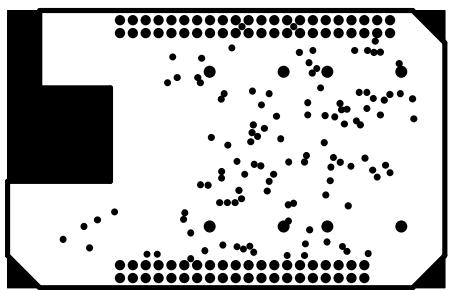
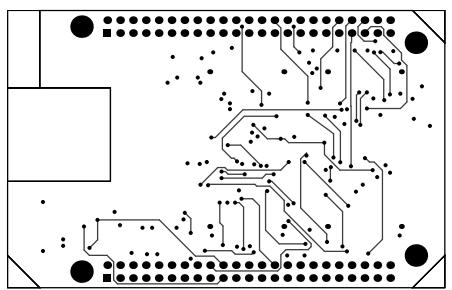


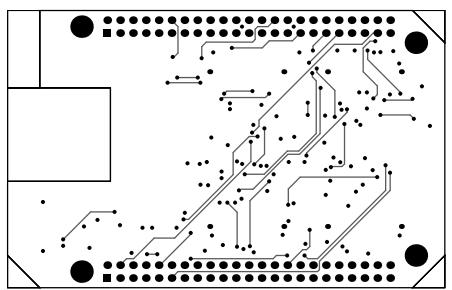
Top Layer



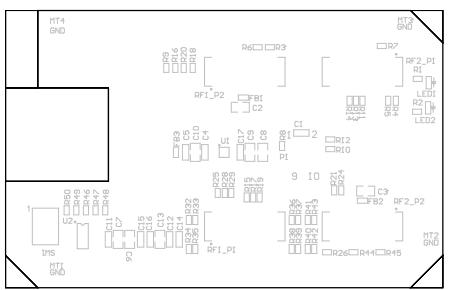
GND_PLANE

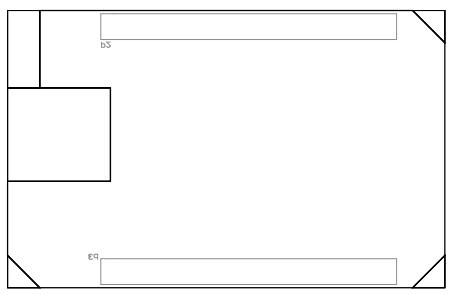


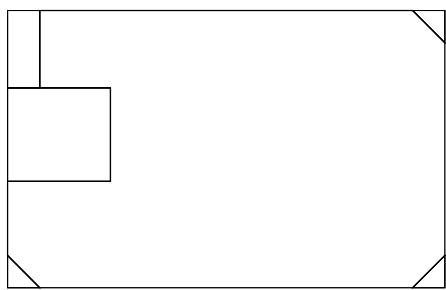
Mid-Layer 1

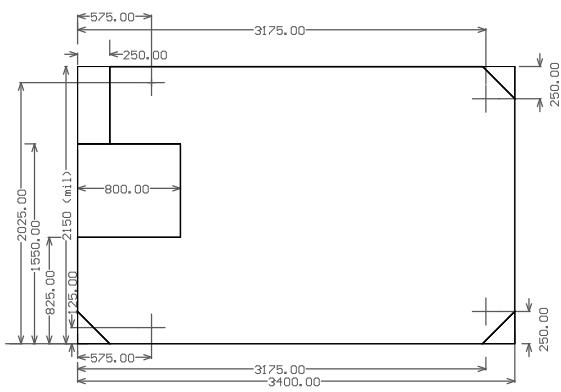


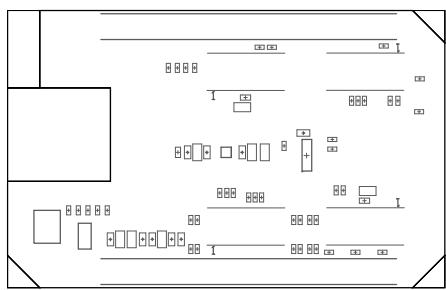
Bottom Layer

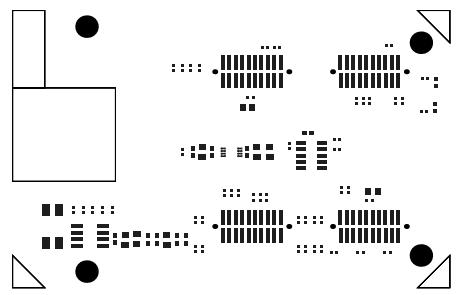




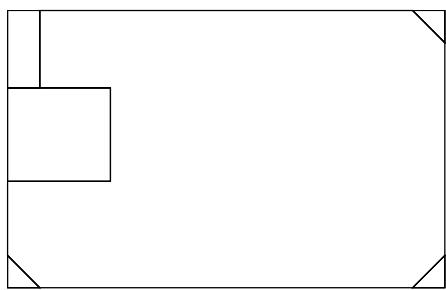










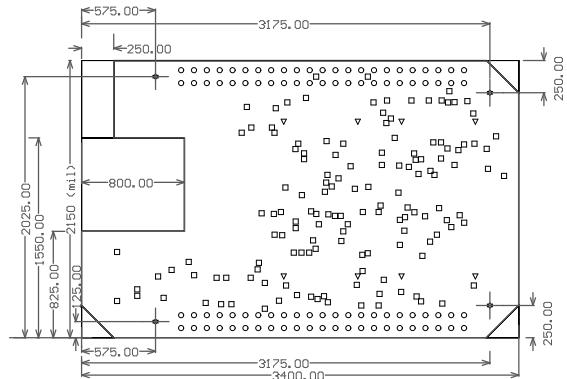


NOTES:

1. MATERIAL: NEMA FR4, .062 THICK +/-0.005, 2.0 oz. Cu / SQ FT.
2. FABRICATION PROCESS SHALL BE UL RECOGNIZED 94V-0 AND PCB SHALL BE IDENTIFIED WITH MFR'S APPROVED LOGO AND TYPE DESIGNATION IN ETCH ON BOTTOM LAYER. FABRICATION SHALL BE IN ACCORDANCE WITH IPC-A-600D, CLASS 2.
3. ALL UNDIMENSIONED HOLES SHALL BE WITHIN .006 OF TRUE POSITION DIA.
4. FINISHED CONDUCTOR WIDTH SHALL BE +/- 20% OF ORIGINAL ARTWORK.
