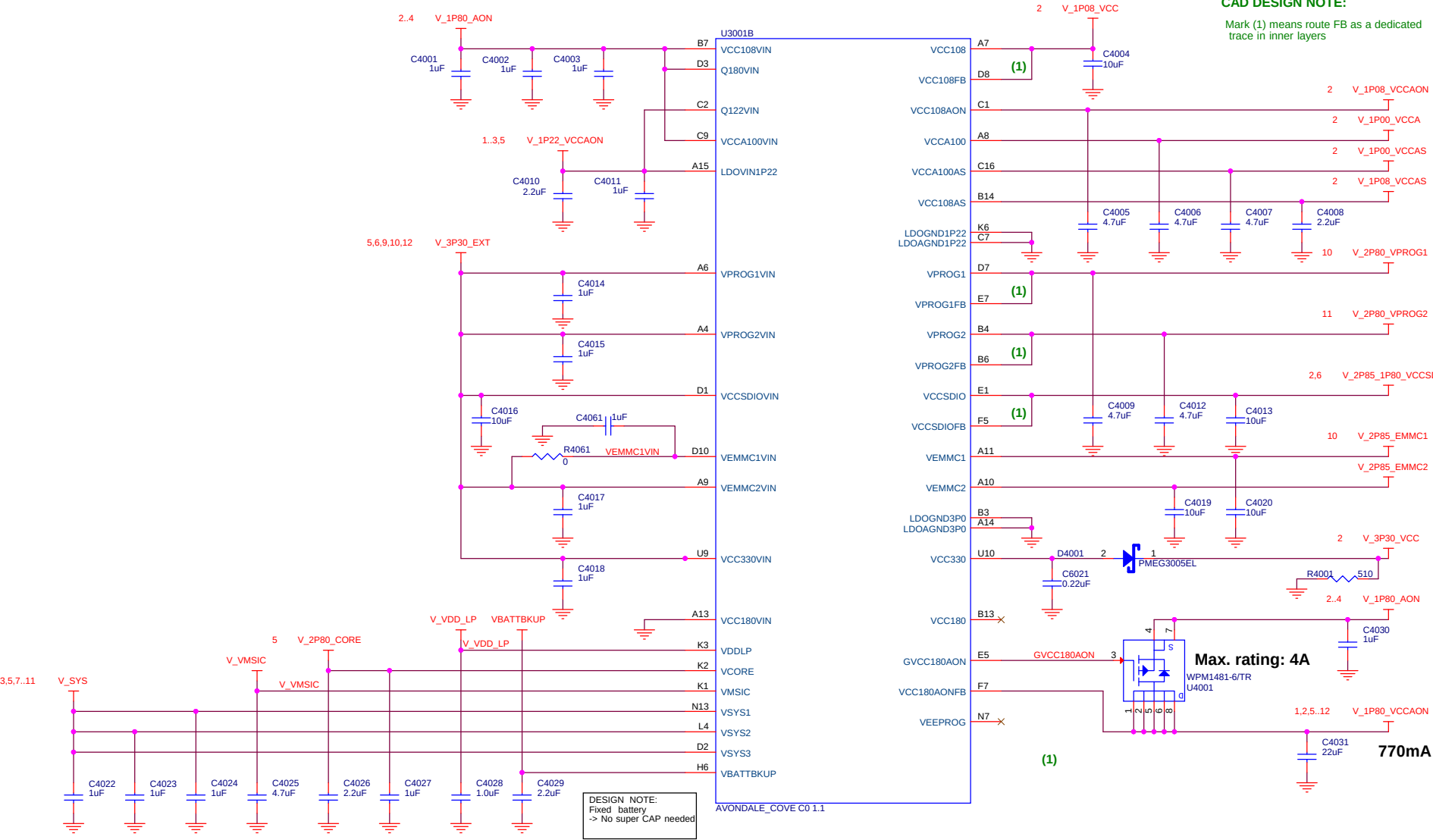
- Use dedicated branch on the following power feeds:
- V_IP22_VCCAON_CSI
- V_IP22_VCCAON_DSI
- V_IP22_VCCPADMCCKAON
- V_IP22_VCCAON_MEM

