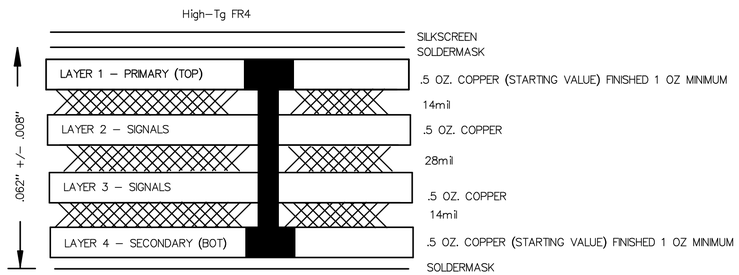
DRL/ECO	DESIGN AUTH	DWN	DESCRIPTION	DATE	REV

Symbol	Hit Count	Tool Size	Plated	Hole Type
A	615	10mil (0.254mm)	PTH	Round
B	32	19.685mil (0.5mm)	PTH	Round
C	10	31.496mil (0.8mm)	PTH	Round
E	14	35mil (0.889mm)	PTH	Round
I	2	39.37mil (1mm)	PTH	Round
D	9	43.307mil (1.1mm)	PTH	Round
F	20	64mil (1.626mm)	PTH	Round
G	2	65mil (1.651mm)	PTH	Round
H	2	120mil (3.048mm)	PTH	Round
K	1	137.795mil (3.5mm)	PTH	Round
J	4	196.85mil (5mm)	PTH	Round
	711 Total			

