

V-SCORE 3 PLACES
SEE DETAIL "A"

REVISIONS				
REV	DESCRIPTION OF CHANGE	DRFTR	DATE	APPROVED
0.1	NEW RELEASE	C.C.D.	11/26/14	
1.0	UPDATED PER ECO2015-021	C.C.D.	09/21/15	

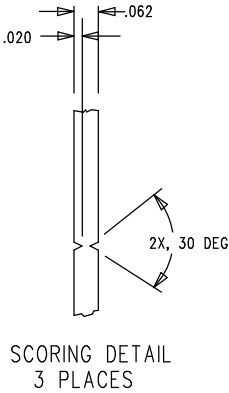
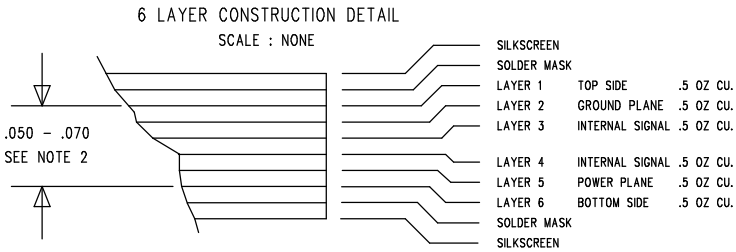
UNLESS OTHERWISE SPECIFIED


- BOARD TO BE FABRICATED PER IPC-6012 (LATEST REVISION) CLASS 2.
- MATERIAL: FR-370HR OR EQUIVALENT, THICKNESS: .062 +/-10%.
VENDOR MAY ADJUST THICKNESS TO FULFILL NOTE 9.
- PLATING: SEE CONSTRUCTION DETAIL FOR FINISHED COPPER WEIGHT.
ALL HOLES PLATED THROUGH, EXCEPT AS NOTED IN HOLE LEGEND.
MINIMUM PTH BARREL THICKNESS = 0.0008" MINIMUM AVERAGE
PER IPC-6012 (LATEST REVISION) WITH AMENDMENT 1, CLASS 2
REQUIREMENTS. WITH NO SINGLE MEASUREMENT LESS THAN 0.00071
IN THE PLATED HOLES.
- FINISH: SURFACES TO BE COATED BY ENIG OF 3 TO 5 MICROINCHES OVER
A MINIMUM OF 150-200 MICROINCHES OF LOW STRESS NICKEL.
- SOLDERMASK: SOLDER MASK TO BE TRANSPARENT GREEN LPI BOTH SIDES
PER GERBER FILES. VENDOR MAY ADJUST SOLDERMASK
PAD SIZE AS NEEDED.
- SILKSCREEN: WHITE EPOXY INK, APPLY TO BOTH SIDES PER GERBER FILES.
- ARTWORK: MINIMUM FEATURE SIZE = 0.005
MINIMUM AIR GAP = 0.004
- ALL DIMENSIONS ARE IN INCHES.
- CONTROLLED IMPEDANCE (+/-10%):
100 OHMS DIFF/PAIR (+/-10%) ON ALL .0045" LINE WIDTHS
60 OHMS SINGLE/ENDED (+/-10%) ON ALL .005" LINE WIDTHS
- DO NOT ADD NON-FUNCTIONAL COPPER THEIVING ON OPEN AREAS OF OUTER LAYERS.
THEIVING IS ALLOWED ON INNER LAYERS, UNLESS OTHERWISE SPECIFIED.
- VIAS SHOULD BE COVERED ACCORDING TO ONE OF THE FOLLOWING METHODS.
METHOD 1 IS PREFERRED.

METHOD 1: VIAS MUST BE FILLED WITH SOLDERMASK MATERIAL AFTER
ELECTROLESS NICKEL/IMMERSION GOLD AND BEFORE PRIMARY LPI MASK.
AFTER THE FILL IS CURED, THE PRIMARY MASK IS THEN APPLIED WITH NO
VIA APERTURES BOTH SIDES.

METHOD 2: AFTER APPLICATION OF FULL BODY ELECTROLESS NICKEL/
IMMERSION GOLD, APPLY PRIMARY MASK WITH REDUCED VIA APERTURES
THAT ARE 6 MILS LARGER THAN DRILLED HOLE DIAMETER BOTH SIDES.
THEN APPLY SOLDER MASK PLUG ON COMPONENT SIDE.
- VIA HOLES (.008 & .012) REQUIRE TANGENCY ONLY, INSTEAD OF ANNULAR RING.
- TEARDROP PADS ARE ACCEPTABLE WHERE NEEDED.
- BUILD AS 1-UP PCB.
- USE IPC-D-356A NETLIST AS SUPPLIED FOR CHECKING.
- V SCORE 3 LINES ON BOTH SIDES OF THE BOARD. SEE DETAIL.

SIZE	QTY	SYM	PLATED	TOL
0.008	232	+	YES	+0.003/-0.008
0.012	2046	×	YES	+0.003/-0.012
0.02	17	□	YES	+/-0.003
0.028	4	◇	NO	+/-0.003
0.028	5	⊗	YES	+/-0.003
0.032 x 0.06	1	⊕ ^B	YES	+/-0.003
0.032 x 0.078	4	⊕ ^A	YES	+/-0.003
0.038	3	⊕ ^C	YES	+/-0.003
0.04	1	⊕ ^D	YES	+/-0.003
0.044	4	⊕ ^E	NO	+/-0.003
0.051	60	⊕ ^F	YES	+/-0.003
0.059	24	⊕ ^G	YES	+/-0.003
0.063	2	⊕ ^H	NO	+/-0.003
0.071 x 0.19	12	⊕ ^J	NO	+/-0.003
0.144	6	⊕ ^K	NO	+/-0.005
0.156	3	⊕ ^L	NO	+/-0.005



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE : .XX +/- .010 .XXX +/- .005	CONTRACT NO.		 20 Alpha Road Chelmsford, MA 01824	
	APPROVALS	DATE		
MATERIAL	DRAWN C.C.D.	09/21/15	FABRICATION DRAWING E13 HDMI Audio Extender	
SEE NOTES	CHECKED			
FINISH	ENGINEERING		SIZE B	REV. 1.0
SEE NOTES	QUALITY		DWG. NO. A0707-2014	
DO NOT SCALE THIS DRAWING	MANUFACTURING		SCALE 1 : 1	SHEET 1 OF 1