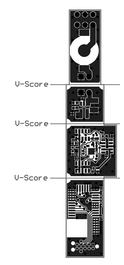
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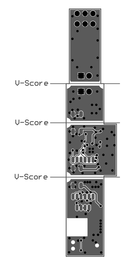
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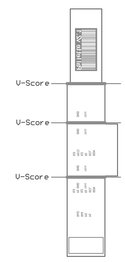
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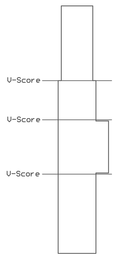
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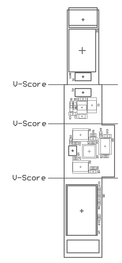
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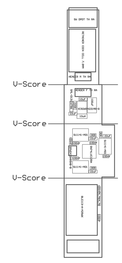
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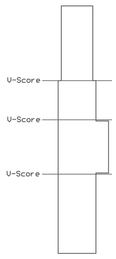
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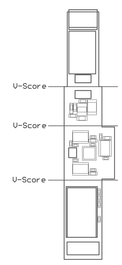
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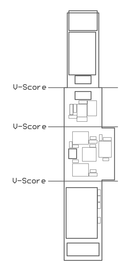
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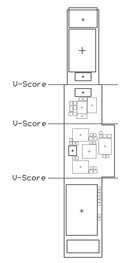
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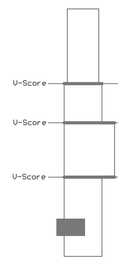
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MASTER FABRICATION DRAWING

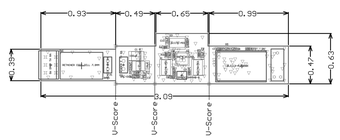
VIEWED FROM PRIMARY SIDE (LAYER 1)

NOTES:

1. THIS DRAWING IS TO BE USED IN CONJUNCTION WITH FILE: Pallette_Rev1_ FABRICATION.ZIP.
2. MANUFACTURING PROCESS: TO IPC-6012B (UNLESS OTHERWISE STATED).
3. ACCEPTANCE: TO IPC-A-600H CLASS 2 (UNLESS OTHERWISE STATED).
4. FINISHED PCB THICKNESS: 0.014"
5. MATERIAL TYPE: ISOLA PCL-FR-370HR
6. LAYER CONSTRUCTION ARE SHOWN IN VIEW 'A'.
7. SURFACE FINISH: ELECTROLESS NICKEL/IMMERSION GOLD (ENIG) AS PER IPC-4552, MINIMUM EN / IG THICKNESS TO BE 3um / 0.05um.
8. ALL HOLE SIZES DESCRIBED IN THIS DOCUMENT ARE FINISHED HOLE SIZES (FHS).
9. MINIMUM CONDUCTOR WIDTH = 0.005", MINIMUM CONDUCTOR SPACING = 0.005".
10. WHITE LPI SOLDER MASK OVER BARE COPPER ON PRIMARY AND SECONDARY SIDE, SOLDER MASK TO CONFORM TO IPC-SM-840D CLASS T.
11. SILKSCREEN ON BOTH SIDES. SILKSCREEN COLOUR: BLACK REMOVE ALL SILKSCREEN WITHIN 0.006" OF EXPOSED CONDUCTORS.
12. MARK VENDOR LOGO, DATE CODE, COUNTRY OF MANUFACTURE, ETC LOCATION AT VENDOR DISCRETION USING WHITE EPOXY INK.
13. PROFILING METHODS: ROUTE AND/OR V-GROOVE/SCORE.
14. 30 DEGREE (+/- 5 DEGREE) V-GROOVE/SCORE, MINIMUM 0.02" (+/-0.004") THICKNESS MUST REMAIN.
15. ALL PCB EDGES SHALL BE CLEAN CUTS AND WITHOUT METALLIC BURRS.
16. REJECTS: MAXIMUM OF 25% X (CROSS) OUTS ALLOWED AT VENDOR COST.
17. ALL PCBs SUPPLIED ARE TO BE COMPLIANT TO RoHS / EU DIRECTIVE 2002/95/EC & OTHER SIMILAR LEGISLATION RESTRICTING THE USE OF HAZARDOUS SUBSTANCES.
18. MANUFACTURING TOLERANCES:
    - GENERAL MANUFACTURING: +/- 0.004"
    - CONDUCTOR WIDTH: > 0.004" +/-20%, < 0.004" +/- 20%
    - CONDUCTOR PATTERN REGISTRATION: +/- 0.004"
    - SOLDERMASK PATTERN REGISTRATION: +/-0.00315"
    - FINISHED PCB/PANEL ARRAY THICKNESS TOLERANCE: > +/-10%
    - HOLE DIAMETER: PTH > 0.118" +/-0.004", 0.118" - 0.004" +/-0.00315", 0.004" +0.002"/-0.004"
      NPTH > 0.157" +/-0.004", < 0.157" +0.002"/-0.002"
    - HOLE LOCATION: +/-0.004"
    - ROUTE: PTH/NPTH +/-0.005"
    - V-GROOVE/SCORE ALIGNMENT: +/-0.005"

