

1				2				3				4			
REV	DATE	BY	CHANGE												
A	8/22/12	GLS	Rotated Switch Changed IO per SW												
A1	10/26/12	GLS	See change list ***												
A2	4/1/13	GLS	Moved EM2 connectors to make room for CC2538												

Feb 5 2013 Next Rev recommendations
Seperate EMK connectors to fit CC2538 that interferes with Debug conn

Change List ***
Added Pushbuttons
Changed P8 and P9 connections per xls from Monk
Added Leds for AM335 Binding signals
Added Reset Logic
Add option to use UART1
Added pullups on AM EMx RSTn's
with DNP for Pulldown if needed on PU
added UART jumpers and Renamed per Roger Monk

Chipcon RF boards, called CCxxxxEMKs mate into the pair of SMT board to board connectors on this adaptor
Each EMK has two 20-pin mating connectors, traditionally called RF1 and RF2 with pins below

EMx_RF1
RF1 Connector

Pin#	EM Adapter Pin Assignment
1	GND
3	MODULE_UART_CTS
5	SLOW_CLK
7	MODULE_UART_RX
9	MODULE_UART_TX
11	I2C_SDA
13	I2C_SCL
15	SDIO_CLK
17	SDIO_CMD
19	GND
2	SDIO_D0
4	SDIO_D1
6	SDIO_D2
8	SDIO_D3
10	RF_GPIO0
12	RF_GPIO1
14	SPI_CS _n
16	SPI_CLK
18	SPI_MOSI
20	SPI_MISO

EMx_RF2
RF2 Connector

Pin#	EM Adapter Pin Assignment
1	+1.8V (Optional)
3	+1.8V (Optional)
5	+1.8V (Optional)
7	+3.3V
9	+3.3V
11	MODULE_AUDIO_FSYNC
13	RF_GPIO2
15	CC_RSTN
17	MODULE_AUDIO_CLK
19	WCS_NSHUTD
2	GND
4	ANALOG_AUDIO_DATA_LEFT
6	ANALOG_AUDIO_DATA_RIGHT
8	MODULE_AUDIO_DATA_OUT
10	MODULE_AUDIO_DATA_IN
12	USBM
14	USBP
16	NC
18	MODULE_UART_RTS
20	RF_GPIO3