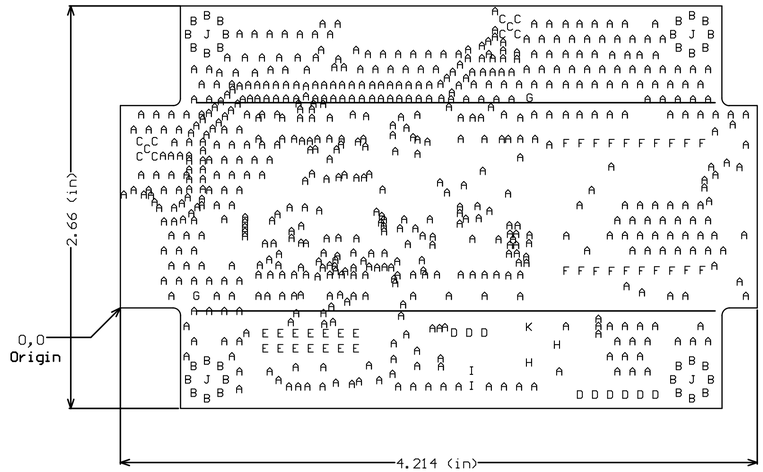
DETAIL – 4 LAYER STACKUP

SCALE: NONE



NOTES: UNLESS OTHERWISE SPECIFIED

1. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M.
2. FABRICATE PCB PER IPC–6012A CLASS II. BARE BOARD ACCEPTANCE PER IPC–A–600G.
3. NUMBER OF ELECTRICAL LAYERS, SEE LAYER STACKUP DETAIL FOR LAYER SEQUENCE AND DIELECTRIC.
4. MATERIAL: USE HIGH TEMP FR4 FOR LEAD FREE SOLDER REFLOW PROCESS.
   LAMINATE AND PREPREG PER IPC–4101. COPPER FOIL PER IPC–MF–150.
   MINIMUM FINISHED EXTERNAL LAYER COPPER WEIGHT = 1 OZ., MINIMUM INTERNAL LAYER COPPER WEIGHT = 0.5 OZ.
   THE MATERIAL'S GLASS TRANSITION TEMPERATURE (Tg) SHALL BE A MINIMUM OF 170 DEGREES CENTRIGRADE.
   MATERIAL MUST MEET UL 94V–0 FLAMMABILITY. VENDOR'S UL LOGO TO BE SCREENED ON THE SECONDARY SIDE.
5. LAYER TO LAYER REGISTRATION WITHIN .003". ALL HOLES TO BE LOCATED WITHIN 003" OF TRUE POSITION.
   ALL HOLES SURROUNDED BY COPPER LAND SHALL HAVE A MINIMUM ANNULAR RING OF .003".
   ALL PLATED THROUGH HOLES TO HAVE AN MINIMUM AVERAGE OF .001" OF COPPER PLATING (ABSOLUTE MINIMUM .0008").
   HOLE DIMENSIONS AND TOLERANCES APPLY AFTER PLATING, SEE DRILL HOLE TOLERANCE CHART.
6. PLATING OPTIONS:
   ☒ ENIG (ELECTROLESS NICKEL IMMERSION GOLD) IAW–4522 CLASS 2. FINISH COMPLIES WITH RoHS DIRECTIVES.
   ☐ HASL (HOT AIR SOLDER LEVEL) SMT PADS MUST BE FLAT TO A MAX OF .003" ABOVE SURFACE. HASL FINISH TO BE USED ON TEST OR PROTOTYPE BOARDS ONLY. THIS FINISH DOES NOT COMPLY WITH RoHS DIRECTIVES.
7. APPLY LPI (LIQUID PROTO–IMAGEABLE) SOLDERMASK OVER BARE COPPER (SMOBC) PER IPC–SM–840 CLASS H TO BOTH SIDES OF PCB. SOLDERMASK COLOR TO BE:
   ☒ GREEN ☐ BLUE ☐ RED ☐ CLEAR
8. APPLY SILKSCREEN LEGEND USING WHITE NON–CONDUCTIVE EPOXY INK. TRIM SILKSCREEN FROM ALL SOLDER PADS.
   ☒ BOTH SIDES ☐ PRIMARY SIDE ONLY ☐ SECONDARY SIDE ONLY
9. FABRICATION VENDOR MAY REMOVE NON–FUNCTIONAL PADS FROM INTERNAL LAYERS. FABRICATION VENDOR MAY ONLY ADD THIEVING OUTSIDE THE BOARD OUTLINE TO COMPENSATE FOR LOW COPPER DENSITY.
10. TOLERANCES: WARP AND TWIST NOT TO EXCEED .0075" PER INCH. CONDUCTOR WIDTHS/SPACINGS TO BE WITHIN +/–20% OF GERBER DATA. REMOVE ALL BURRS AND BREAK SHARP EDGES, .015" MAXIMUM. INSIDE CORNER MAXIMUM RADIUS SHALL BE .060".
11. PANELIZATION REQUIREMENTS:
    ☐ NO MATRIX DRAWING IS REQUIRED. BOARDS TO BE DELIVERED FULLY ROUTED.
    ☐ MATRIX DRAWING PROVIDED, SEE FABRICATION DRAWING SHEET 2 OF 2.
    ☒ VENDOR TO GENERATE MATRIX DRAWING. VENDOR GENERATED MATRIX DRAWINGS REQUIRE APPROVAL. PANELIZED BOARDS TO HAVE SAME ORIENTATION AND SHALL BE ROUTED AND RETAINED WITH BREAK AWAY TABS. SUPPORT RAIL WIDTH TO BE 0250" TO .500" WITH .060" FIDUCIALS AND .125" TOOLING HOLES IN THREE CORNERS. PANELIZED SOLDERPASTE GERBER TO BE SUBMITTED TO WITH BOARD DELIVERY.
12. BARE BOARD ELECTRICAL TESTS:
    ☒ REQUIRED – USE THE SUPPLIED IPC–D–356 NETLIST.
    ☐ WAVIED – ELECTRICAL TESTING IS NOT REQUIRED.
13. CONTROLLED IMPEDANCE REQUIREMENTS: FABRICATION VENDOR MAY NOT MODIFY DIELECTRIC THICKNESS WITHOUT WRITTEN CONSENT.
    ☐ NO CONTROLLED IMPEDANCE MEASUREMENTS REQUIRED.
    ☒ VENDOR TO PROVIDE TEST COUPON AND IMPEDANCE REPORT.
    22mil TRACES ON LAYER 1 (TOP) REFERENCED TO LAYER 2 ARE 50 OHMS +/– 10%.



HOLE TOLERANCE CHART: inch (metric)

HOLE DIAMETER	TOLERANCE	NOTES
.010 TO .020 – VIA (.25mm to .5mm)	+ MAX / – .000	OK TO FILL
.020 TO .062 (.5mm to 1.57mm)	+/– .004 (.1mm)	
.062 TO .200 (1.57mm to 5.08mm)	+/– .006 (.15mm)	
> .200 (5.08mm)	+/– .008 (.2mm)	
TOOLING .125 (31.75mm)	+.002 / –.000 (.05mm)	NON–PLATED

SUN# 2651

ENGINEER: Alain Charles	TITLE: RACM Board	
PCB DESIGNER: Jason McKay		
DATE: 9/10/2013	PART NO.: 405-0038-03	REV: 00
FILE NAME: rACM.PcbDoc	DWG NO: 410-0038-03	SCALE: SCALE: 1.00