5. MINIMUM COPPER PLATE IN HOLES TO BE .002". UPON PLATING THE HOLES, THE SURFACE COPPER WILL HAVE A TOTAL COPPER THICKNESS OF 2 OUNCE.
6. HASL 60/40 TIN/LEAD PLATE TO A TOTAL THICKNESS OF .000080/.001500. (MAX ALLOWABLE DEVIATION OF TIN/LEAD COMPOSITION TO BE 50/50.)
7. APPLY LP1 SOLDERMASK PER IPC-SM-840, CLASS II, TYPE A1 OVER BARE COPPER TO BOTH SIDES. COLOR: WHITE
8. CONSTRUCTION: 4 LAYERS
9. APPLY SCREENED NOMENCLATURE INK TO COMPONENT SIDE - BLACK EPOXY INK.
10. FABRICATOR TO PANELIZE 2 X 2 WITH .100 ROUTED SEPARATION BETWEEN BOARDS

* = RF_CAPE.PcbDoc
 *ZIP FILE CONTENTS
 RS274X EMBEDDED APERTURES FOR ALL GERBERS

FILENAME SUFFIX	DESCRIPTION
***.GTL	LAYER 1 (TOP)
***.GP1	LAYER 2 (GND PLANE)
***.GP2	LAYER 3 (VCC PLANE)
***.GBL	LAYER 4 (BOTTOM)
***.GTO	TOP SILKSCREEN
***.GTS	TOP SOLDERMASK
***.GBS	BOTTOM SOLDERMASK
***.GTP	TOP SOLDERPASTE
***.DRR	DRILL REPORT
***.TXT	ASCI DRILL FILE
***.DRL	EXCELLON DRILL FILE
***.NET	NETLIST
***.GD1	FABRICATION DETAIL
README.TXT	CONTACT INFORMATION FILE

