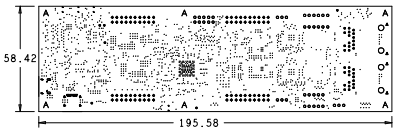
FABRICATION NOTES:

1. FABRICATE PCB IN ACCORDANCE WITH IPC-6012D, CLASS 2; PER IPC-4011.
2. MATERIALS:
   1. LAMINATE AND PREPREG (B-STAGE) TO BE IN ACCORDANCE WITH IPC-4101/126. (MIN.TG 170)
   2. COPPER FOIL TO BE IN ACCORDANCE WITH IPC-MF-150. UNLESS OTHERWISE SPECIFIED, ALL COPPER WEIGHT FOR INNER SIGNAL LAYERS AND INNER PLANE LAYERS TO BE 35UM (1 OZ.). FOR OUTER LAYERS 35UM (1 OZ), COPPER WEIGHT IS TO BE CONSIDERED "FINISHED". THE COPPER FOIL THICKNESS TOLERANCES SHALL BE AS PER IPC 6012B TABLE NO.3-7 AND 3-8.
3. ALL HOLES SHALL BE LOCATED WITHIN 0.150MM DIAMETER OF TRUE POSITION. LAYER TO LAYER REGISTRATION SHALL BE WITHIN 0.125MM.
4. BOW AND TWIST SHALL NOT EXCEED MORE THAN 0.75% OF THE DESIGN LENGTH.
5. CONDUCTOR WIDTH SHALL NOT BE LESS THAN 20% FROM ITS ORIGINAL DATA. INCASE FOR MATCHING IMPEDANCE MISTRAL SHALL APPROVE THE MODIFIED WIDTHS AND SPACING. TRACE WIDTH SHALL BE MEASURED ON THE SURFACE IN CONTACT WITH THE LAMINATE.
6. BOARD FINISHED SHALL BE ACCORDING TO IPC-6012D CLASS 2.
7. AUTOMATED OPTICAL INSPECTION OF ALL THE LAYERS IS REQUIRED.
8. FINISH:
   1. ALL EXPOSED CONDUCTIVE PATTERN AREAS NOT COVERED WITH SOLDER MASK OR OTHER PLATING SHALL BE CHEM. ELECTROLESS NICKEL/IMMERSION GOLD. ELECTROLESS NICKEL SHALL BE 3-6 MICRONS. TYPICAL IMMERSION GOLD THICKNESS SHALL BE 0.04-0.06 MICRONS OF SOLDERABLE IMMERSION GOLD SURFACE.
   2. APPLY LIQUID PHOTO IMAGEABLE SOLDER MASK PER IPC-SM-840, CLASS H, TO BOTH SIDES OF THE BOARD OVER BARE COPPER. VIA HOLES SHALL BE FILLED WITH NON CONDUCTIVE INK AND COVERED WITH SOLDER MASK. ONLY SOLDER MASK IMAGES THAT ARE 0.08(0.003") PER SIDE SHALL BE REDUCED IF REQUIRED. ALL OTHER SOLDER MASK IMAGES SHALL NOT BE ENLARGED,SOLDER MASK SHALL BE RED.
   3. SILKSCREEN SHALL BE WHITE, PERMANENT, ORGANIC, NON-CONDUCTIVE INK. THERE SHALL BE NO SILKSCREEN ON ANY SOLDERABLE COMPONENT PAD. CLIPPING OF SILK SCREEN SHALL BE ALLOWED IF THE SILK SCREEN FALLS ON SOLDERABLE AREAS.
   4. SURFACE AND VIA HOLES FINISH SHALL NOT BE LESS THAN 20UM [0.00078"]. INCASE OF LASER VIA'S. BLIND VIA'S SHALL NOT BE LESS THAN 12UM [0.00047"] AND BURIED VIA'S SHALL NOT BE LESS THAN 15UM [0.0006"].
   5. ALL HOLES SURROUNDED BY LAND <=0.010" SHALL BE COMPLIANCE TO IPC6012, CLASS 2.
9. MARKING;
   1. BOARD SHALL MEET THE REQUIREMENTS OF UL-796E WITH FLAMMABILITY RATING OF MINIMUM 94V-0. UL LOGO, MANUFACTURER'S IDENTIFICATION AND DATE CODE LETTER SHALL BE RENDERED IN SILKSCREEN.
10. TEST REQUIREMENTS;
    1. 100% NET LIST ELECTRICAL VERIFICATION USING MISTRAL SUPPLIED IPC-D-356 NET LIST FOR OPENS AND SHORTS.
11. THIEVING IS ALLOWED ONLY IN THE PANEL FRAME, NOT IN THE CIRCUIT AREA.
12. TEAR DROPS SHALL BE ADDED ON VIA'S AND THROUGH HOLE PADS IN ALL INTERNAL AND OUTER LAYERS.
13. ALL UNCONNECTED VIA'S SHALL BE SUPPRESSED IF REQUIRED.
14. FINISHED PCB THICKNESS SHALL BE 0.063(1" +/-10%.
15. MIN TRACE WIDTH/SPACING ON BOARD IS 0.0040"/0.0040".
16. PLATE EDGE CONNECTOR 0.8UM [0.00003"] MINIMUM GOLD THICKNESS OVER 2.5UM [0.0001"] MINIMUM LOW STRESS NICKEL.