DUCATI_MB_V4P0			
File	02 AP_CLV_PWR_GND		
Size	Document Number	Rev	
A2		V1.0	
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AVONDALE_COVE

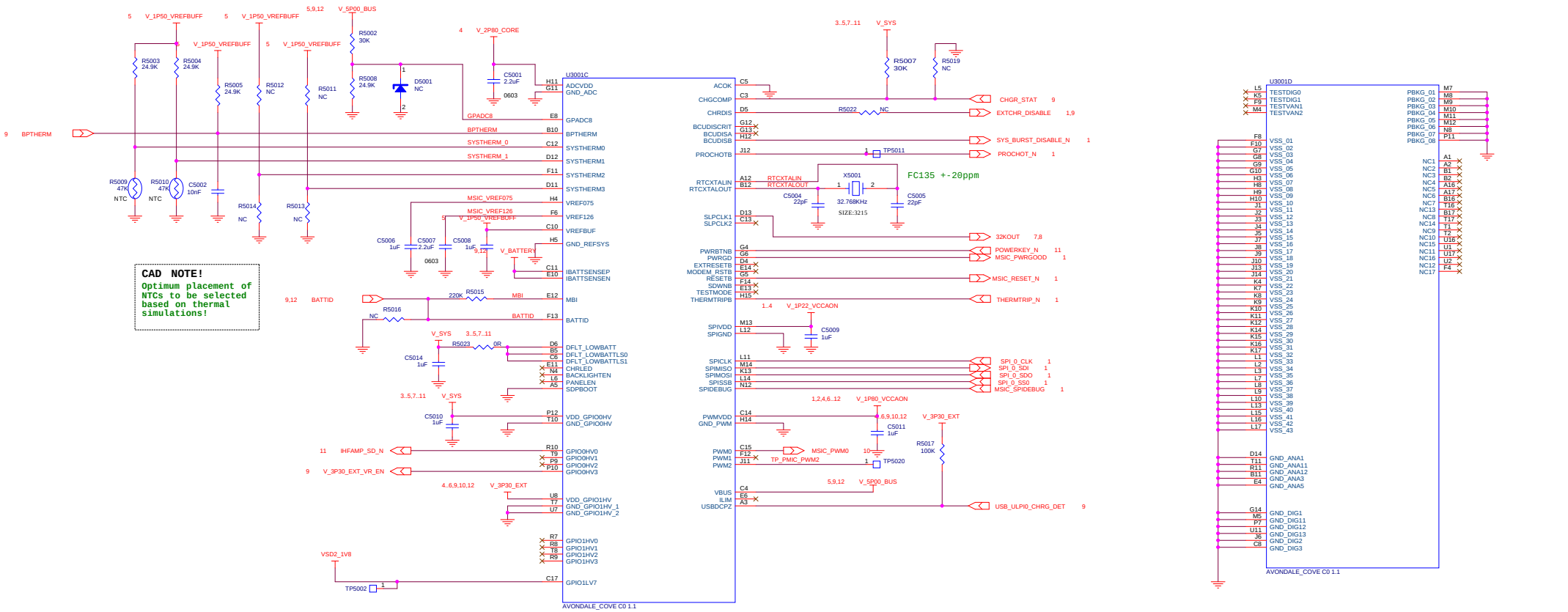
DUCATI_MB_V4P0			
Title			
03 PMIC_ Avondale Cove_1			
Size A3	Document Number		Rev V1.
Date:	Monday, March 24, 2014	Sheet	3 of 12