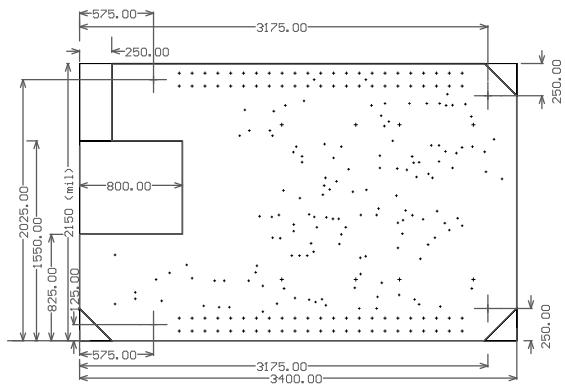


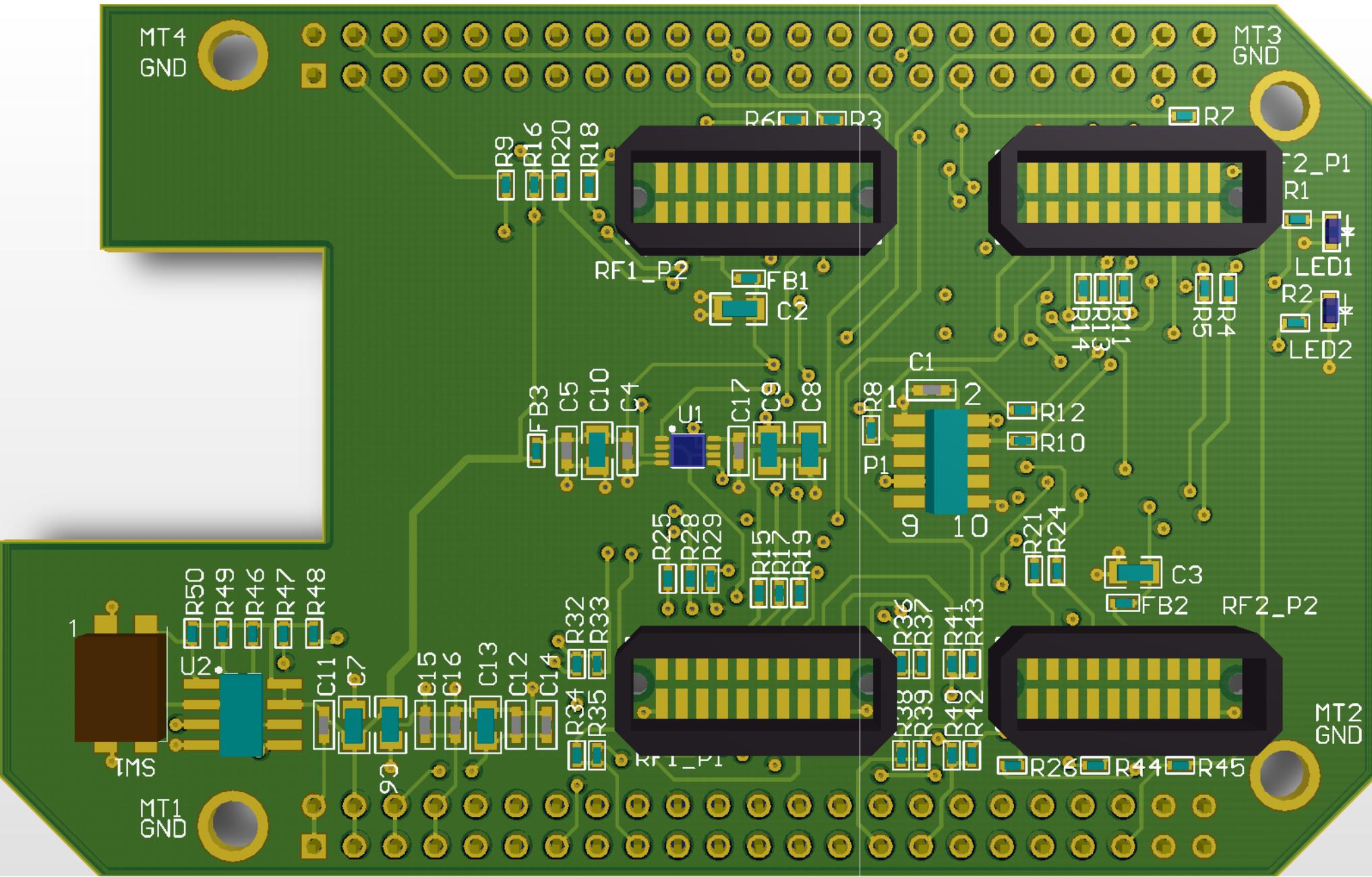
Symbol	Hit Count	Tool Size	Plated	Hole Type
□	142	15mil (0.381mm)	PTH	Round
○	92	40mil (1.016mm)	PTH	Round
▽	8	53.15mil (1.35mm)	NPTH	Round
◇	4	125mil (3.175mm)	PTH	Round
246 Total				

