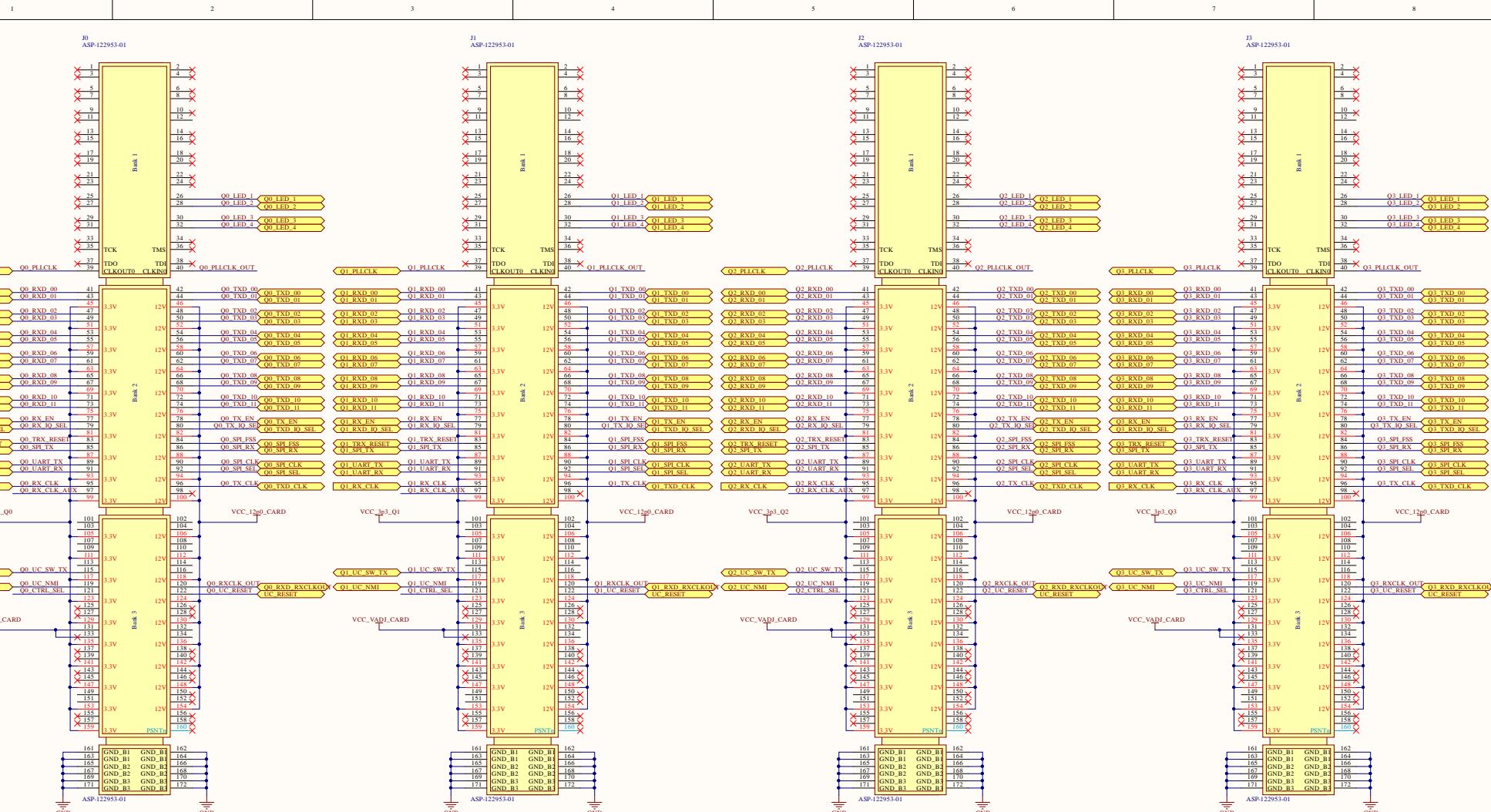


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File:	D:\Dropbox\...\WAB 1x4 bus transcript	1



RF Control Lines: CTRLSEL, WIFI_ANT_CTRL,
UHF_ANT_CTRL, WIFI_PA_CTRL, UHF_PA2_CTRL are left to the Stellaris Microcontroller to control.