AVONDALE_COVE

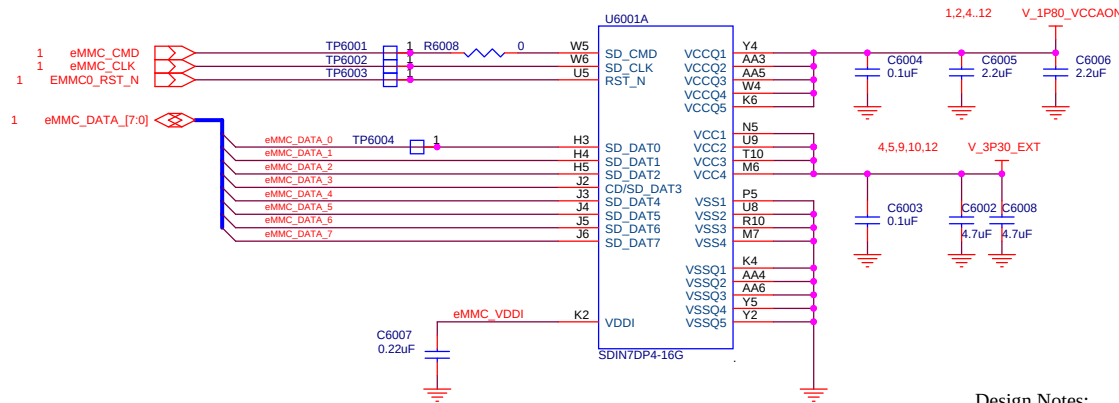


DUCATI_MB_V4P0			
Title			
04 PMIC_Avondale Cove_2			
Size	Document Number		Rev
A3			V1.0
Date:	Monday, March 24, 2014	Sheet	4 of 12