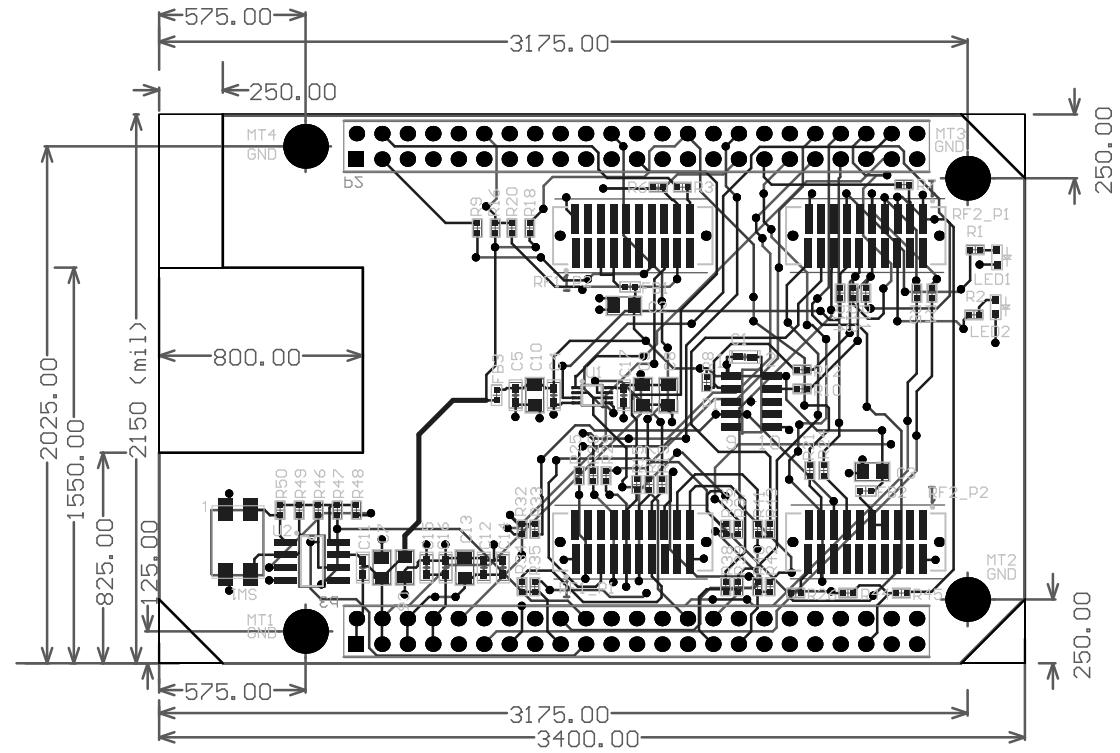
Layer Stack Up Detail
Layer Name
To Layer
00
01
Bottom Layer

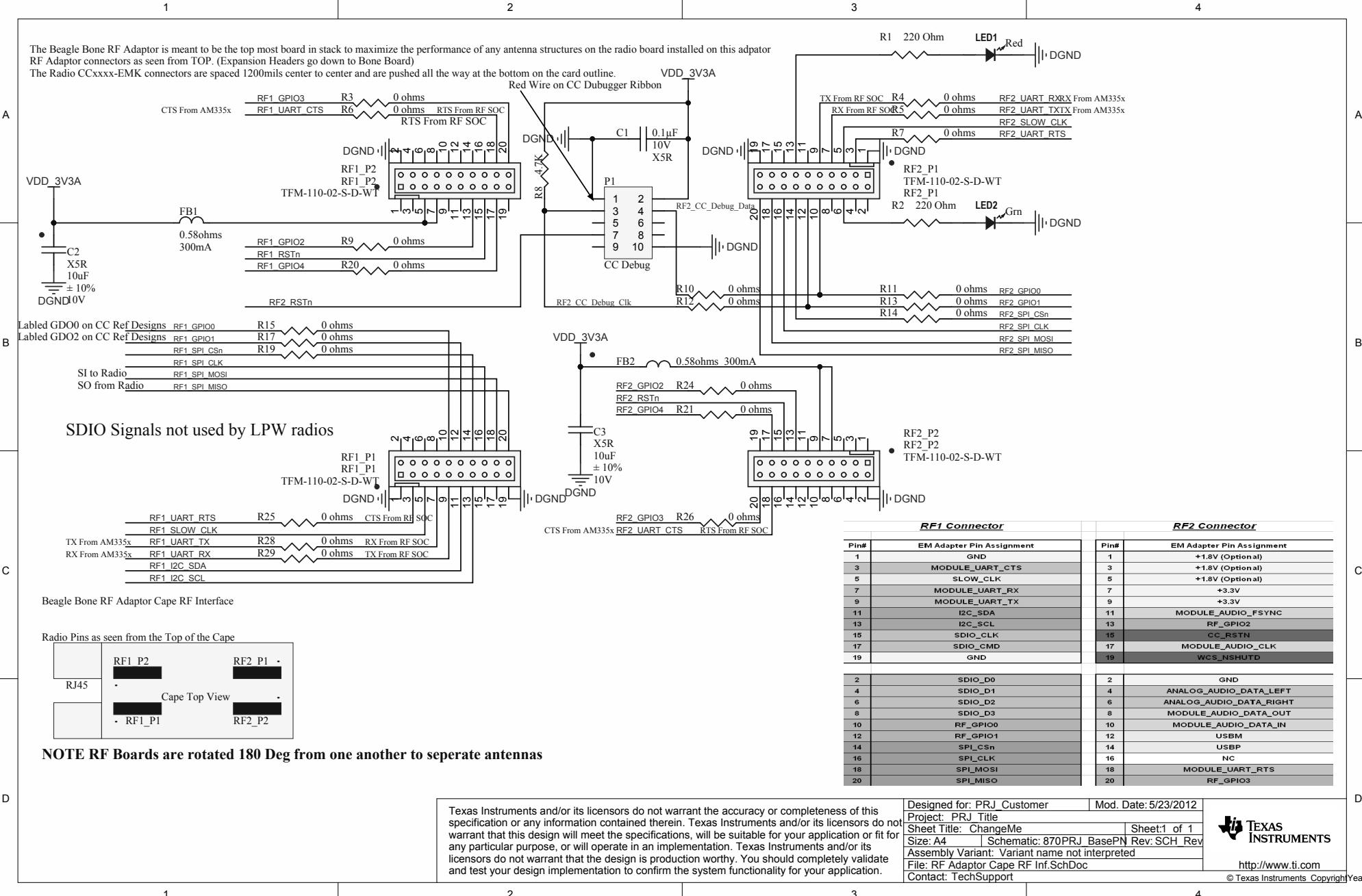
C:\Documents and Settings\...\Desktop\Strategic Marketing\Beagle Bone\Altium files\RF_CAPE.PcbDoc

