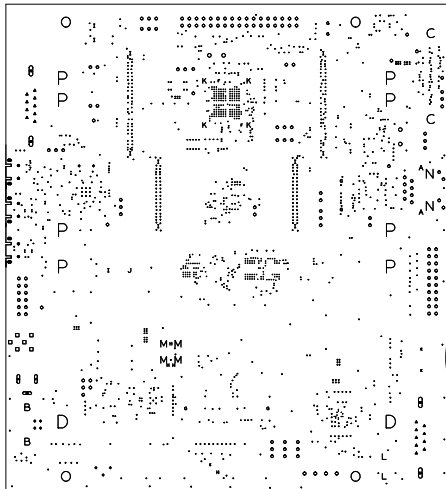


5 IMPEDANCE TABLE

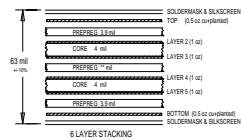
LAYER	TRACE (mil)	SPACING (mil)	IMPEDANCE (Ohm/mil)	IMPEDANCE (Ohm/inch)	TOLERANCE
1,6	5.0	N/A	55 OHM	N/A	+/-10%
3	5.0	N/A	55 OHM	N/A	+/-10%
1	5.1	9.9	N/A	100 OHM	+/-10%
3	5.1	9.9	N/A	90 OHM	+/-10%



DRILL CHART: TOP to BOTTOM					
ALL UNITS ARE IN MILS					
FIGURE	SIZE	TOLERANCE	PLATED	ROTATION	QTY
-	6.0	+3.0/-3.0	PLATED	-	13
-	8.0	+3.0/-3.0	PLATED	-	292
-	10.0	+3.0/-3.0	PLATED	-	631
-	12.0	+3.0/-3.0	PLATED	-	602
•	30.0	+3.0/-3.0	PLATED	-	9
•	38.0	+3.0/-3.0	PLATED	-	18
•	40.0	+3.0/-3.0	PLATED	-	143
•	43.0	+3.0/-3.0	PLATED	-	4
•	48.0	+3.0/-3.0	PLATED	-	6
•	53.0	+3.0/-3.0	PLATED	-	4
A	64.0	+3.0/-3.0	PLATED	-	2
B	95.0	+3.0/-3.0	PLATED	-	2
C	126.0	+3.0/-3.0	PLATED	-	2
D	177.0	+3.0/-3.0	PLATED	-	2
•	28.0	+2.0/-2.0	NON-PLATED	-	3
•	33.46	+2.0/-2.0	NON-PLATED	-	2
•	38.0	+2.0/-2.0	NON-PLATED	-	6
•	39.0	+2.0/-2.0	NON-PLATED	-	4
I	47.0	+2.0/-2.0	NON-PLATED	-	11
J	58.0	+2.0/-2.0	NON-PLATED	-	1
K	67.0	+2.0/-2.0	NON-PLATED	-	4
L	79.0	+2.0/-2.0	NON-PLATED	-	2
M	94.0	+2.0/-2.0	NON-PLATED	-	4
N	125.0	+2.0/-2.0	NON-PLATED	-	2
O	136.0	+2.0/-2.0	NON-PLATED	-	4
P	177.0	+2.0/-2.0	NON-PLATED	-	8
•	33.0x30.0	+5.0/-5.0	PLATED	0.000	6
•	59.0x33.0	+5.0/-5.0	PLATED	0.000	6
•	126.0x40.0	+5.0/-5.0	PLATED	90.000	2
•	126.0x40.0	+5.0/-5.0	PLATED	0.000	1
•	140.0x50.0	+5.0/-5.0	PLATED	90.000	4

TOTAL HOLES = 1800

4 LAYER STACK-UP



## NOTES: UNLESS OTHERWISE SPECIFIED

- THIS BOARD WILL CONFORM TO:  
IPC-A-600, CURRENT REV. CLASS II  
IPC-2012, CURRENT REV. CLASS II
- ALL UNSPECIFIED DIMENSIONS AND TOLERANCES ARE IN INCHES.  
UNLESS OTHERWISE SPECIFIED ALL HOLE DIMENSIONS APPLY AFTER PLATING.  
ALL HOLES SHALL BE LOCATED WITHIN .002" DIAMETER OF TRUE POSITION.
- INTERNAL FR4 RATING 94V-0 MINIMUM EPOXY GLASS LAMINATE.  
SEE LAYER STACK-UP SEQUENCE FOR OVERALL THICKNESS.
- IMPEDANCE CONTROL (IF APPLICABLE) AND VENDOR TO PROVIDE IMPEDANCE PATTERN COUPON AND TEST REPORT.  
SEE IMPEDANCE CONTROL TABLE FOR DETAIL INFORMATION.
- BOARD SHALL BE UP SOLDER MASKED OVER BARE COPPER BOTH SIDES PER IPC-SM-840 CLASS II.  
COLOR GREEN
- SILKSCREEN SHALL BE PERMANENT NON-CONDUCTIVE INK AND WITH NO OVERLAP ON ANY COMPONENT PAD OR THROUGH HOLE.  
COLOR WHITE
- SURFACE WILL BE FINISHED WITH 2-5 MICRO INCHES IMMERSION GOLD OVER 100 MICRO INCHES NICKEL.
- MINIMUM ANNUAL RING OVER FINISHED HOLE SIZE:  
INTERNAL .002"  
EXTERNAL .003"
- ALL VIAS UNDER BGA MUST BE COVERED AND PLUGGED WITH GREEN GROUT.
- REMOVE ALL SHAPE EDGES AND BURRS .005 MAXIMUM.
- PLEASE USE THE SUPPLIED IPC 358 NETLIST TO VERIFY BOARD BEFORE FABRICATING BOARD.

 DESIGNED BY SOFER www.sofer.com.cn Tel: +86 21 6422 6808 Email: sofersales@sofer.com.cn	LAYER: FAB DRAWING & DRILL LEGEND	COMPANY NAME: ST	
	DESIGNER: Shelly	PROJECT NAME: MB1045	
	DATE: 2015.06.07	PROJECT NUMBER: D021-006A2	REV: B

UNLESS OTHERWISE SPECIFIED	SIGNATURES		DATE		LOGO		COMPANY NAME	
	DRAWN		YY-MM-DD		TITLE		PROJECT NAME *	
	CHECKED		YY-MM-DD					
	ENG'G		YY-MM-DD					
DIMENSIONS ARE IN INCHES TOLERANCES ON: 2 PL DECIMALS + 3 PL DECIMALS + ANGLES + FRACTIONS +		ISSUED			SIZE	B	DWG NO	*****
					SCALE	1:1		SHEET 1 OF 1