AVONDALE_COVE

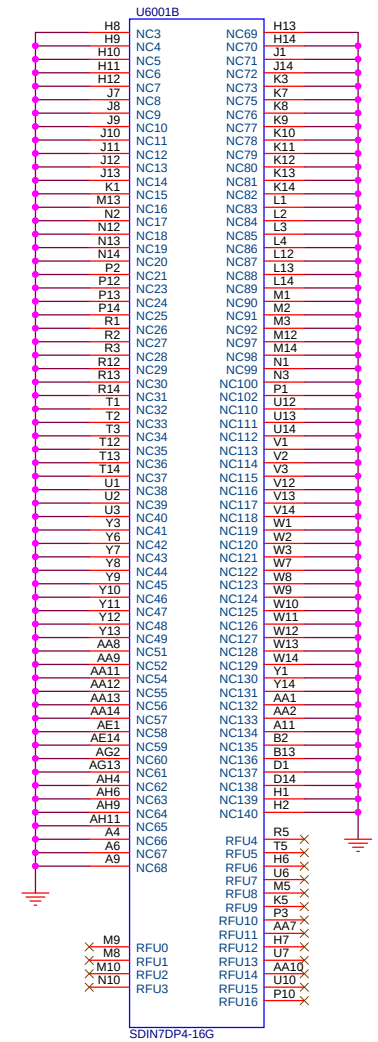


eMMC - 8/16GB

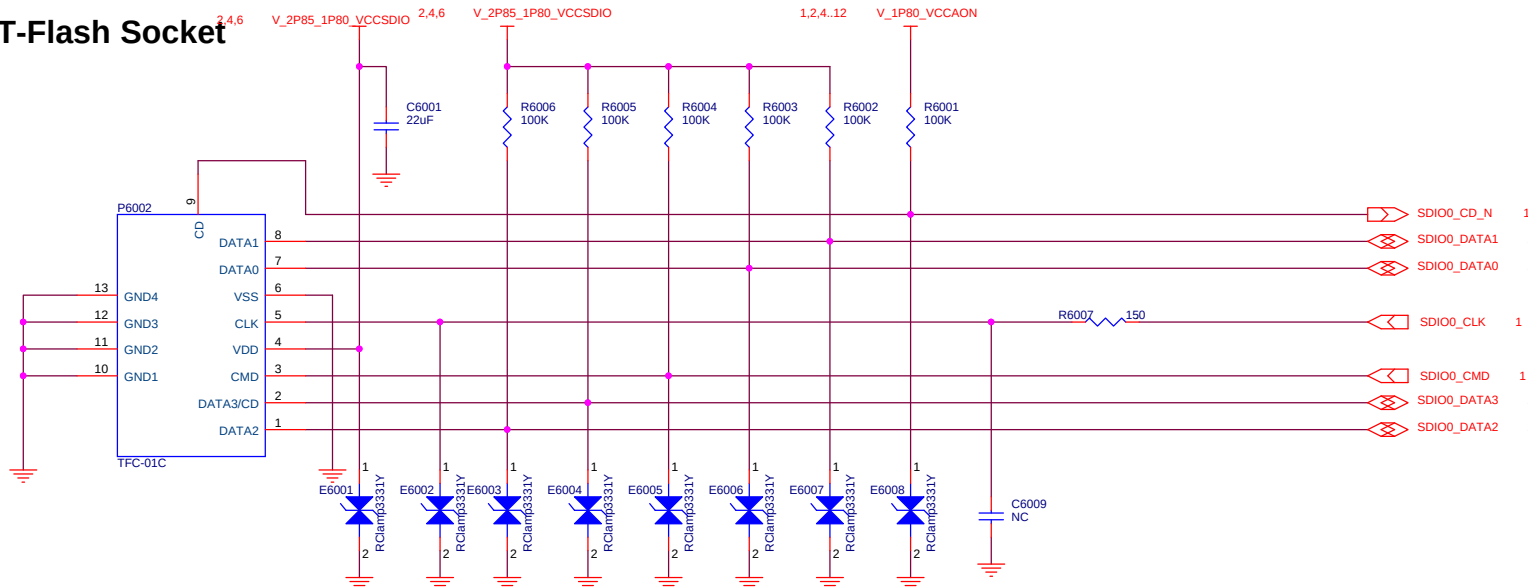


Design Notes:

- eMMC NC pins should be connected to GND.
RFU pins should be left unconnected.
- Compatible JEDEC packages:
12mm x 16mm (169 balls) as default on PCB
12mmx18mm (169 balls)
11.5x13mm (153 balls)
- 16GB Toshiba THGBM5G7A2JBAIR
16GB Sandisc SDIN7DP4-16G
16GB Samsung KLMAG2GE4A-A001
- 8GB SanDisc SDIN7DU2-8G