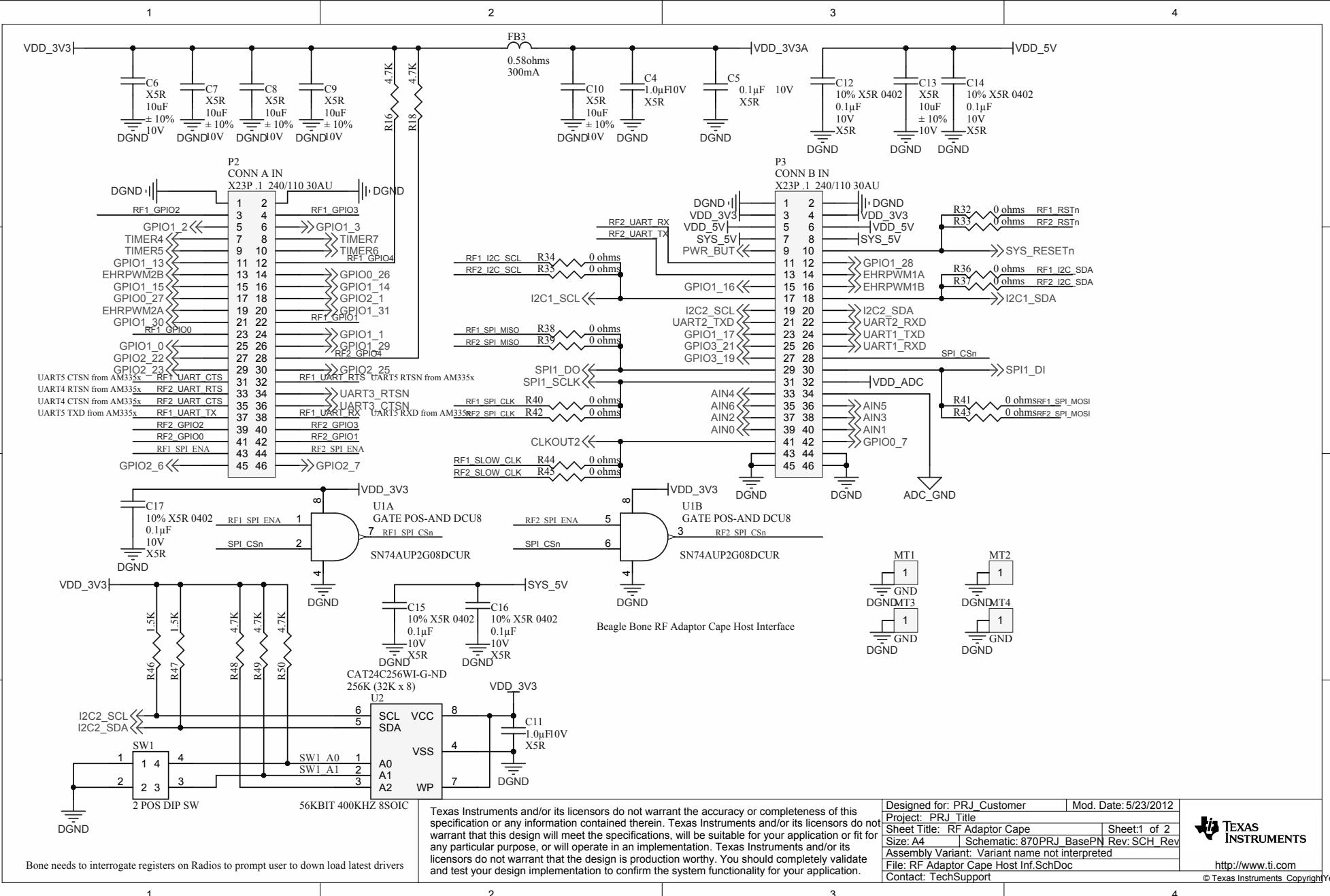
Texas Instruments		
12500 Ti Blvd Dallas, Tx 75243		
FABRICATION DETAIL		
RF Cape		
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES	APPROVALS	DATE
TOLERANCES ARE: XXX \pm .005 XX \pm .010 ANGLES \pm 1/2°	DRAWN BY Grant Smith	5/23/12
THIRD ANGLE PROJECTION	DESIGNER	
	CHECKER	
	ENGINEER	
	ISSUED	
	SIZE	FSQM NO.
	B	
	DRAWING NO.	
	450-5500-501	REV. A
DO NOT SCALE DRAWING	SCALE 1/1	SHEET 1 OF 1











