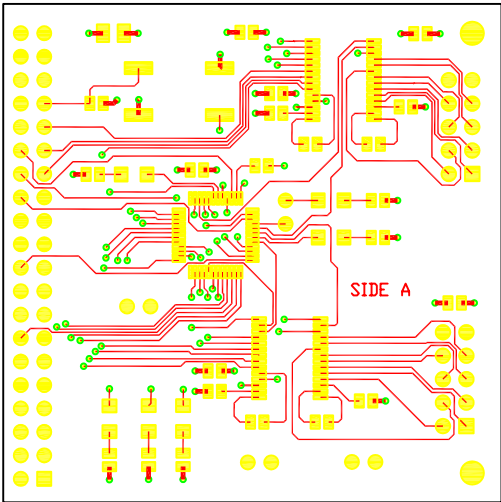


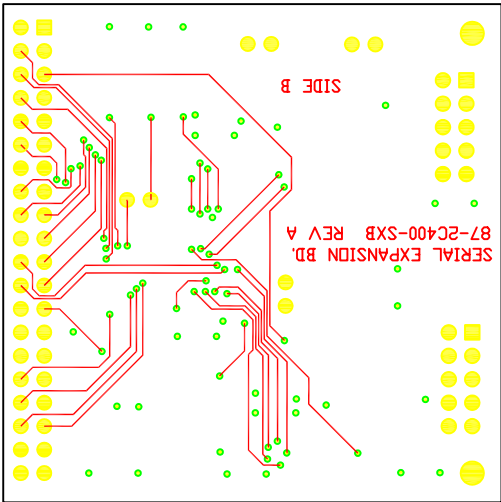
REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	NEW DRAWING		

- NOTES:
- THE FOLLOWING ABIDES BY THE DSC INSPECTION DOCUMENTATION: # 27-00200-000.
 - PART MUST WITHSTAND THREE REFLOW PASSES WITH PEAK TEMPERATURES OF 230±5° CELSIUS. FOR 10 SECONDS, FOLLOWED BY AQUEOUS OR SEMI-AQUEOUS CLEANING, WITH NO BLISTERING, DELAMINATION, SOLDERMASK FLAKING, OR ANY OTHER DAMAGE.
 - A) MINIMUM DESIGNED CONDUCTOR WIDTH IS 0.006.
B) MINIMUM DESIGNED CONDUCTOR SPACE IS 0.006.
C) MAXIMUM ALLOWABLE LINE REDUCTION DUE TO PIN HOLES, NICKS ON LINE RUNS, AND LINE SHRINKAGE TO BE 10%.
 - MINIMUM LAYER TO LAYER DIELECTRIC FINISH .003, FOR MULTILAYER BOARDS ONLY.
 - COPPER WALL THICKNESS TO MEET IPC-600 CLASS 2.
 - MINIMUM ANNULAR RING PER IPC-6012A (CURRENT REVISION) CLASS 2.
 - ALL FIDUCIAL ALIGNMENT MARKS ARE TO BE PLATED PER THE PROCESS BELOW.
MAXIMUM 10% SIZE REDUCTION ALLOWED, .250 SOLDERMASK CLEARANCE AROUND FIDUCIALS.
 - SOLDERMASK ; MASK HEIGHT MUST NOT EXCEED .0014 INCHES.
 - SOLDERMASK REGISTRATION TO BE ± .002.
 - SIDE TO SIDE REGISTRATION TO BE ± .003.
 - REMOVE ALL BURRS AND SHARP EDGES IN ORDER TO MEET DIMENSIONAL TOLERANCES.
 - THE FOLLOWING MUST BE PRESENT & LOCATED PER PAGE 2. (ETCHED, SOLDERMASK, SILKSCREENED OR STAMPED WITH NON-CONDUCTIVE INK).
A) "PART NUMBER"
B) "REVISION LETTER"
C) "SIDE A" FOR SIDE A, "SIDE B" FOR SIDE B.
D) DATE CODE
E) MANUFACTURER'S UL LOGO
 - EXTERNAL COPPER WEIGHT WILL NOT EXCEED 1.5 OZ.
 - MAXIMUM ALLOWABLE WARP PER IPC-600.
 - SOLDERMASK ARTWORK MUST NOT BE EDITED IN ANY WAY. THE ARTWORK MANDATES A MINIMUM CLEARANCE AROUND BOARD EDGE TO REDUCE PEELING AND KEEP MASK OFF EDGE CONNECTORS AND LEAD FRAME PADS IF APPLICABLE.