During development, we showed that it not only was possible to leave all switching control to the Stellaris microcontroller, it was much easier from a high-level soft flow perspective to do so. Pulldowns on the WSD default RF control to the microcontroller can be used to leave all three inputs floating.

microcontroller, so we can leave all these inputs floating.

PVDDSPI33 must be fixed to 3.3V in order to operate with onboard Stellaris SPL. This requires that all four SPI lines and chip control signals remain 3.3V signals: SEN, SDO, SDIO, CLK, RESET, TXEN, RXEN, and most importantly: PLLCL

PVDDAD33[ABCD] digital IQ interface supply pins, determining high voltage between [1.8..3.3] V. This means TXD[11:0], TX_IQ_SEL, TX_CLK, and RX_CLK_OUT, RX_CLK, RX_IQ_SEL, RXD[11:0] must all work at the reference voltage provided on these pins.

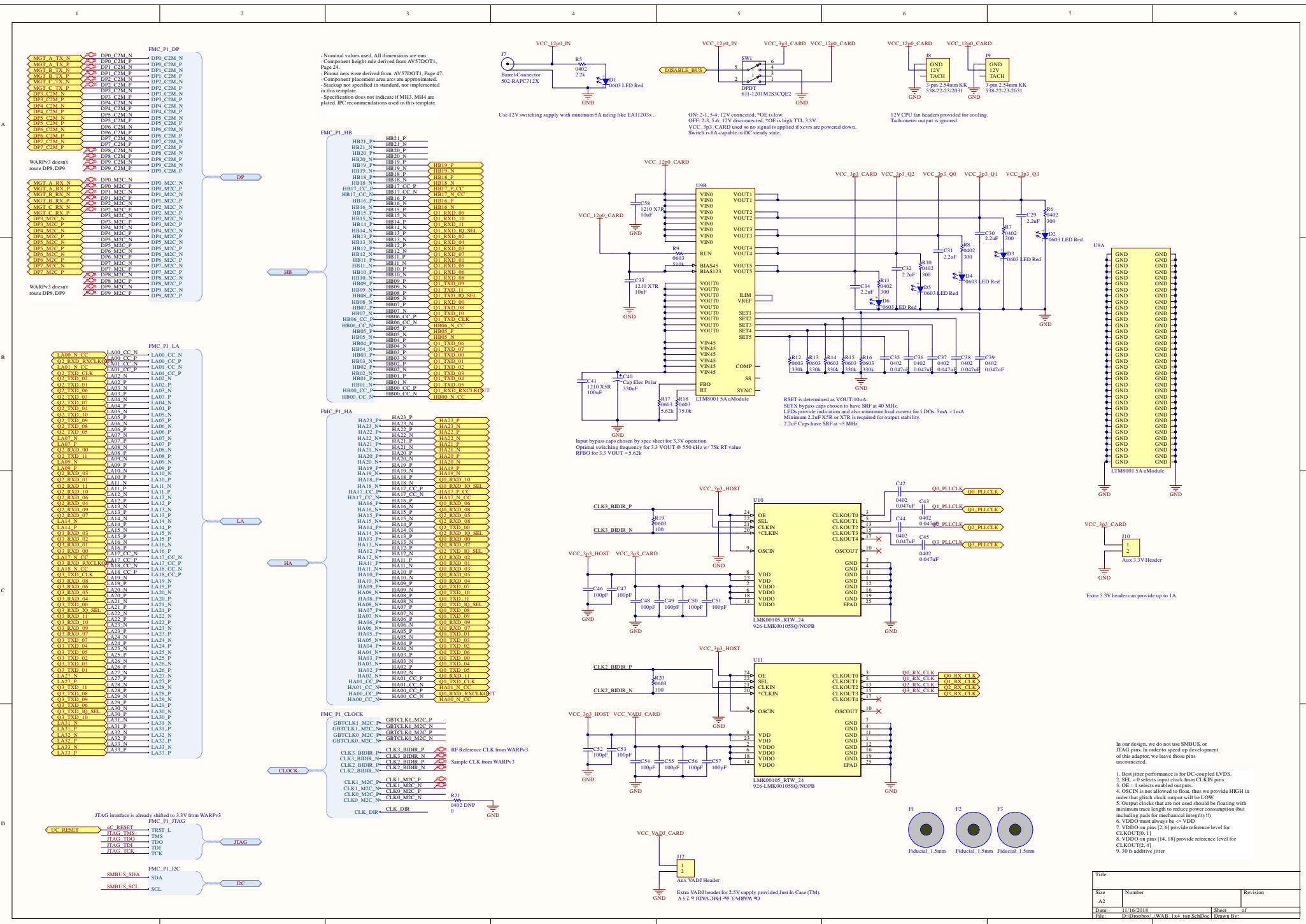
PVDDVGG is the ESD diode supply voltage and MUST remain at 3.3V all the time.