Bone needs to interrogate registers on Radios to prompt user to down load latest drivers

Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.

Designed for: PRJ Customer	Mod. Date: 5/23/2012
Project: PRJ Title	
Sheet Title: RF Adaptor Cape	Sheet1 of 2
Size: A4	Schematic: 870PRJ_BasePN Rev: SCH_Rev
Assembly Variant:	Variant name not interpreted
File: RF Adaptor Cape Host Inf.SchDoc	

 TEXAS
DEPARTMENT OF TRANSPORTATION

<http://www.ti.com>

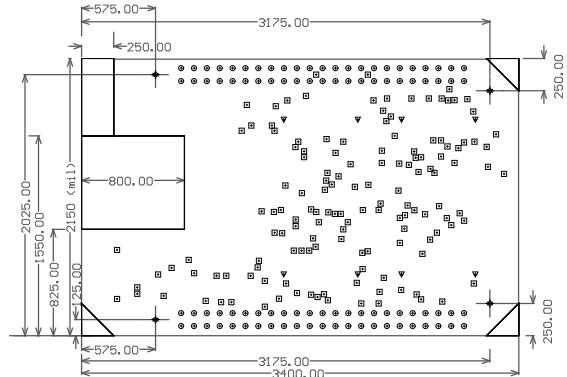
© Texas Instruments Copyright Year

NOTES:

1. MATERIAL: NEMA FR4, .062 THICK +/-0.005, 2.0 oz. Cu / SQ FT.
2. FABRICATION PROCESS SHALL BE UL RECOGNIZED 94V-0 AND PCB SHALL BE IDENTIFIED WITH MFR'S APPROVED LOGO AND TYPE DESIGNATION IN ETCH ON BOTTOM LAYER. FABRICATION SHALL BE IN ACCORDANCE WITH IPC-A-600D, CLASS 2.
3. ALL UNDIMENSIONED HOLES SHALL BE WITHIN .006 OF TRUE POSITION DIA.
4. FINISHED CONDUCTOR WIDTH SHALL BE +/- 20% OF ORIGINAL ARTWORK.
5. MINIMUM COPPER PLATE IN HOLES TO BE .002". UPON PLATING THE HOLES, THE SURFACE COPPER WILL HAVE A TOTAL COPPER THICKNESS OF 2 OUNCE.
6. HASL 60/40 TIN/LEAD PLATE TO A TOTAL THICKNESS OF .000080/.001500. (MAX ALLOWABLE DEVIATION OF TIN/LEAD COMPOSITION TO BE 50/50.)
7. APPLY LPI SOLDERMASK PER IPC-SM-840, CLASS II, TYPE A1 OVER BARE COPPER TO BOTH SIDES. COLOR: WHITE
8. CONSTRUCTION: 4 LAYERS
9. APPLY SCREENED NOMENCLATURE INK TO COMPONENT SIDE - BLACK EPOXY INK.
10. FABRICATOR TO PANELIZE 2 X 2 WITH .100 ROUTED SEPARATION BETWEEN BOARDS

* = RF_CAPE.PcbDoc
 *ZIP FILE CONTENTS
 RS274X EMBEDDED APERTURES FOR ALL GERBERS

FILENAME SUFFIX	DESCRIPTION
***.GTL	LAYER 1 (TOP)
***.GP1	LAYER 2 (GND PLANE)
***.GP2	LAYER 3 (VCC PLANE)
***.GBL	LAYER 4 (BOTTOM)
***.GTO	TOP SILKSCREEN
***.GTS	TOP SOLDERMASK
***.GBS	BOTTOM SOLDERMASK
***.GTP	TOP SOLDERPASTE
***.DRR	DRILL REPORT
***.TXT	ASCI DRILL FILE
***.DRL	EXCELLON DRILL FILE
***.NET	NETLIST
***.GD1	FABRICATION DETAIL
README.TXT	CONTACT INFORMATION FILE