Beagle Bone RF Adaptor Cape RF Interface

Radio Pins as seen from the Top of the Cape

NOTE RF Boards are rotated 180 Deg from one another to seperate antennas

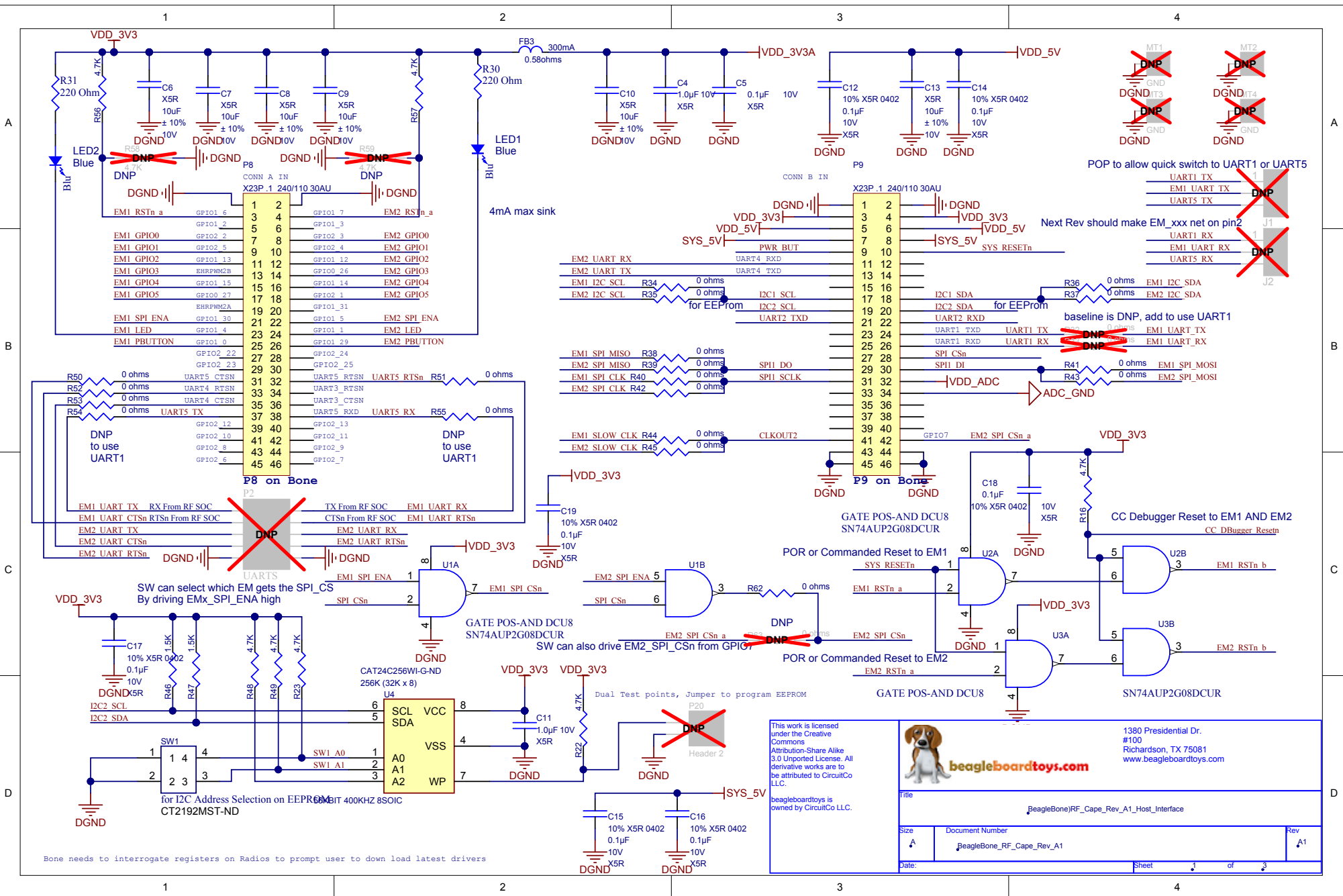
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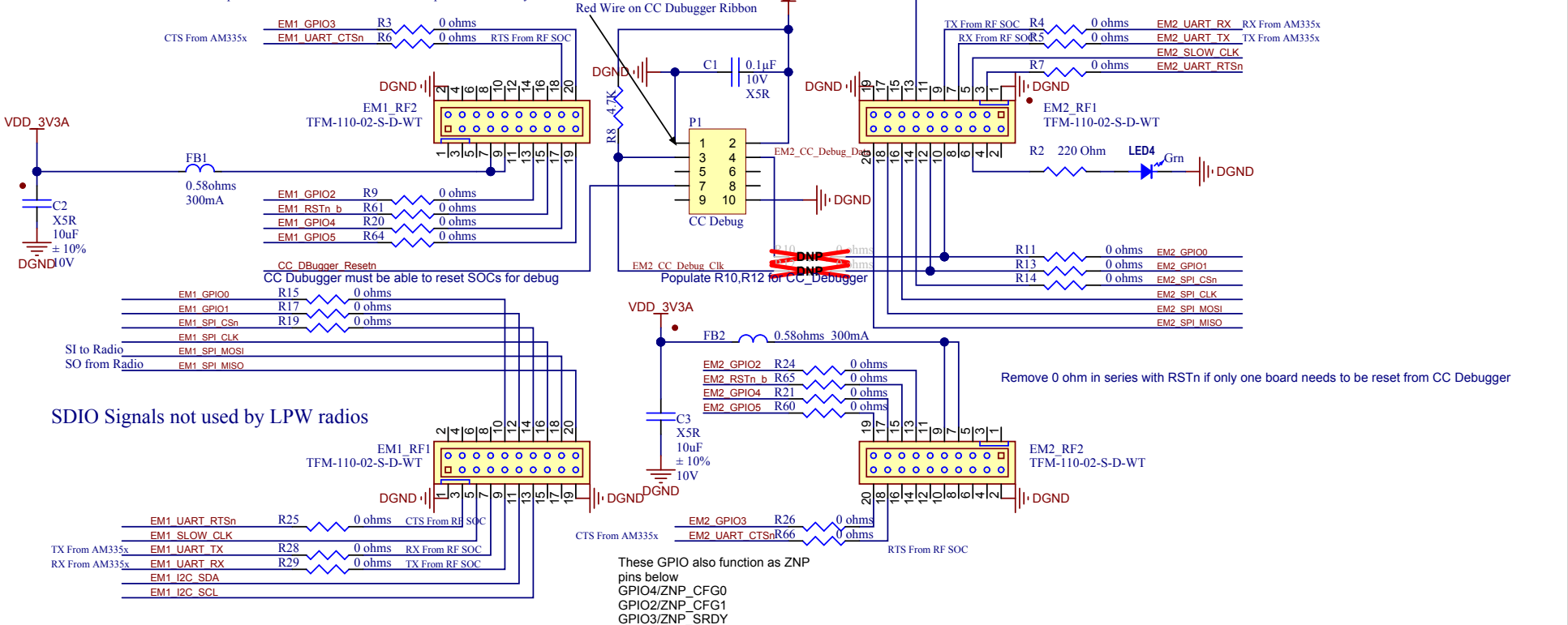
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The Beagle Bone RF Adaptor is meant to be the top most board in stack to maximize the performance of any antenna structures on the radio board installed on this adaptor
RF Adaptor connectors as seen from TOP. (Expansion Headers go down to Bone Board)
The Radio CCxxx-EMK connectors are spaced 1200mils center to center and are pushed all the way at the bottom on the card outline.



