



ALL ARTWORK VIEWED FROM TOP SIDE  
 BOARD #: ISE4033 REV: E1 SUN REV: Not In VersionControl  
 LAYER NAME = ~~PCB Fabrication~~  
 TID #: TIDA-00486  
 PLOT NAME = Fabrication Drawing  
 GENERATED : 6/15/2015 4:53:35 PM  
 TEXAS INSTRUMENTS

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Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.40mil	3.5	
3	Top Layer	Copper	1.40mil		
4	Dielectric 1	FR-4 High TG	10.00mil	4.2	
5	Signal Layer 1	Copper	1.40mil		
6	Dielectric 2	FR-4 High TG	27.00mil	4.2	
7	Signal Layer 2	Copper	1.40mil		
8	Dielectric 3	FR-4 High TG	10.00mil	4.2	
9	Bottom Layer	Copper	1.40mil		
10	Bottom Solder	Solder Resist	0.40mil	3.5	
11	Bottom Overlay				

IMPEDANCE CONTROLS:  
 120 OHM DIFF, TOP SIDE, USING 12 MIL TRACES WITH 25 MIL SPACING  
 140 OHM DIFF, TOP SIDE, USING 8.5MIL TRACES WITH 25 MIL SPACING  
 50 OHM SE, TOP SIDE, USING 18MIL TRACE

Symbol	Quantity	Finished Hole Size	Plated	Hole Type
▼	6	43.31mil (1.100mm)	NPTH	Round
○	41	7.87mil (0.200mm)	PTH	Round
✕	233	8.00mil (0.203mm)	PTH	Round
☆	277	10.00mil (0.254mm)	PTH	Round
■	2	33.46mil (0.850mm)	PTH	Round
▽	31	40.00mil (1.016mm)	PTH	Round
★	8	43.31mil (1.100mm)	PTH	Round
⊗	1	59.06mil (1.500mm)	PTH	Round
◇	4	62.99mil (1.600mm)	PTH	Round
●	5	63.00mil (1.600mm)	PTH	Round
□	4	125.98mil (3.200mm)	PTH	Round
612 Total				

**DESIGN INFORMATION**

MIN. TRACK WIDTH: 8 MIL  
 MIN. CLEARANCE: 7.6 MIL  
 MIN. VIA PAD SIZE: 18 MIL  
 MINIMUM ANNULAR RING 0.05mm (2MIL) EXTERNAL  
 PER IPC-D-275 CLASS 2 LEVEL C  
 REGISTRATION TOLERANCES: METAL +/- 5 MIL, HOLES +/- 3 MIL

**MATERIAL:**  
 FR-408  FR-4 High Tg  OTHER \_\_\_\_\_  
 THICKNESS:  62 MIL (1.6mm) +/-10%  OTHER 53MIL +/-10%  
 TOLERANCE:  ANSI IPC-6012 TYPE 3 CLASS 2  
 OTHER +/- \_\_\_\_\_  
 BOW & TWIST:  ANSI IPC-6012 TYPE 3 CLASS 2  
 OTHER +/- \_\_\_\_\_

**DRILLING:**  
 REFERENCE:  AS SHOWN  NC\_DRILL FILES  
 PTH MIN COPPER THICKNESS:  1MIL  OTHER \_\_\_\_\_

**BOARD FINISH:**  
 SILKSCREEN:  TOP  BOTTOM  
 SILKSCREEN COLOR:  WHITE  OTHER \_\_\_\_\_  
 SOLDER RESIST COLOR:  GREEN  BLUE  OTHER \_\_\_\_\_

**SURFACE FINISH:**  IMMERSION GOLD (ENIG)  ENEPIG  
 IMM. TIN/SILVER OR EQUIV  OTHER \_\_\_\_\_

**ARRAY/PANEL:**  CUT AND TRIM PER MECH LAYER 1  
 N.C. ROUTE  V. SCORE

**CERTIFICATION:** MATERIALS AND WORKMANSHIP FOR ALL PCBs TO MEET OR EXCEED THE REQUIREMENTS OF:  
 ANSI IPC-A-600F CLASS ->  1  2  3  
 UL 94V-0  RoHS  OTHER PER ORDER

**ADDITIONAL REQUIREMENTS:**  
 MICROSECTION:  YES  
 BARE BOARD ELEC. TEST:  NONE  REQUIRED  PER ORDER  
 MANUFACTURER'S UL:  RAIL  METAL  SILK

**TEXAS INSTRUMENTS**

PROJECT TITLE: Isolated RS-485 To Wi-Fi Bridge with 24 UAC Power  
 DESIGNED FOR: Public Release  
 FILE NAME: ISE4033\_IS0485\_to\_WiFi.PcbDoc  
 ENGINEER: M. Knapp  
 LAYOUT BY: Krypton Solutions/RS  
 SCALE: 1.00  
 ALTIM DESIGNER VERSION: 14.3.14.34663

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