

NOTES (UNLESS OTHERWISE SPECIFIED):

- THIS DRAWING SPECIFIES THE REQUIREMENTS FOR A PRINTED WIRING BOARD IN ACCORDANCE WITH SPECIFICATION IPC-A-600 CLASS 2 (LATEST REVISION).
- THE PWB MUST BE LEAD FREE ASSEMBLY PROCESS COMPATIBLE AND MUST BE ABLE TO HANDLE A MINIMUM OF 5 CYCLES AT 260 DEGREES CELSIUS FOR 10 SECONDS.
- BASE MATERIAL - LAMINATE AND PREPREG SHALL MEET IPC-4101B-26, 83 or 98
Tg - MUST BE GREATER THAN OR EQUAL TO 150 DEGREES CELSIUS.
Td - MUST BE GREATER THAN OR EQUAL TO 330 DEGREES CELSIUS.
- COPPER FOIL WEIGHT - SEE STACKUP SECTION 'B'
- CHARACTERISTIC IMPEDANCE - SEE TABLE 'C'
- MINIMUM CONDUCTIVE WIDTH/SPACING TO BE .007"/.005"
- PLATING FINISH - BOTH SIDES ENIG (ELECTROLESS NICKEL IMMERSION GOLD):
.05080-.232 MICRON (2-8 MICROINCH) OF GOLD OVER
2.540-6.350 MICRON (100-250 MICROINCH) OF NICKEL.

- 8 ALL THROUGH HOLE VIAS MAY BE PLATED SHUT.
9. SOLDERMASK - GREEN COLOR (TAIYO OR EQUIVALENT), BOTH SIDES.
MODIFICATION OF SOLDERMASK IS NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM NXP.
10. SILKSCREEN - WHITE EPOXY INK, BOTH SIDES. NO SILKSCREEN ON ANY EXPOSED COPPER FEATURE.
11. ELECTRICAL TEST - 100% IPCD356.
12. PRINTED WIRING BOARD IS TO BE INDIVIDUALLY BAGGED.
13. DRC'S MUST BE RUN ON THE GERBER BEFORE BUILDING BOARDS,
UNLESS PRIOR APPROVAL IS GIVEN IN WRITING BY NXP.
14. TEARDROPS MAYBE ADDED AT THE FAB HOUSE TO ALL SIGNAL LAYERS.
15. TWO SOLDER SAMPLES TO BE PROVIDED.
- 16 BASIC GRID INCREMENT AT 1:1 IS .0001.
- 17 SUPPLIER MARKINGS - ON SOLDER SIDE ONLY, WHERE SHOWN.
MUST BE UL RECOGNIZED AND MUST HAVE AN ID THAT CONFORMS TO UL94V-0
18. THE PWB WILL BE MARKED AS LEAD FREE BY USE OF AN INK STAMP (Pb)
19. THE PWB WILL BE MARKED AS LEAD FREE PROCESS COMPATIBLE BY USE OF AN INK STAMP (260°C)

20. ALL PLATED AND NON-PLATED THROUGH HOLES ARE TO BE DRILLED AT PRIMARY DRILL STEP.
21. FINISHED PCB MUST BE PANELIZED FOR ASSEMBLY ACCORDING TO CONTRACT MANUFACTURERS REQUIREMENTS.
THE ADDITION OF RAILS AND .125"NON-PLATED TOOLING HOLES ARE AT THE DISCRETION OF CONTRACT MANUFACTURER.PANELIZATION MUST BE APPROVED BY CONTRACT MANUFACTURER.
22. THE MANUFACTURE HAS THE OPTION TO ADD COPPER THIEVING ON OUTER AND INNER LAYERS.
KEEP A MINIMUM DISTANCE OF .100" FROM ANY BOARD FEATURES.