TTL External signals used to MUX SPI and RF CTRL lines also remain 3.3V levels for compatibility with digital switch and inputs throughout the board.

Ambition: check output provided to allow quick adaptation to other Lime/Micromobility boards.

<u>Q0_RX_CLK</u>	R1 W 0402 DNP 0	<u>Q0_RX_CLK_AUX</u>
<u>Q1_RX_CLK</u>	R2 W 0402 DNP 0	<u>Q1_RX_CLK_AUX</u>
<u>Q2_RX_CLK</u>	R3 W 0402 DNP 0	<u>Q2_RX_CLK_AUX</u>
<u>Q3_RX_CLK</u>	R4 W 0402 DNP 0	<u>Q3_RX_CLK_AUX</u>

Title		
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Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	PSR-4000BN	0.40mil	4.5	
3	Top Layer	Copper	1.35mil		
4	Dielectric1	FR406 2113	3.90mil	4.2	
5	Ground Plane 1 (GND)	Copper	1.35mil		
6	Dielectric2	FR406 Core	5.00mil	4.2	
7	Inner Layer 1	Copper	1.35mil		
8	Dielectric3	FR406 2113+2116	7.70mil	4.2	
9	Ground Plane 2 (GND)	Copper	1.35mil		
10	Dielectric4	FR406 Core	5.00mil	4.2	
11	Inner Layer 2	Copper	1.35mil		
12	Dielectric5	FR406 2113+2116	7.70mil	4.2	
13	Power Plane (+3, 3V)	Copper	1.35mil		
14	Dielectric6	FR406 Core	8.00mil	4.2	
15	Power Plane (+12V)	Copper	1.35mil		
16	Dielectric7	FR406 2113+2116	7.70mil	4.2	
17	Inner Layer 3	Copper	1.35mil		
18	Dielectric8	FR406 Core	5.00mil	4.2	
19	Ground Plane 3 (GND)	Copper	1.35mil		
20	Dielectric9	FR406 2113+2116	7.70mil	4.2	
21	Inner Layer 4	Copper	1.35mil		
22	Dielectric10	FR406 Core	5.00mil	4.2	
23	Ground Plane 4 (GND)	Copper	1.35mil		
24	Dielectric11	FR406 2113	3.90mil	4.2	
25	Bottom Layer	Copper	1.35mil		
26	Bottom Solder	PSR-4000BN	0.40mil	4.5	
27	Bottom Overlay				

1. Contact: Ryan E. Guerra, Cell +1 (315) 857-7693 all-hours.
2. Controlled Dielectric, 12-layer stackup on Mech Layer 13.
3. Lead-free Solder ONLY.
4. OK to panel for fab. OK to de-panel AFTER assembly.
5. Hold for Assembly.
6. Green Soldermask.
7. Automated Optical Inspection for Assembly.
8. X-ray inspection required for mezzanine connectors: J0, J1, J2, J3, P1, and U9.

