

8 7 6 5 4 3 2 1

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
T_g - MUST BE GREATER THAN OR EQUAL TO 150 DEGREES CELSIUS.
T_d - MUST BE GREATER THAN OR EQUAL TO 330 DEGREES CELSIUS.
- COPPER FOIL WEIGHT - SEE STACKUP DETAIL 'A'
- CHARACTERISTIC IMPEDANCE - SEE DETAIL 'B'
50 THE TRACES FROM J1.1 TO L1.2 AND J2.1 TO L2.2 ARE MEET TO 50 OHMS IMPEDANCE. REST OF THE SIGNALS ARE NON IMPEDANCE.
- MINIMUM CONDUCTIVE WIDTH/SPACING TO BE .008"/.006"
- 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.
- ALL THROUGH HOLE VIAS MAY BE PLATED SHUT.
- SOLDERMASK - GREEN COLOR (TAYO OR EQUIVALENT), BOTH SIDES.
MODIFICATION OF SOLDERMASK IS NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM FREESCALE.
- SILKSCREEN - WHITE EPOXY INK, BOTH SIDES. NO SILK ON PADS.
- ELECTRICAL TEST - 100% IPCD356.
- PRINTED WIRING BOARD IS TO BE INDIVIDUALLY BAGGED.
- DRC'S MUST BE RUN ON THE GERBER BEFORE BUILDING BOARDS.
UNLESS PRIOR APPROVAL IS GIVEN IN WRITING BY FREESCALE.
- ADD TEARDROPS TO ALL SIGNAL LAYERS.
- SOLDER SAMPLES TO BE PROVIDED.
- BASIC GRID INCREMENT AT 1:1 IS .0001.
- SUPPLIER MARKINGS - ON SOLDER SIDE ONLY, WHERE SHOWN.
- MUST BE UL RECOGNIZED AND MUST HAVE AN ID THAT CONFORMS TO UL94V-0
- THE PWB WILL BE MARKED AS LEAD FREE BY USE OF AN INK STAMP (Pb)
- THE PWB WILL BE MARKED AS LEAD FREE PROCESS COMPATIBLE BY USE OF AN INK STAMP (260°C)
- ALL PLATED AND NON-PLATED THROUGH HOLES ARE TO BE DRILLED AT PRIMARY DRILL STEP. ALL HOLE LOCATION TOLERANCES ARE TO BE +/- .002 IN REFERENCE TO THE PRIMARY DATUM.
- FINISHED PCB MUST BE PANELIZED FOR ASSEMBLY ACCORDING TO CONTRACT MANUFACTURING REQUIREMENT. ADDITION OF .25" RAILS AND .125" NON-PLATED TOOLING HOLES ARE AT THE DISCRETION OF CONTRACT MANUFACTURER AND FAB HOUSE. PANELIZATION MUST BE APPROVED BY FREESCALE.

2000.00
150.00
0
150.00
0
PRIMARY DATUM GRID ORIGIN
VIEW FROM PRIMARY SIDE

DETAIL B
IMPEDANCE REQUIREMENTS

Layers	Single Ended
L1_P5	18.00 50
L4_S5	18.00 50

DRILL CHART: TOP to BOTTOM
ALL UNITS ARE IN MILS

FIGURE	SIZE	TOLERANCE	PLATED	QTY
-	8.0	+0.0/-8.0	PLATED	365
⊙	40.0	+3.0/-3.0	PLATED	74
▲	63.0	+3.0/-3.0	PLATED	10
◇	125.0	+4.0/-4.0	NON-PLATED	4

.034" THK +/- 10%

FINISHED Cu WEIGHT

LAYER	THICKNESS	WEIGHT
LAYER 1	COMPONENT SIDE	1/2 oz.
LAYER 2	L2_GND	1 oz.
LAYER 3	L3_PWR	1 oz.
LAYER 4	SOLDER SIDE	1/2 oz.

DETAIL A
LAYER STACKUP
SCALE: NONE

PART NO. 170-27108

FREESCALE SEMICONDUCTOR

6501 WILLIAM CANNON DRIVE WEST AUSTIN, TEXAS 78735 USA

TITLE: PRINTED WIRING BOARD 1231X-MRB

APPROVALS: ANTONIO QUIROZ 03-06-12
PABLO MUNOZ 03-06-12
JULIO MUNOZ 03-06-12

DATE: 03-06-12

SIZE: D LAY-27108

QTY: 1

DO NOT SCALE DRAWING

SHEET 1 OF 1

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