23. INTENTIONAL SHORTS AT:
- | | | | |
|-----|-------------|-----|---------|
| SH1 | P2V8 | AND | V_MCU |
| SH2 | P2V8 | AND | V_RF |
| SH3 | V5_BUS | AND | P5V_USB |
| SH4 | BAT | AND | V_BATT |
| SH5 | D104 | AND | PTA19 |
| SH6 | D100 | AND | PTC3 |
| SH7 | D101 | AND | PTC2 |
| SH8 | D105/CLKOUT | AND | PTA18 |
| SH9 | V_IN | AND | V_BRD |

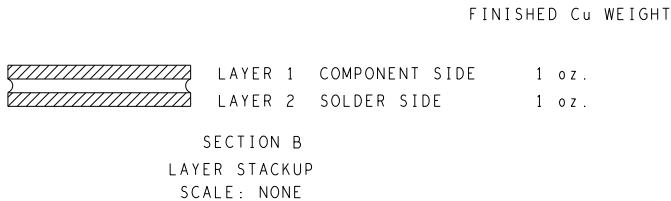
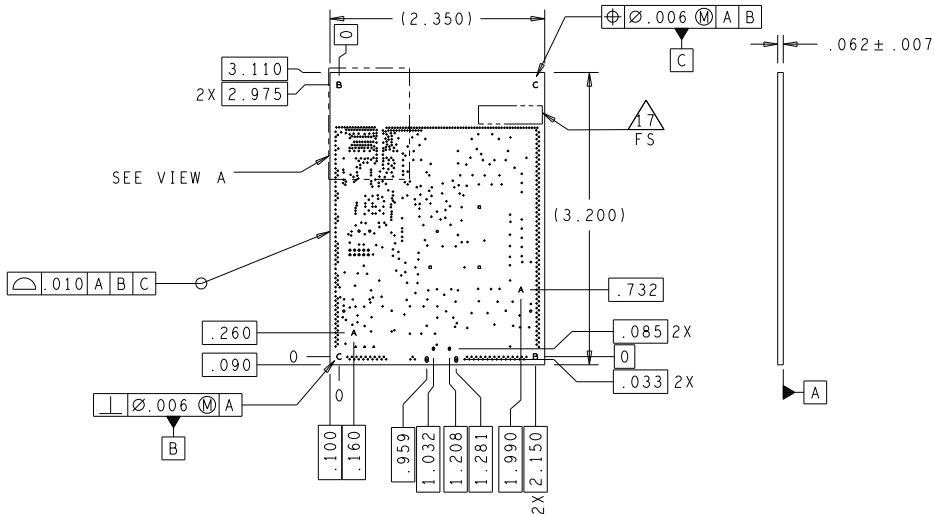


TABLE C
IMPEDANCE REQUIREMENTS
(Dk 4.3 USED FOR CALCULATIONS)

Layers	GROUNDED COPLANAR WAVEGUIDE		
	Trace Width (Mils)	Trace Airgap (Mils)	Impedance (Ohms)
L1, P5	32	6	50 +/- 10%

VIEW A
TOP ETCH
SCALE: NONE

PART NO. 170-29210		NXP SEMICONDUCTORS	
THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO NXP AND SHALL NOT BE USED FOR ENGINEERING DESIGN PROCEDURE OR MANUFACTURE IN WHOLE OR IN PART WITHOUT THE CONSENT OF NXP.		6501 WILLIAM CANNON DRIVE WEST AUSTIN, TEXAS 78735 USA	
TITLE: PRINTED WIRING BOARD X-KW01-RCD-RD		SIZE D	
DRAWN J. SCHWARTZ 16-03-11		DWG. NO. FAB-29210	
CHECKED A. QUIROZ 16-03-11		REV A	
DESIGN ENGINEER J. A. QUIROZ 16-03-11		SCALE 1 / 1	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: DECIMALS ANGLES .XX .01 .005 .0-30° ✓ RMS ALL MACHINED SURFACES BREAK ALL SHARP EDGES AND CORNERS. REMOVE BURRS. UNDERLINED DIM. NOT TO SCALE. THIRD ANGLE ORTHOGRAPHIC PROJECTION IS USED.		DO NOT SCALE DRAWING	
SHEET 1 OF 1		SHEET 1 OF 1	