NOTES: UNLESS OTHERWISE SPECIFIED

- MILLIMETERS (mm) ARE THE CONTROLLING DIMENSIONS FOR THE DRAWINGS AND SUPPLIED DATA. INCH DIMENSIONS ARE FOR REFERENCE ONLY.
- FABRICATE PCB IN ACCORDANCE WITH IPC-6012A, CLASS 2; PER IPC-6011 USING CUSTOMER SUPPLIED DATA FILES.
- MATERIALS:
- OR IPC-4101/26. LAMINATE AND PREPREG (B-STAGE) TO BE IN ACCORDANCE WITH IPC-4101/24 MATERIAL MUST MEET UL 94V-0 FLAMABILITY RATING.
- COPPER FOIL TO BE IN ACCORDANCE WITH IPC-MF-150. SPECIFIED, ALL COPPER WEIGHT FOR INNER LAYERS TO BE 17um (0.5 OZ) AND FOR OUTER LAYERS 35um (1.0 OZ). COPPER WEIGHT IS TO BE CONSIDERED "FINISHED". UNLESS OTHERWISE
- ALL HOLES SHALL BE LOCATED WITHIN 0.216 (0.0085") DIAMETER TRUE POSITION. LAYER TO LAYER REGISTRATION SHALL BE WITHIN 0.127 (0.005")...
- S FINISH:
- ALL EXPOSED CONDUCTIVE PATTERN AREAS NOT COVERED WITH SOLDERMASK OR OTHER PLATING SHALL BE HOT AIR SOLDER LEVELED (HASL) USING SN63A TIN LEAD SOLDER PER ANSI/J-STD-006.
- ⋋ OTHER PLATING SHALL BE PLATED WITH ORGANIC SURFACE PROTECTANT (OSP). ALL EXPOSED CONDUCTIVE PATTERN AREAS NOT COVERED WITH SOLDERMASK OR
- ⊳ NICKEL (NiAu) ALL EXPOSED CONDUCTIVE PATTERN AREAS NOT COVERED WITH SOLDERMASK OR OTHER PLATING SHALL BE PLATED WITH IMMERSION GOLD OVER ELECTROLYSIS OVER COPPER.
- ⊳ OTHER PLATING SHALL BE PLATED WITH IMERSION WHITE TIN (IWT). ALL EXPOSED CONDUCTIVE PATTERN AREAS NOT COVERED WITH SOLDERMASK OR
- ⊳ OTHER PLATING SHALL BE PLATED WITH IMMERSION SILVER (IAg). ALL EXPOSED CONDUCTIVE PATTERN AREAS NOT COVERED WITH SOLDERMASK OR
- $\overline{\mathbb{Q}}$ APPLY LIQUID PHOTO IMAGEABLE SOLDER MASK PER IPC—SM—840, CLASS H, TO BOTH SIDES OF THE BOARD OVER BARE COPPER. VIA HOLES COVERED WITH SOLDERMASK DO NOT NEED TO BE PLUGGED. ONLY SOLDER MASK IMAGES THAT ARE THE SAME SIZE AS THE COMPONENT PADS MAY BE ENLARGED, AND SHALL BE ENLARGED BEYOND 0.08 (.003") PER SIDE OR 0.15 (.006") OVERALL. OTHER SOLDER MASK IMAGES SHALL NOT BE ENLARGED.
- \cap SILKSCREEN SHALL BE WHITE, PERMANENT, ORGANIC, NON-CONDUCTIVE INK. THERE SHALL BE NO SILKSCREEN ON ANY SOLDERABLE COMPONENT PAD.
- <u></u> MARKING:
- BOARD PART NUMBER AND REVISION LETTER IS RENDERED IN ETCH ON THE BOTTOM SIDE OF THE BOARD. REVISION LETTER SHOULD BE IDENTICAL TO THIS DRAWING.
- UL LOGO, MANUFACTURER'S IDENTIFICATION AND DATE CODE LETTER SHALL RENDERED IN ETCH ON THE BOTTOM SIDE OF THE BOARD APPROXIMATELY WHERE SHOWN. . BE
- 7. TEST REQUIREMENTS:
- NETLIST FOR OPENS AND SHORTS. ALL NETS SHALL BE ACCESIMULTANEOUSLY OR AS OTHERWISE MUTUALLY AGREED UPON. 100% NETLIST ELECTRICAL VERIFICATION USING CUSTOMER SUPPLIED NETLIST FOR OPENS AND SHORTS. ALL NETS SHALL BE ACCESSED
- HIPOT TEST ALL PREPREG/CORE MATERIAL LESS THAN 0.0025 THICK AT 500VDC FOR 30 SECONDS MINIMUM. TEST SHOULD BE DONE AT THE LAYER STAGE AND AGAIN PRIOR TO PACKAGING.

∞ TOLERANCES:

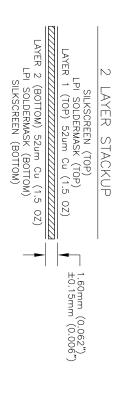
- WARP OR TWIST OF BOARD SHALL NOT EXCEED 1%.
- CONDUCTOR WIDTHS AND SPACING SHALL BE WITHIN +/- 0.03 (0.001") OF GERBER DATA.
- REMOVE ALL BURRS AND BREAK SHARP EDGES 0.4 (0.015") MAXIMUM
- \Box ABOVE BOARD SURFACE. SURFACE MOUNT PAD PLATING MUST BE FLAT TO A MAXIMUM OF 0.08 (0.003")
- 1.5 (0.059") MAXIMUM RADIUS ON ANY INSIDE CORNERS.
- CONTROLLED IMPEDANCE:
- STRIPLINE REFERENCED TO LAYERS 2 AND x. 50 OHMS ON OUTER LAYERS. IMPEDANCE STRUCTURE DEFINED AS ××mm
- 50 OHMS ON INNER LAYERS. IMPEDANCE STRUCTURE DEFINED AS xxmm MICROSTRIP REFERENCED TO NEAREST PLANE.

THEIVING:

9

- SUPPLIER MAY ADD THIEVING TO COMPENSATE FOR HIGH COPPER DENSITY AREAS ON THIS DESIGN.
- THE FOLLOWING GUIDELINES MUST BE ADHERED TO IN ORDER TO MAINTAIN ELECTRICAL AND MECHANICAL INTEGRITY OF THE DESIGN:
- THIEVING TO CARD EDGE SPACING 2.5 (.100") MINIMUM.
- THIEVING TO FIDUCIAL SPACING 5.0 (.200") MINIMUM.

- THIEVING TO NON-PLATED THROUGH HOLES 5.0 (.200") MINIMUM. THIEVING TO ALL OTHER FEATURES 0.25 (.100") MINIMUM. THERE SHALL BE NO EXPOSED THIEVING IN ANY AREA FREE OF SOLDERMASK OR INTERNAL COPPER PLANE.
- 10. PLATE EDGE CONNECTOR 0.8um (0.000032") 2.5um (0.00098") MIN. LOW STRESS NICKEL. MIN. GOLD THICKNESS OVER
- 11. LAYER STACKUP DETAIL AS BELOW.



WIJZIGING UTHOORN FROM PROPERTY OF THE PROPERT	MAATEENHEID DATUM :
VLF-SCOPE : INPUT CHANNEL X FRONT PCB FABRICATION NOTES	mm AFDELING: MyElectronics/work 18-01-2006 GEZIEN:
NUMMER: FORM: 52.002.00 .02.01 A3	

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30-10-2003

LJH TIMMERMAN

DATUM

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OMSCHRIJVING VAN DE

FIRST ISSUE