

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
01	INITIAL RELEASE	09/06/06	SERGIO

- NOTES:
- FABRICATE TO IPC-A-600, CURRENT REVISION.
  - BOARD SHALL MEET THE INSPECTION CRITERIA OF IPC-A-600, CLASS 2, CURRENT REVISION.
  - MATERIAL: NELCO-4000-13
  - WEIGHT OF ALL COPPER LAYERS SHALL NOT BE LESS 0.5 OZ. PER SQUARE FOOT.
  - IMPEDANCE TOLERANCE +/- 5% FOR LAYER 3, +/- 10% OTHER LAYERS
  - APPLY SOLDER MASK OVER BARE COPPER(SMBOC) IAW IPC-SM-840, BOTH SIDES, USING LPI, COLOR GREEN
  - FINISH: GOLD IMMERSION.
  - SILKSCREEN TOP SIDE/BOTH SIDES WITH NON-CONDUCTIVE EPOXY BASED INK. COLOR SHALL BE WHITE A CONTRASTING INK WITH RESPECT TO SOLDER MASK COLOR. DISTORTION OF SILKSCREEN IS ACCEPTABLE OVER TRACES. EPOXY INK ON PLATED LANDS IS NOT ACCEPTABLE.
  - VENDOR LOGO AND DATE CODE TO BE MARKED FAR SIDE. MAXIMUM HEIGHT .12 INCHES.
  - 100% ELECTRICAL TEST REQUIRED FOR CONTINUITY. BOARD SHALL HAVE A UL RATING OF 94V-0. UL SYMBOL AND RATING SHAL BE MARKED FAR SIDE.
  - REMOVE ALL UNUSED PADS FROM INTERNAL LAYERS.
  - SOLDER MASK FOLLOW GERBER DATA FOR TOP & BOTTOM SIDE.
  - SOLDER MASK REGISTRATION TO BE WITHIN DIAMETRICAL TRUE POSITION OF +/- 0.002 WITH APPLICABLE HOLE / PAD.
  - 274X GERBERS/ODB++ USED FOR FAB MUST BE VERIFIED AGAINST THE PROVIDED IPC356 NETLIST.
  - USE ARTMASTER # 0531585

STACK-UP FOR REFERENCE MAY USE PREVIOUS REV STACK-UP

TOP SIDE	
LAYER 1 (L1 TOP)	← 1/2 OZ CU
PRE-PREG 4000-13	← .0045"
LAYER 2 (L2 GND)	← 1/2 OZ CU
CORE 4000-13	← .010"
LAYER 3 (L3 INNER)	← 1/2 OZ CU
PRE-PREG 4000-13	← .007"
LAYER 4 (L4 GND)	← 1/2 OZ CU
PRE-PREG 4000-13	← .006"
LAYER 5 (L5 INNER)	← 1/2 OZ CU
CORE 4000-13	← .006"
LAYER 6 (L6 GND)	← 1/2 OZ CU
PRE-PREG 4000-13	← .0040"
LAYER 7 (L7 PWR)	← 1/2 OZ CU
CORE 4000-13	← .005"
LAYER 8 (L8 INNER)	← 1/2 OZ CU
PRE-PREG 4000-13	← .005"
LAYER 9 (L9 INNER)	← 1/2 OZ CU
CORE 4000-13	← .005"
LAYER 10 (L10 PWR)	← 1/2 OZ CU
PRE-PREG 4000-13	← .004"
LAYER 11 (L11 GND)	← 1/2 OZ CU
CORE 4000-13	← .006"
LAYER 12 (L12 INNER)	← 1/2 OZ CU
PRE-PREG 4000-13	← .006"
LAYER 13 (L13 GND)	← 1/2 OZ CU
PRE-PREG 4000-13	← .006"
LAYER 14 (L14 INNER)	← 1/2 OZ CU
CORE 4000-13	← .006"
LAYER 15 (L15 GND)	← 1/2 OZ CU
PRE-PREG 4000-13	← .0045"
LAYER 16 (L16 BOTTOM)	← 1/2 OZ CU

BOTTOM SIDE

DRILL CHART: TOP to L4 GND			
ALL UNITS ARE IN MILS			
FIGURE	SIZE	PLATED	QTY
.	8.0	PLATED	64
.	8.0	PLATED	71

  

DRILL CHART: TOP to BOTTOM			
ALL UNITS ARE IN MILS			
FIGURE	SIZE	PLATED	QTY
.	9.84	PLATED	336
.	10.0	PLATED	4205
.	15.75	PLATED	258
.	37.0	PLATED	15
.	37.0	PLATED	3
.	40.0	PLATED	310
.	40.0	PLATED	3
.	41.0	PLATED	9
.	50.0	PLATED	8
.	55.0	PLATED	10
.	60.0	PLATED	4
.	63.0	PLATED	344
.	73.0	PLATED	5
.	90.55	PLATED	2
.	94.0	PLATED	6
.	95.0	PLATED	6
.	120.0	PLATED	2
◇	120.0	PLATED	2
○	125.0	PLATED	18
.	140.0	PLATED	1
⊕	190.0	PLATED	3
+	250.0	PLATED	10
.	39.37	NON-PLATED	2
.	47.0	NON-PLATED	24
.	52.0	NON-PLATED	2
○	67.0	NON-PLATED	2
●	87.0	NON-PLATED	2
.	100.4	NON-PLATED	2

DETAIL A  
SCALE: NONE

LINE WIDTH IMPEDANCE CHART FOR REFERENCE

LAYER	SINGLE ENDED LINE WIDTH	DIFF LINE WIDTH	SPACE CENTER 2 CENTER	SINGLE	DIFF
L1, L16	7 MILS	6.5 MILS	13.5 MILS	50-55 OHMS	100 OHMS
L3	7.75 MILS	7.74 MILS	20 MILS	50-55 OHMS	100 OHMS
L5, L12	4 MILS	3.9 MILS	11 MILS	50-55 OHMS	100 OHMS
L8, L9	5 MILS	4.9 MILS	12 MILS	50-55 OHMS	100 OHMS
L14	4 MILS	3.9 MILS	11 MILS	50-55 OHMS	100 OHMS

UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE
DIMENSIONS ARE IN INCHES TOLERANCES ON: 2 PL DECIMALS +/- .010 3 PL DECIMALS +/- .005 ANGLES ° FRACTIONS -	DRAWN PATRICK JABBAZ	02/20/06
	CHECKED	
	ENGRG PATRICK JABBAZ	
	ISSUED	

  

PCB, ROHS COMPLIANTT			
ML523 FF1136			
SIZE	FSCM NO	DWG NO	REV
D		1280397	01
SCALE: NONE			SHEET 1 OF 1

ARTWORK, ROHS COMPLIANT, ML523 FF1136	
ARTMASTER # 0531585	LAYER:
Designed by Xilinx	DATE: SEPT 5, 2006
BOARD designer: PATRICK JABBAZ	PHONE: (408) 879-4709
SHEET OF 22	

