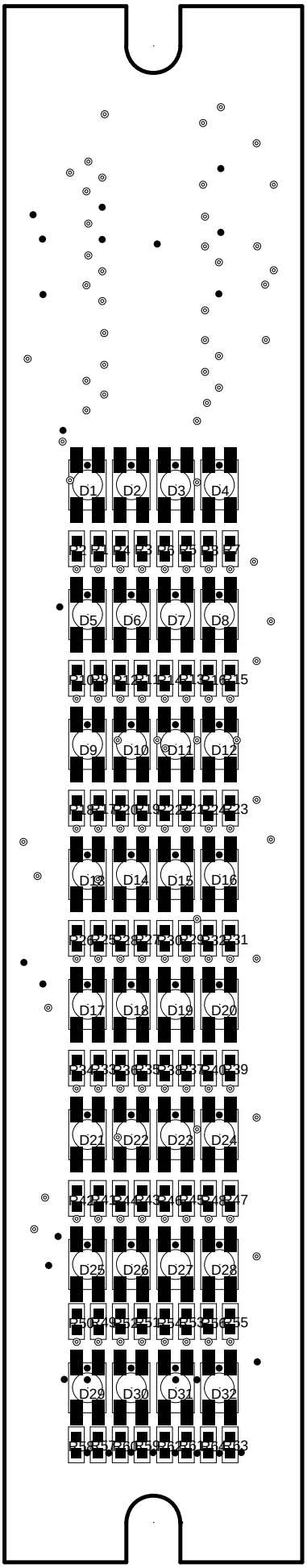
FEM FVTX LED BOARD

126Y-1766596 REV –

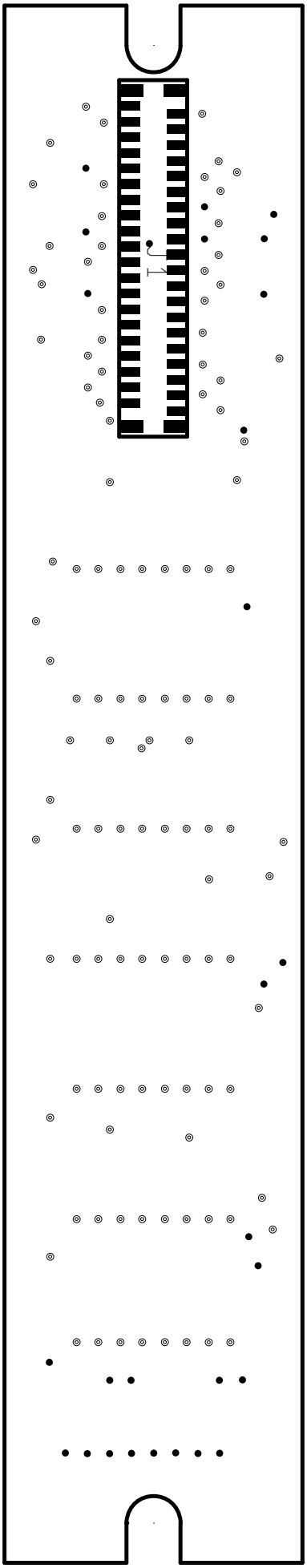
1) PDF COVER SHEET
2) PCB ASSEMBLY- FRONT
3) PCB ASSEMBLY – REAR
4) SCHEMATIC
5) FABRICATION DRAWING
6) BOM
7) ASSEMBLY LOG

REFERENCE:

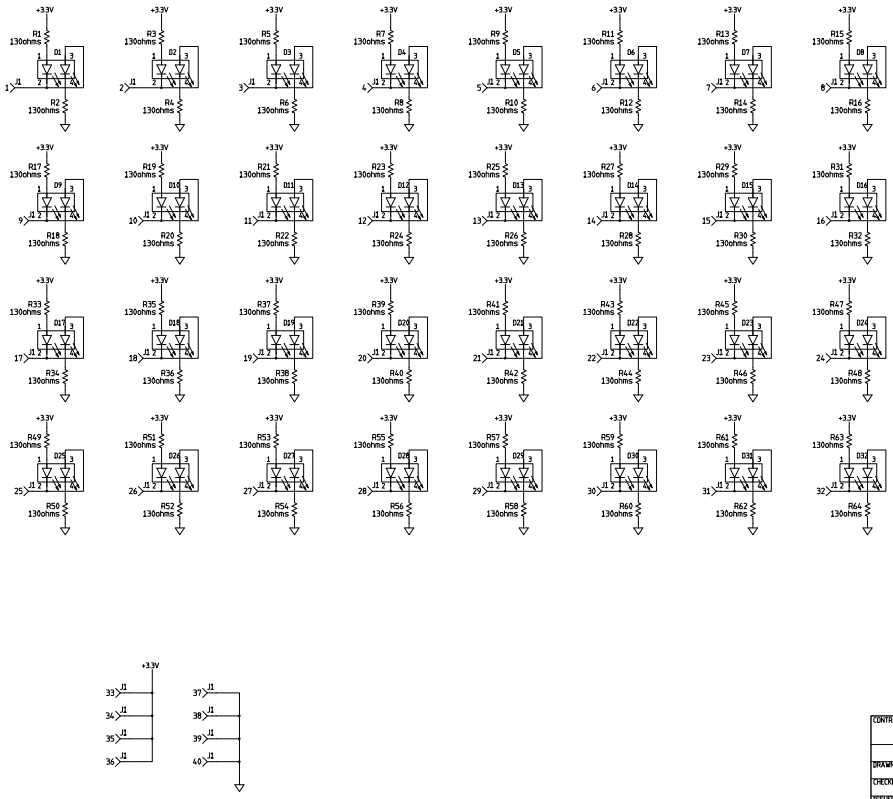
FOR GERBER DATA SEE 126Y-1766596_FEM_FVTX_LED.zip (LOCATED IN GERBER FOLDER)



ASSEMBLY TOP VIEW



ASSEMBLY REAR VIEW



DWG. NO.	SH.	REV

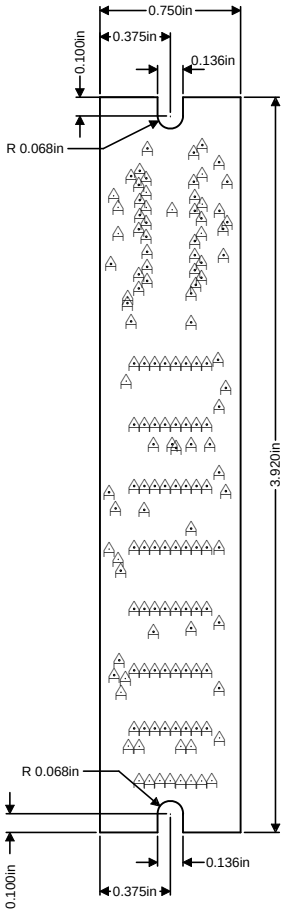
REVISIONS

REV	DESCRIPTION	DATE	APPROVED

CONTRACT NO.		
APPROVALS	DATE	
DRAWN		
CHECKED		
ISSUED		

SIZE	FSCM NO.	DWG. NO.	REV
D			
SCALE		SHEET	

HUMAD. V:4LA



NOTES: (UNLESS OTHERWISE SPECIFIED)