MANUFACTURING FILE LIST

	FABRICATION FILES	FILE NAME
■	TOP OVERLAY	Pallette _Rev1 .GTO
■	TOP SOLDER MASK	Pallette _Rev1 .GTS
■	TOP COPPER LAYER (L1)	Pallette _Rev1 .GTL
■	BOTTOM COPPER LAYER (L2)	Pallette _Rev1 .GBL
■	BOTTOM SOLDER MASK	Pallette _Rev1 .GBS
■	BOTTOM OVERLAY	Pallette _Rev1 .GBO
■	V-SCORE DRAWING	Pallette _Rev1 .GM12
■	KEEPOUT	Pallette _Rev1 .GKO
■	APERTURE FILE	Pallette _Rev1 .APR
■	DRILL REPORT - TOOL FILE	Pallette _Rev1 .DRR
■	DRILL - PLATED	Pallette _Rev1-Plated.TXT
■	DRILL - NONPLATED	Pallette _Rev1-NonPlated.TXT
■	DRILL - BINARY FILE	Pallette _Rev1 .DRL
■	FABRICATION DRAWING	Drill Drawing.PDF
□		
□		
	ASSEMBLY FILES	
■	TOP PASTE MASK	Pallette _Rev1.GTP
□	BOTTOM PASTE MASK	Pallette _Rev1.GBP
■	PICK PLACE FILE	Pick Place for Pallette_Rev1.CSV
■	TOP DESIGNATOR	Pallette _Rev1.GM2
■	TOP VALUES	Pallette _Rev1.GM3
■	ASSEMBLY	Pallette _Rev1.GM13
■	COURTYARD	Pallette _Rev1.GM15
■	DATUM CROSS	Pallette _Rev1.GM16
■	ASSEMBLY DRAWING	Assembly Drawings.PDF
■	BOM	Bill of Materials.PDF
□		
□		
□		
□		
	GENERAL FILES	
■	BOARD OUTLINE	Pallette _Rev1.GM1
□	BOARD INFORMATION	Pallette _Rev1.GM10
□	ALTIUM PCB FILE	Pallette _Rev1.PcbDoc
□	READ ME FILE	Pallette _Rev1.TXT
□		



VIEW 'A': STACKUP STRUCTURE

FINISHED PCB/PANEL ARRAY THICKNESS: 0.014"

DIELECTRIC CONSTANT FOR FR4 CORE AND PrePREG: Er = 4.0 - 4.5.

0.014" - 2 Layer Stackup

		LAYER 1 (PRIMARY SIDE)
A		HALOGEN FREE PCB 35um COPPER CLAD LAMINATE
		LAYER 2 (SECONDARY SIDE)

MATERIALS & SPECIFICATIONS

A. BASE MATERIAL - 35um (1.0oz) Cu CLAD DOUBLE SIDED LAMINATE, MUST MEET IPC4101B/24 OR EQUIVALENT (MINIMUM Tg 135 AND Td 280 DEGREES C, SUITABLE FOR A LEAD FREE PROCESS).

B. PrePREG MATERIAL - MATERIAL SELECTED TO MATCH THE ABOVE LAMINATE, PrePREG TO ICP4101B/24 OR EQUIVALENT (MINIMUM Tg 135 AND Td 280 DEGREES C, SUITABLE FOR A LEAD FREE PROCESS). 2 SHEETS MINIMUM BETWEEN BONDING LAYERS. GLASS STYLE, RESIN FLOW AND GEL TIMES OPTIONAL.

C. 18um (0.5oz) Cu FOIL LAYERS TO IPC-MF-150F/3. OUTER LAYERS TO BE PLATED TO 35um (1oz) FINISHED WEIGHT.

Symbol	Hit Count	Tool Size	Plated	Hole Type
▽	121	14.961mil (0.38mm)	PTH	Round
○	4	27.559mil (0.7mm)	PTH	Round
⌘	6	35.433mil (0.9mm)	PTH	Round
☼	3	39mil (0.991mm)	NPTH	Round
◌	4	39.37mil (1mm)	PTH	Round
⊠	4	118.11mil (3mm)	NPTH	Round
	142 Total			

REVISION				
ISSUE	DATE	ECO No	BY	
1	FIRST ISSUE Aug 29th 2016		JZ	

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCH
TOLERANCES ARE:
DECIMALS .X ±0.02 .XX ±0.01
ANGLES ±5°

MATERIAL 4 5 6

FINISH 7 10 11

DO NOT SCALE DRAWING

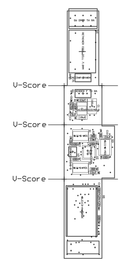
Pallette

DESCRIPTION

Tongue Controlled Interface

SIZE	DRAWN	REV.
A1	JZ 08-29-2016	1
SCALE 1 : 1		SHT 1 OF 1

2:59:48 PM 8/30/2016 DRAWING SIZE A1


V-Score
V-Score
V-Score