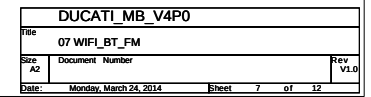


T-Flash Socket

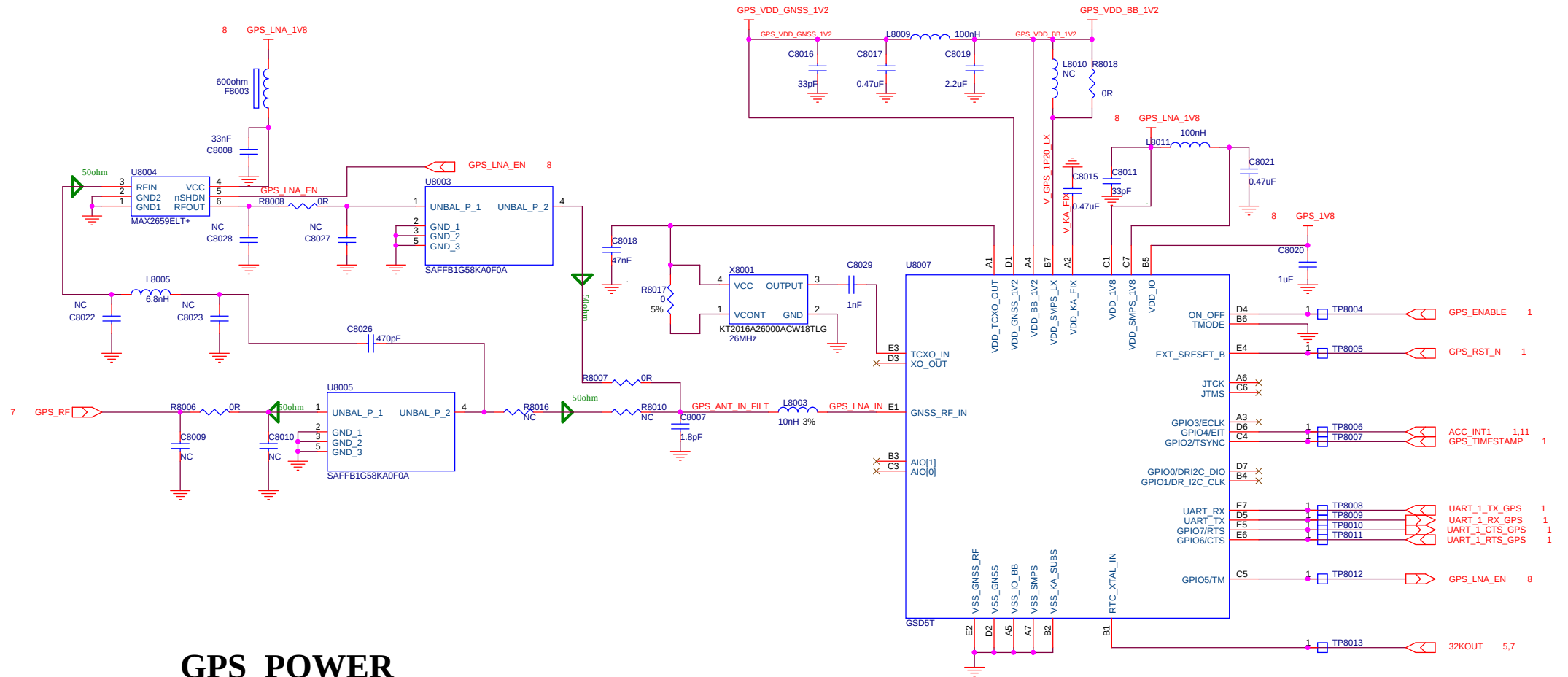


DUCATI_MB_V4P0			
Title	06 eMMC_T-FLASH		
Size A3	Document Number	Rev v1.0	
Date:	Monday, March 24, 2014	Sheet 6	of 12