Symbol	Hit Count	Tool Size	Plated	Hole Type
□	142	15mil (0.381mm)	PTH	Round
○	92	40mil (1.016mm)	PTH	Round
▽	8	53.15mil (1.35mm)	NPTH	Round
◇	4	125mil (3.175mm)	PTH	Round
246 Total				

Layer Stack Up Detail
Layer Name
To Layer
00
01
02
Bottom Layer

C:\Documents and Settings\...\Desktop\Strategic Marketing\Beagle Bone\Altium files\RF_CAPE.PcbDoc

Texas Instruments		
12500 Ti Blvd Dallas, Tx 75243		
FABRICATION DETAIL		
RF Cape		
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES	APPROVALS	DATE
TOLERANCES ARE: XXX ± .005 XX ± .010 ANGLES ± 1/2°	DRAWN BY Grant Smith	5/23/12
THIRD ANGLE PROJECTION	DESIGNER	
	CHECKER	
	ENGINEER	
	ISSUED	
	SIZE	FSQM NO.
	B	
	DRAWING NO.	
	450-5500-501	
	REV.	A
DO NOT SCALE DRAWING	SCALE	SHEET 1 OF 1

Quantity	Designator	Comment	Description	Manufacturer	Manufactu rer Part Number	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Stock 1	Suppli er Sto ck 1	Suppli er Sto ck 1
7	C1, C5, C12, C14, C15, C16, C17	10%X5R 0402	CAP CER 0.1UF 10V 10% X5R 0402	Taiyo Yuden	LMK105BJ 104KV-F	Digi-Key	587-1227-6- ND	0.1	## 2	CC 040 2	CC 040 2
8	C2, C3, C6, C7, C8, C9, C10, C13	10V, X5R, 0805	CAP CER10UF, 10V, X5R, 0805	KEMET	CU805C10 6K8PACT U	Newark	70K9138	0.3	## 5	CC 080 5	CC 080 5
2	C4, C11	10%X5R 0402	CAP CER 1UF 10V 10% X5R 0402	Taiyo Yuden	LMK105BJ 105KV-F	Digi-Key	587-1454-2- ND	## 2	## 2	CC 040 2	CC 040 2
3	FB1, FB2, FB3	0402, 580mOHM, 300mA	FERRITE BEAD, 0402, 580mOHM, 300mA	TAIYO YUDEN	BK1005H S102-T	Newark	87K3443	0.04	## 2	SM T IN D 040 2	SM T IN D 040 2
1	LED1	Red	SMT LED 0603			Digi-Key	P11466TR- ND		## 3	LE D- 060 3	LE D- 060 3
1	LED2	Grn	SMT LED 0603			Digi-Key	P11473TR- ND		## 3	LE D- 060 3	LE D- 060 3
4	MT1, MT2, MT3, MT4	GND	1P .125DIA	DNP	DNP	Digi-Key	A26541-ND	0.58	##	MT GH 200 C1 25 D- PL	MT GH 200 C1 25 D- PL
1	P1	CC Debug	SMT Header, 10-Pin, .050LS Dual row	Sullins Connector Solutions	GRPB052 VWQS-RC	Digi-Key	S9012E-05- ND	1.14	##	HE AD ER 10 P	HE AD ER 10 P
2	P2, P3	X23P .1 240/110 30AU	Headers & Wire Housings HDR VT 2X23P .1 240/110 30AU	Molex	10-89- 7460	Mouser	538-10-89- 7460		0	HE AD ER 23 X2 - BO T- MO UN 0 T	HE AD ER 23 X2 - BO T- MO UN 0 T
2	R1, R2	1/10W 1%0402 SMD	RES 220 OHM 1/10W 1% 0402 SMD	Panasonic - ECG	ERJ- 2GEJ221X	Digi-Key	P220JCT- ND	0.1	## 2	RE SC 040	RE SC 040
35	R3, R4, R5, R6, R7, R8, R10, R11, R12, R13, R14, R15, R17, R19, R20, R21, R24, R25, R26, R28, R29, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45	0402 Chip Res 5%	RES 0.0 OHM 1/10W 0402 SMD	Panasonic - ECG	ERJ- 2GE0R00 X	Digi-Key	P0.0JDKR- ND	0.05	## 2	RE SC 040	RE SC 040
6	R8, R16, R18, R48, R49, R50	1/10W 1%0402 SMD	RES 4.70K OHM 1/10W 1%0402 SMD	Panasonic - ECG	ERJ- 2RKF4701 X	Digi-Key	P4.70KLCT- ND	0.1	## 2	RE SC 040	RE SC 040
2	R46, R47	1/10W 1%0402 SMD	RES 1.50K OHM 1/10W 1%0402 SMD	Panasonic - ECG	ERJ- 2RKF1501 X	Digi-Key	P1.50KLCT- ND	0.1	## 2	RE SC 040	RE SC 040
4	RF1_P1, RF1_P2, RF2_P1, RF2_P2	20POS 1.27MM GLD SMD	CONN HEADER 20POS 1.27MM GLD SMD	Samtec Inc	TFM-110- 02-S-D- W1	Digi-Key	SAM8705- ND	5.85	187 A	TF M- 110 02- X-D	TF M- 110 02- X-D
1	SW1	2 POS DIP SW	2 POS SMT DIP SWITCH w SEAL TAPE	Multicomp	MCEMR- 02-T	Newark	74M3000	1.11	7	SM -C RY -S CC 18	SM -C RY -S CC 18
1	U1	GATE POS-AND DCU8	IC GATE POS-AND DL 2INP LP 8US8	Texas Instruments	SN74AUP 2G08DCU R	Digi-Key	SN74AUP2 G08DCUR- ND		0	DC 0 U-8	DC 0 U-8
1	U2	56KBIT 400KHZ 8S0	IC EEPROM 256KBIT 400Kb	ON Semicondu	CAT24C25	Digi-Key	CAT24C256	1.33	##	SO8	SO8