TABLE FOR ARTWORK					
NO.	DESCRIPTION	STARTING COPPER WT.	REVISION		
1.	SIDE A SILKSCREEN		A		
2.	SIDE A SOLDERMASK		A		
3.	LAYER 1 SURFACE (SIDE A)	0.5 OZ.	A		
4.	LAYER 2 (GND PLANE)	1.0 OZ.	A		
5.	LAYER 3 (PWR PLANE)	1.0 OZ.	A		
6.	LAYER 4 SURFACE (SIDE B)	0.5 OZ.	A		
7.	SIDE B SOLDERMASK		A		
8.	SIDE B SILKSCREEN		A		



SIDE - A



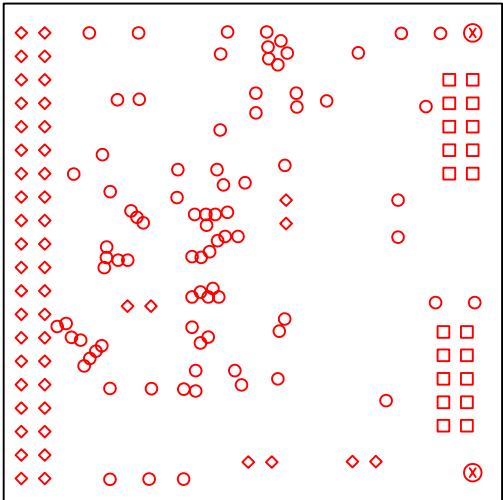
SIDE - B

(FOR REFERENCE ONLY NOT TO SCALE)

- PROCESSES: SOLDERMASK OVER BARE COPPER (SMOBC) AND ELECTROLESS NI IMMERSION GOLD (ENIG).
MUST MEET IPC-S-804 SOLDERABILITY.
- Au (IMMERSION 3-10 MICRO INCHES)
 - Ni (ELECTROLESS 100-300 MICRO INCHES)
 - SOLDERMASK PER IPC-SM-840 (CURRENT REVISION) USING ARTWORK NO. 2 FOR SIDE A AND NO. 7 FOR SIDE B.
 - SILKSCREEN COLOR WHITE NON-CONDUCTIVE EPOXY INK USING ARTWORK NO. 1 FOR SIDE A AND ARTWORK NO. 8 FOR SIDE B.
- OR:
- PROCESSES: ELECTROLYTIC NI GOLD.
MUST MEET IPC-S-804 SOLDERABILITY.
- Au (ELECTROLYTIC 3-30 MICRO INCHES)
 - Ni (ELECTROLYTIC 100-500 MICRO INCHES)
 - SOLDERMASK PER IPC-SM-840 (CURRENT REVISION) USING ARTWORK NO. 2 FOR SIDE A AND NO. 7 FOR SIDE B.
 - SILKSCREEN COLOR WHITE NON-CONDUCTIVE EPOXY INK USING ARTWORK NO. 1 FOR SIDE A AND ARTWORK NO. 8 FOR SIDE B.

DRILL/TEST DATA							
DESCRIPTION	SIDE	REVISION					
HOLE CONFIGURATION	A	A					
HOLE CONFIGURATION	B						
CONTINUITY TEST	A						
CONTINUITY TEST	B						
PROFILE	A						
PROFILE	B						

HOLE SCHEDULE				
SYM	FINISHED HOLE DIAMETER		QTY	REMARKS
	UNSUPPORTED	PLATED THRU +.007/- .003		
○		.013	84	
◇		.036	48	
□		.039	20	
x	.100		2	NON PLATED



SIDE - A

(FOR REFERENCE ONLY NOT TO SCALE)

REF	6.		27-00200-000	DSC INSPECT SPECIFICATION
REF	5.		MP****	MASTER PATTERN
AR	4.		PREPREG	BONDING LAYER, TYPE GF OF MIL-P-13949
AR	3.		SOLDERMASK	SOLDERMASK, TYPE B1: COLOR GREEN
AR	2.		FLGFN C1/0 A3B	COPPER CLAD FLAME RETARDANT (FR-4) PER MIL-P-13949 (CURRENT REVISION) INTERNAL LAYER
AR	1.		FLGFN C.5/.5 A3B	COPPER CLAD FLAME RETARDANT (FR-4) PER MIL-P-13949 (CURRENT REVISION) TOP LAYER
				NOMENCLATURE OR DESCRIPTION
				PCB, TINIs400 SERIAL EXPANSION BOARD
				DWG NO. 87-2C400-SXB 1 A
				SHEET 1 OF 2

QTY REQD	QTY REQD	QTY REQD	QTY REQD	QTY REQD	ITEM NO.	MFG FSCM	PART NUMBER OR IDENTIFYING NO.
UNLESS OTHERWISE SPECIFIED				SIGNATURE			
ALL DIMENSIONS ARE IN INCHES. TOLERANCES: FRACTIONS .XX .01 ANGLES DECIMALS .XX .01 .005 SURFACE FINISH IN AA MICRONS. REMOVE ALL BURRS AND SHARP EDGES. DO NOT SCALE THIS DRAWING.				TEST:		ASSY ENGR:	
				PCB DES:	D. CLARK 05/07/04	PROD. ENGR:	R. AGUIRRE 05/07/04
				ON APVD:	R. SHINE 05/07/04	DES ENGR:	J. OWENS 05/07/04
				DOC CONTROL:	J. WALKER 05/07/04	CHECK BY:	S. MACDONALD 05/07/04
				SMT ASSY ENGR:	T. TSUI 05/07/04	DRAWN BY:	D. CLARK 05/07/04
APPLICATION							