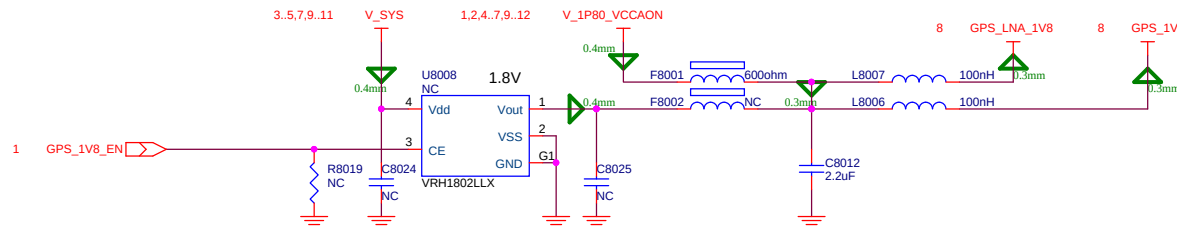
AS MFG RF TEST



GPS GSD5T

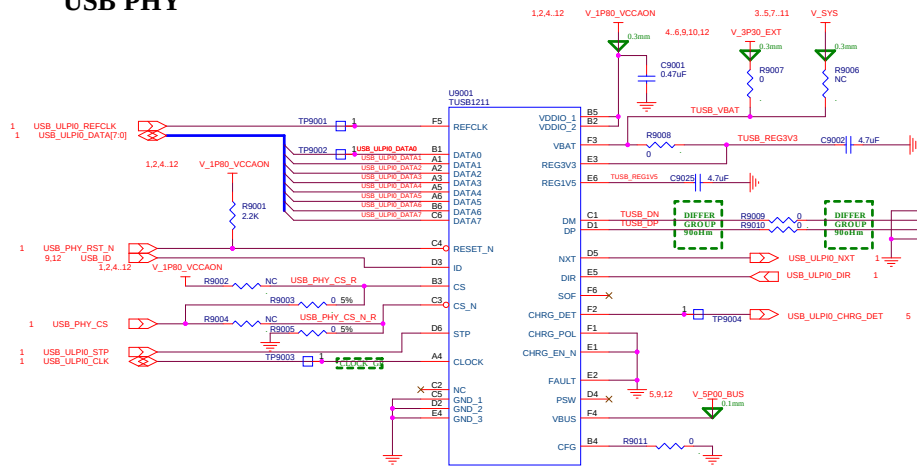


GPS POWER

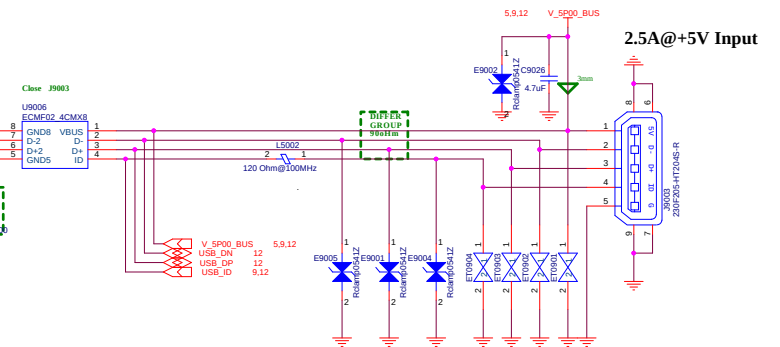


DUCATI_MB_V4P0			
Title	08 CWS_GPS		
Size	Document Number	Rev V1.0	
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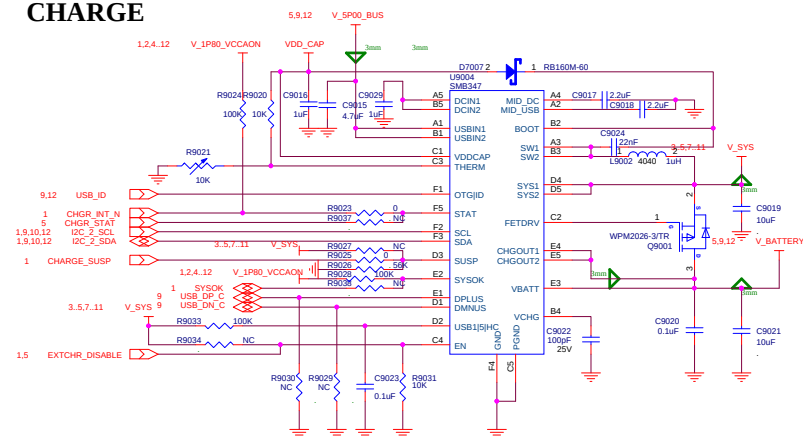
USB PHY