1. MATERIAL : .063 THK HFR-4, +/- .008. LAMINATE GLASS FIBER EPOXY FLAME RETARDANT PER IPC-4101, Tg=140 DEGREES C. MINIMUM.
2. COPPER PLATING : TOTAL ON THE SURFACE INCLUDING ORIGINAL CLADDING PLUS PLATED COPPER SHALL BE 1 OZ. MINIMUM. COPPER PLATING ON WALL OF HOLES SHALL BE .0008" AVG. MIN. NO VALUE LESS THAN .0007".
3. SOLDER PLATING: SURFACE CONDUCTOR PATTERN AND SOLDER PLATE ON WALL OF PLATED THROUGH HOLES SHALL BE TIN-LEAD (60% TIN, 40% LEAD) IN ACCORDANCE WITH THE SOLDERABILITY REQUIREMENTS OF J-STD-003.
4. TRIM CARD TO DIMENSIONS SHOWN. DIMENSIONS ARE IN INCHES.
5. DO NOT SCALE DRAWING.
6. SEE DRILL TABLE FOR PLATING REQUIREMENTS.
7. HOLE DIAMETERS APPLY AFTER PLATING +/- .003.
8. USE THE FOLLOWING ARTWORK/STACKUP FOR LANL PN 126Y-176659 REV - :
   - M1 - LAYER 1, SIG 1 PRIMARY SIDE
   - M2 - LAYER 2, SIG 2
   - M3 - LAYER 3, PLANE (+3.3V)
   - M4 - LAYER 4, PLANE (GND)
   - M5 - LAYER 5, SIG 3
   - M6 - LAYER 6, SIG 4 SECONDARY SIDE
   - M7 - SOLDER MASK - COMPONENT
   - M8 - SOLDER MASK - SOLDER
   - M9 - SILKSCREEN - COMPONENT
   - M10 - SILKSCREEN - SOLDER
   - D6 - FAB NOTES
9. SOLDER MASK (SMOBC) BOTH SIDES OF BOARD.
10. SILKSCREEN BOTH SIDES OF BOARD USING WHITE INK.
11. MANUFACTURE IN ACCORDANCE WITH IPC 6011 AND 6012- CLASS 2.
12. NO MODIFICATIONS OR REPAIRS WITHOUT PRIOR APPROVAL.
13. APPROVED MODIFICATIONS OR REPAIRS SHALL BE IN ACCORDANCE WITH IPC-R-700.

Through Holes						
Symbol	Diameter (in)	Tolerance (in)	Plated	Punched	Hole Name	Quantity
A	0.0080	+/- 0.0030	Yes	No	Drill 8	144

REVISION LETTER	CODE IDENT	REVISIONS	DATE	CHANGED BY	CHECKED BY	APPROVED BY
-	N/R	ORIGINAL ISSUE				

LOS ALAMOS

LOS ALAMOS NATIONAL LABORATORY
LOS ALAMOS, NEW MEXICO 87545

CLASSIFICATION OF DRAWING: UNCLASSIFIED

PROJECT

FEM FVTX LED BOARD
ASSEMBLY DRAWING
(PRIMARY SIDE)

SOFTWARE: EXPEDITION (WG2004)

	NAME	SIGNATURE	DATE	GROUP
ORIGINATED	W. WINTON	W. Winton	2-9-09	AOT-IC
DESIGNED	W. WINTON	W. Winton	2-9-09	AOT-IC
DRAWN	W. WINTON	W. Winton	2-9-09	AOT-IC
CHECKED	W. WINTON	W. Winton	2-9-09	AOT-IC
PROJ ENGR	M. STOFFER	M. Stoffer	3-19-10	AOT-RFE
APPROVED				
RELEASED				

TOLERANCE (UNLESS OTHERWISE NOTED)
X = - 0.XX = - ANGULAR = -
0.X = - 0.XXX = - FINISH = -

SCALE NONE | TOTAL SHEETS 1 | DRAWING NO. 126Y-1766596 | SIZE A | NO. 1

ITEM	QTY	REF DES	DESCRIPTION	VENDOR	VALUE	FOOTPRINT	PART NO	DATASHEET
1	32	D1-D32	LED HIGH EFFICIENCY RED SUPER BRIGHT GREEN	KINGBRIGHT		3.2X2.4mm SMD CHIP LED	APBD3224ESGC-F01	\\E-PHIL-DELL\EXP_2005_ECAD_LIBRARY\0001_DATASHEETS\LEDS\APBD3224ESGC-F01.pdf
2	64	R1-R64	RES 130 OHM 1/10W 1% 0402 SMD	PANASONIC	130	402	ERJ-2RKF1300X	\\E-PHIL-DELL\EXP_2005_ECAD_LIBRARY\0001_DATASHEETS\RESISTORS\ERJ_SERIES.pdf
3	1	J1	40-Pin Molex Connector	MOLEX		501951-4000-C	501951-4000-C	\\E-PHIL-DELL\EXP_2005_ECAD_LIBRARY\0001_DATASHEETS\CONNECTORS\501951-4000-C.pdf

Total Parts Used: 97

LANL BOARD #:	126Y-1766596
Assembled by:	
Group:	AOT-IC
Date:	4/19/10
PAGE OF PAGE:	1 of 1

Los Alamos NATIONAL LABORATORY

Assembly Log

CLEAR LOG

ASSEMBLY LOG (eg.. part Issues, white wires, part changes, mounting holes, ….etc)