REVISIONS		
REV #	DESCRIPTION	DATE
REV #	CCN #	DDMMYY

DRILL CHART: TOP to BOTTOM
ALL UNITS ARE IN MILS

FIGURE	SIZE	TOLERANCE	PLATED	QTY
·	8.0	+3.0/-3.0	PLATED	1484
•	18.0	+3.0/-3.0	PLATED	14
*	36.0	+3.0/-3.0	PLATED	24
+	40.0	+3.0/-3.0	PLATED	14
◇	44.0	+2.0/-2.0	PLATED	41
*	46.0	+3.0/-3.0	PLATED	80
▲	62.0	+3.0/-3.0	PLATED	4
-	32.0	+2.0/-2.0	NON-PLATED	8
-	32.0	+3.0/-3.0	NON-PLATED	2
○	124.0	+3.0/-3.0	NON-PLATED	4
A	124.0	+3.0/-3.0	NON-PLATED	6
▭	48.0x22.0	+3.0/-3.0	PLATED	2
▪	48.0x24.0	+3.0/-3.0	PLATED	4
▭	68.0x34.0	+3.0/-3.0	PLATED	2



IMPEDANCE SPECIFICATIONS

SL#	TYPE	LAYER	TRACEWIDTH(Mils)	SPACING(Mils)	IMPEDANCE(Ohms)	REF LAYER
01	EDGE COUPLED MICROSTRIP	L1-L6	4.1	6.8	120	L2
02	EDGE COUPLED MICROSTRIP	L1-L6	4.0	7.7	100	L2
03	EDGE COUPLED MICROSTRIP	L1-L6	4.2	5	90	L2
04	EDGE COUPLED STRIPLINE	L3	3.5	8.1	100	L2
05	EDGE COUPLED STRIPLINE	L3	4.0	8	90	L2
06	STRIPLINE	L3	4.75	NA	50	L2
07	MICROSTRIP	L1,L6	5.3	NA	50	L2,L5
08	COPLANAR					

LAYER STACKUP

LAYER NAME	FINISHED Cu	X-SECTION	DIELECTRIC THICKNESS [INCHES]
PRIMARY SIDE SILKSCREEN			
PRIMARY SIDE SOLDERMASK			
L01 —— PRIMARY SIDE	1oz.		0.0035
L02 —— GROUND-PLANE-1	1oz.		0.0040
L03 —— INNER-SIGNAL-1	1oz.		0.0368
L04 —— INNER-SIGNAL-2	1oz.		0.0040
L05 —— POWER-PLANE-1	1oz.		0.0035
L06 —— SECONDARY SIDE	1oz.		
SECONDARY SIDE SOLDERMASK			
SECONDARY SIDE SILKSCREEN			

MISTRAL

MISTRAL SOLUTIONS PVT.LTD.,
#60, ADARSH REGENT, 100' FEET RING ROAD,
DOMLUR EXTENSION, BANGALORE 560 071.

PCB,
AM243x LP EVM

	APPROVALS	DATE
DRAWN	NAME	DDMMYY
CHECKED	NAME	DDMMYY
APPROVED	NAME	DDMMYY

SIZE: C | DRAWING NO.: PROC109 | REV: E1

SCALE:NONE | FILE NAME: | SHEET 01 OF 13