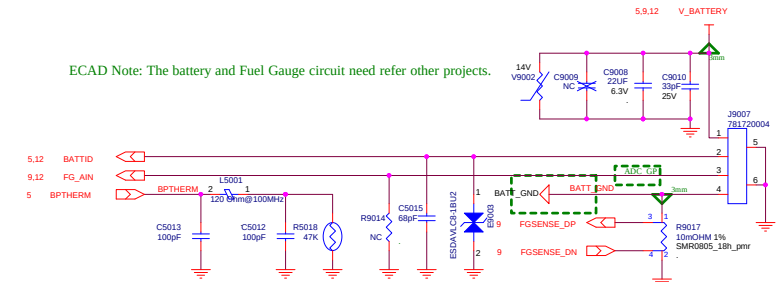
5PIN MICRO USB



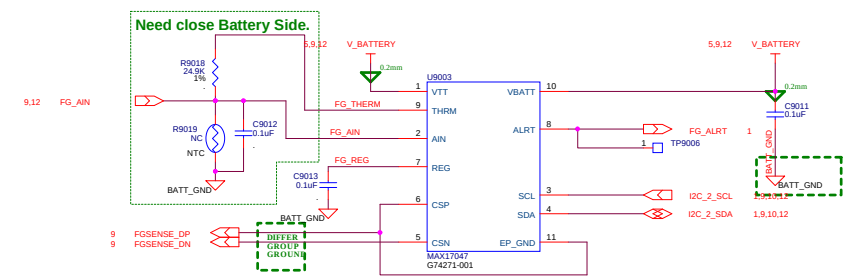
BATTERY CON



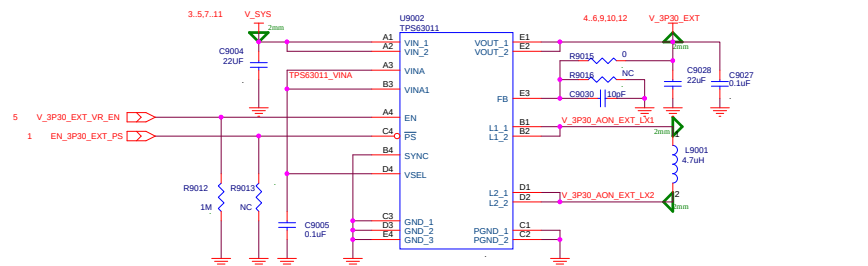
ECAD Note: The battery and Fuel Gauge circuit need refer other projects.



FUEL GAUGE

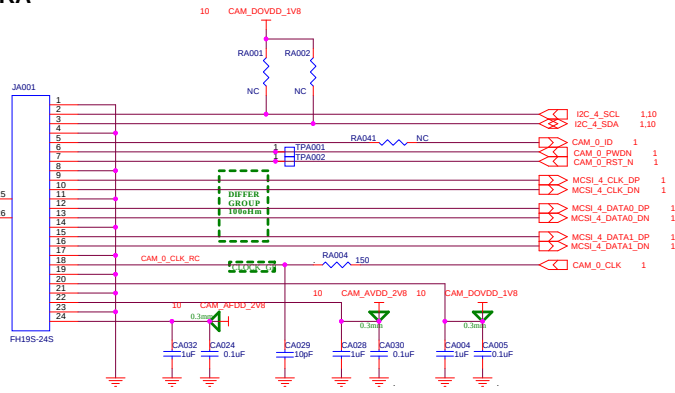


DCDC 3.3V

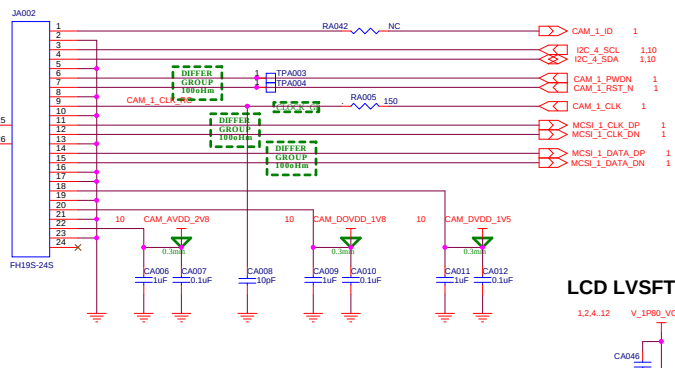


DUCATI_MB_V4P0			
Title			
09 POWER_USB_CHARGE_FG			
Size A2	Document Number		Rev V1.0
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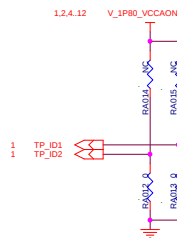
1 DGND
2 I2C_SCL
3 I2C_SDA
4 DGND
5 STROBE
6 PWDN
7 RESET_N
8 DGND
9 MCSTI_CLK_P
10 MCSTI_CLK_N
11 DGND
12 MCSTI_DATA0_A_P
13 MCSTI_DATA0_A_N
14 DGND
15 MCSTI_DATA1_P
16 MCSTI_DATA1_N
17 DGND
18 MCLK
19 DGND
20 DOVDD1.8V
21 DGND
22 AVDD2.8V
23 AGND
24 AFDD



1 NC
2 DGND
3 I2C_SCL
4 I2C_SDA
5 DGND
6 PWDN
7 RESET_N
8 DGND
9 MCLK
10 DGND
11 MCS1_CLK_P
12 MCS1_CLK_N
13 DGND
14 MCS1_DATA0_P
15 MCS1_DATA0_N
16 DGND
17 DGND
18 DVDD1.5V
19 DGND
20 DOVDD1.8V
21 DGND
22 AVDD2.8V
23 AGND
24 NC

