

MONTANA STATE UNVERISTY  
THIS DOCUMENT AND ANY ASSOCIATED DATA  
CONTAINS INFORMATION THAT IS FOR EDUCATIONAL  
PURPOSES ONLY.

ENGINEERING RESPONSIBILITY		USING DIVISIONS		DOCUMENT NUMBER	
SYM		REVISED BY		APPROVED BY	
A AS ISSUED		-		Brock J. LaMeres	
			DATE		
			4-4-08		

Layer Stackup Units = Inches				DESIGN CLASS			FINISH TYPE : Silver	
MATERIAL TYPE: SEE LAYERS				6 MIL TRACE AND 6 MIL SPACE			TYPE - STANDARD	
LAYER NO.	LAYER NAME	COPPER WEIGHT	COPPER THICKNESS	PREPREG & CORE MATERIAL	PREPREG & CORE PRESSED THICKNESS	TRACE WIDTH & IMPEDANCE	VIA LAYERS	
1	TOPSIDE	0.5 OZ + PLT	0.0014	SOLDERMASK-SMOBC (GREEN)		0.120 # 50 OHMS	1-2	
2	BOTTOMSIDE	0.5 OZ + PLT	0.0014	FR-4 (Er=4.4)	0.062			
				SOLDERMASK-SMOBC (GREEN)				

THIS MATERIAL STACKUP HAS BEEN APPROVED BY THE MSU DESIGN ENGINEER

SPECIFIED BOARD THICKNESS : 0.062 +/- .004

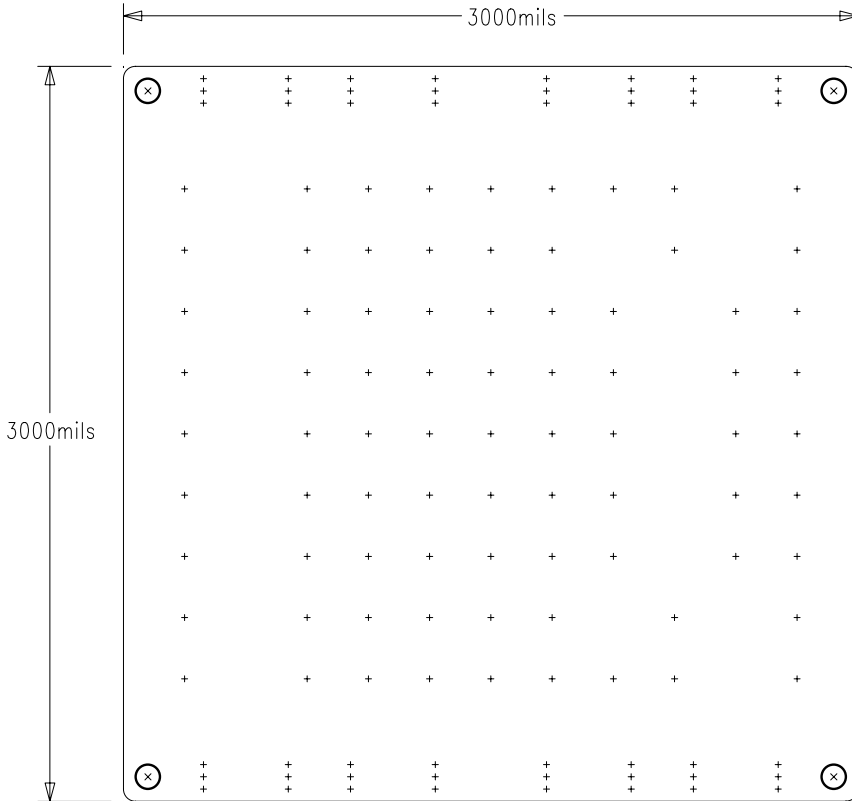
SOLDER RESIST TYPE: VENDOR SELECTED

SAFETY REQUIREMENT: MATERIAL TO BE UL94V-0FR4 OR EQUIVALENT

1. REVISION ON FACE OF BOARD: 001.
2. PCB DESIGNED PER IPC-A-600.
3. 0.050" RADI REQUIRED ON INSIDE CORNERS UNLESS SPECIFIED OTHERWISE.
4. DIMENSIONS AND TOLERANCES ARE SHOWN IN: INCHES.  
DRILL TABLE UNITS ARE: INCHES.
5. TOLERANCES: UNPLATED ROUTED FEATURES +/- 0.015" (0.038MM).
6. VENDOR MAY ADD COPPER BALANCE PADS TO OUTER LAYERS,  
COPPER BALANCE PADS MUST AVOID ANY PRE-EXISTING COPPER FEATURE  
(I.E. COMPONENT PADS, TRACES, CONDUCTIVE AREAS...) BY 0.100" (2.54MM).
7. VENDOR MAY ALTER PHOTO DATA (GERBER) TO COMPENSATE FOR ETCHING PROCESS.
8. LINE WIDTHS MAY BE REDUCED FOR MAINTAIN MINIMUM MANUFACTURABLE SPACING.

Layer Assignments

- ==== Layer 1 : Topside Routing and Components
- ==== Layer 2 : GND Plane



SIZE	QTY	SYM	PLATED	TOL
0.016	127	+	YES	+/-0.000
0.1	4	⊗	NO	+/-0.000

DO NOT SCALE THIS DRAWING		ITEM	QTY	PART/MATERIAL - DESCRIPTION	MATL-PART NO.	MATL-DWG NO.	MATL-SPEC	
		DRAWN BY		Brock J. LaMeres	4-4-08			
		CHECKED BY		Brock J. LaMeres	4-4-08			
RELEASE TO PRODUCTION		DATE	TITLE		FRAME DATE: 4/4/2008			
SUPERSEDES DOC.		DATE	A	FULL SCALE	1	1	SHEET OF	
				PRINTED CIRCUIT BOARD COMBINED FAB/DRILL DRAWING		Montana State University		
						FILE NAME: CBDWG		
						PART NUMBER: EE461_HW10		
						CBDWG_EE461_HW10		