Design Rules Verification Report

Filename : C:\Documents and Settings\l0270551\Desktop\Strategic Marketing\Beagle Bone\Altium files\RF_CAPE.PcbDoc Warnings 0
Rule Violations 0

Warnings	
Total	0
Rule Violations	
Net Antennae (Tolerance=5mil) (All)	0
Silk to Silk (Clearance=3mil) (All),(All)	0
Minimum Solder Mask Sliver (Gap=1.8mil) (All),(All)	0
Hole To Hole Clearance (Gap=10mil) (All),(All)	0
Hole Size Constraint (Min=10mil) (Max=200mil) (All)	0
Pads and Vias to follow the Drill pairs settings	0
Height Constraint (Min=0mil) (Max=1000mil) (Preferred=500mil) (All)	0
Component Clearance Constraint (Horizontal Gap = 10mil, Vertical Gap = 10mil) (All),(All)	0
Routing Via (MinHoleWidth=15mil) (MaxHoleWidth=15mil) (PreferredHoleWidth=15mil) (MinWidth=28mil)	0
Routing Layers(All)	0
Width Constraint (Min=10mil) (Max=50mil) (Preferred=10mil) (All)	0
Power Plane Connect Rule(Direct Connect)(Expansion=20mil) (Conductor Width=10mil) (Air Gap=10mil) (Entries=4)	0
Clearance Constraint (Gap=7mil) (All),(All)	0
Un-Routed Net Constraint ((All))	0
Short-Circuit Constraint (Allowed=No) (All),(All)	0
Total	0

Difference Report For Project RF_Adaptor.PrjPCB and RF_CAPE.PcbDoc

No differences were detected.

Electrical Rules Check Report

Class	Document	Message
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid C 15 at 88.9mm,64.14mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid C 16 at 106.68mm,64.14mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid C 12 at 180.34mm,175.9mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid C 14 at 208.28mm,175.9mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid C 13 at 198.12mm,175.9mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid C 6 at 33.02mm,175.9mm
Warning	RF Adaptor Cape RF Inf.SchDoc	Off grid Pin C3-2 at 124.46mm,97.79mm
Warning	RF Adaptor Cape RF Inf.SchDoc	Off grid Pin C2-2 at 12.7mm,135.89mm
Warning	RF Adaptor Cape RF Inf.SchDoc	Off grid Pin C1-2 at 140.97mm,162.56mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C4-2 at 139.7mm,171.45mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C17-2 at 33.02mm,82.55mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C15-1 at 88.9mm,67.31mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C16-1 at 106.68mm,67.31mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C12-1 at 180.34mm,179.07mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C14-1 at 208.28mm,179.07mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C13-1 at 198.12mm,179.07mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C11-2 at 114.3mm,34.29mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C5-2 at 157.48mm,171.45mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C10-2 at 127mm,171.45mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C9-2 at 71.12mm,171.45mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C8-2 at 58.42mm,171.45mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C7-2 at 45.72mm,171.45mm
Warning	RF Adaptor Cape Host Inf.SchDoc	Off grid Pin C6-1 at 33.02mm,179.07mm