[illegible][illegible]

TP_ID1 (GPI O?)	TP_ID2 (GPI O?)	TP TYPE
0	0	FT5406
1	0	GT928
0	1	Reserved
1	1	Reserved

[illegible]

The image shows a detailed PCB layout for a Raspberry Pi 4B, specifically the back of the board. The layout is color-coded to match the components on the board. The main board is shown in the background, with various components labeled with their part numbers and values. The layout includes a power section with a 5V regulator, a USB section with a USB-to-UART bridge, and a display section with a 10.1-inch display. The board is populated with various components including capacitors, resistors, and integrated circuits. The layout is color-coded to match the components on the board.

[illegible]

1 MIC
A1 MIC
2 GND
3 HSR
4 HSL
5 DET

[illegible]

The schematic diagram illustrates the audio amplifier circuit, showing the connection of the left and right speakers. The circuit includes a power supply section with a 3.5V regulator, a signal input section with a 10k resistor, and two speaker drivers. The left speaker is connected to the output of the left channel, and the right speaker is connected to the output of the right channel. The schematic also shows the connection of the ground plane and the power supply pins of the IC.

DUCATI MB_V4P0	
Pin	11 AUDIO_CODEC_KEY_ASENSOR

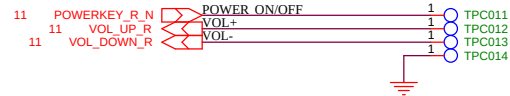
AUDIO JACK



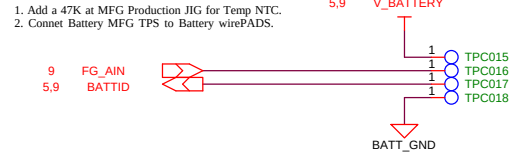
USB IF



KEYPAD



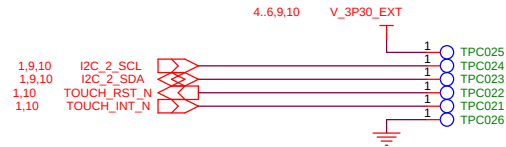
BATTERY



UART2



TOUCH PANNEL



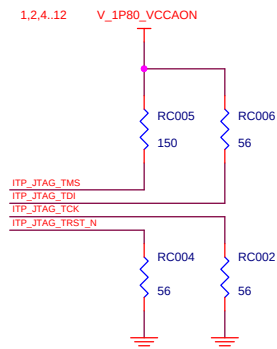
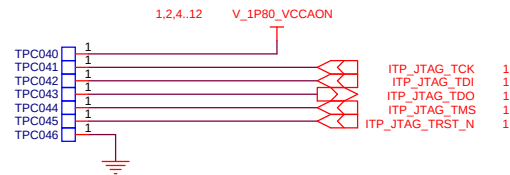
AUDIO



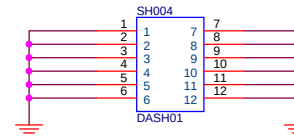
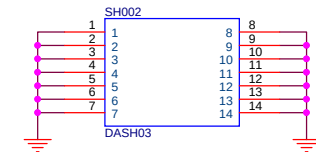
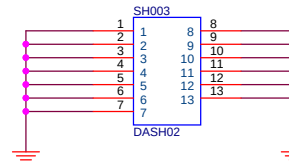
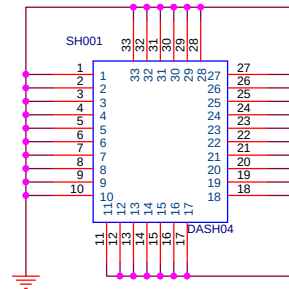
PRODUCTION TP

- 50mils test points on PCB BOTTOM side.
- Every TPs gorup must place to together.
- All production TPS are out of shielding case.

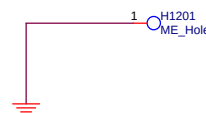
JATG TP



SHIELDING CASE



ME PTH



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12 DEBUG_MFGTP_SHIELDING			
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