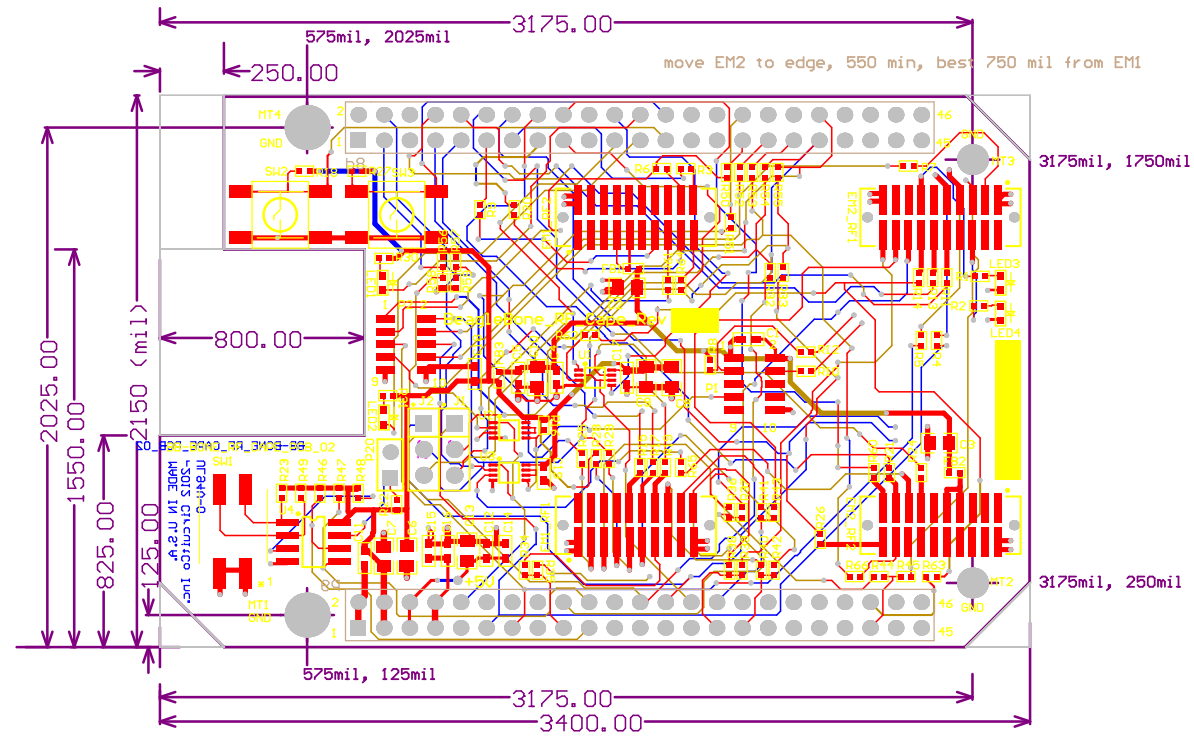
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Top Overlay
Top Layer
Mid-Layer 1
Bottom Layer