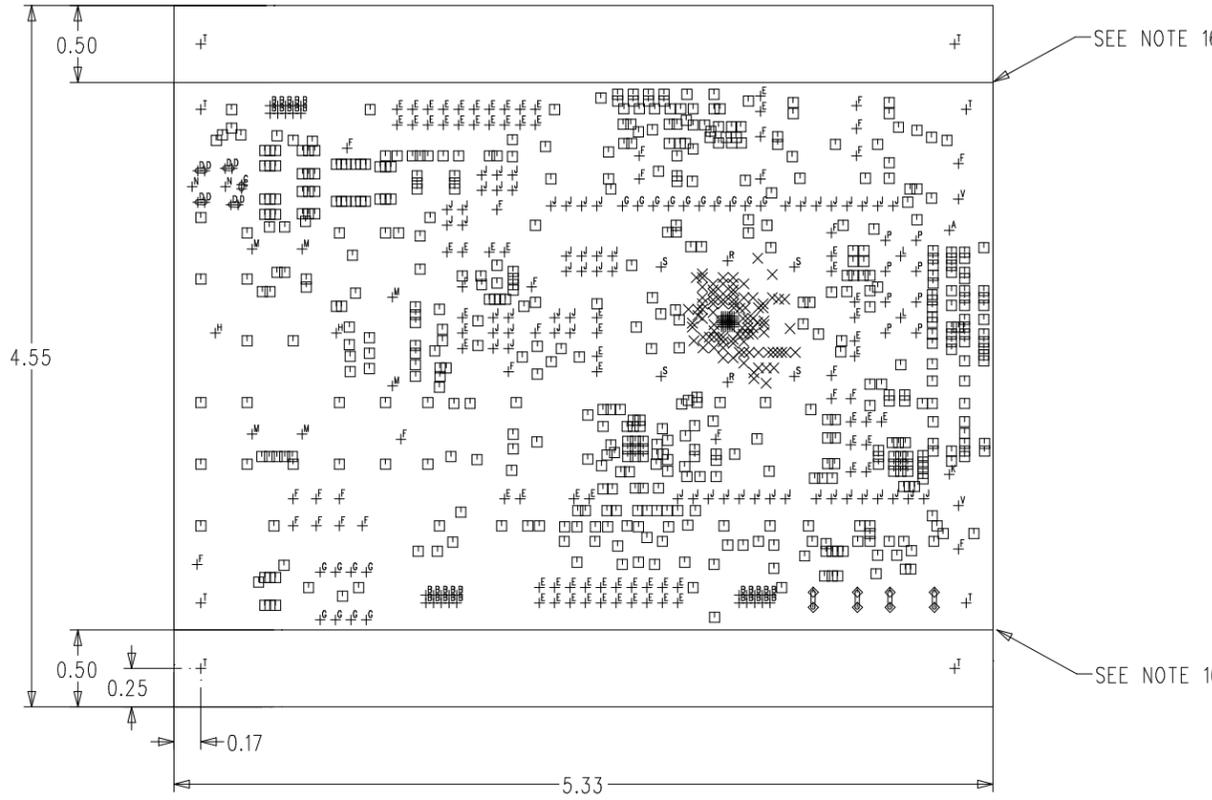
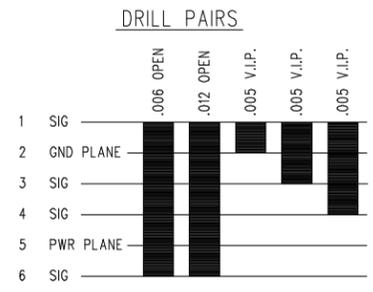
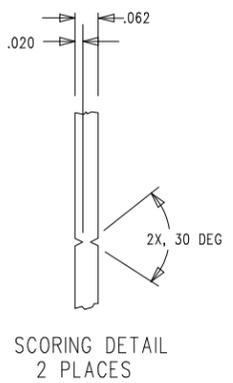
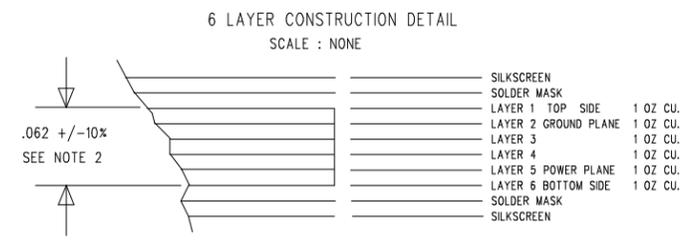


REVISIONS				
REV	DESCRIPTION OF CHANGE	DRFTR	DATE	APPROVED
0.1	NEW RELEASE	C.C.D.	8/26/16	
1.0	UPDATED PER ECO2017-001	C.C.D.	1/09/17	

SIZE	QTY	SYM	PLATED	TOL
0.005	42	+	YES	+0.000/-0.005
0.006	93	X	YES	+0.000/-0.006
0.012	535	□	YES	+/-0.003
0.028 x 0.126	4	◇	YES	+/-0.003
0.028	1	† ^A	NO	+/-0.003
0.029	30	† ^B	YES	+/-0.003
0.032 x 0.06	1	† ^C	YES	+/-0.003
0.032 x 0.078	4	† ^D	YES	+/-0.003
0.038	70	† ^E	YES	+/-0.003
0.04	29	† ^F	YES	+/-0.005
0.041	18	† ^G	YES	+/-0.003
0.042	2	† ^H	YES	+/-0.003
0.043	56	† ^J	YES	+/-0.003
0.044	1	† ^K	NO	+/-0.003
0.047	2	† ^L	YES	+/-0.003
0.053	6	† ^M	NO	+/-0.003
0.063	2	† ^N	NO	+/-0.003
0.067	8	† ^P	YES	+/-0.003
0.079	2	† ^R	NO	+/-0.003
0.095	4	† ^S	NO	+/-0.003
0.125	8	† ^T	NO	+/-0.005
0.144	2	† ^V	NO	+/-0.005



- UNLESS OTHERWISE SPECIFIED
- BOARD TO BE FABRICATED PER IPC-6012B, CLASS 2.
 - MATERIAL: FR-370HR OR EQUIVALENT. OUTER LAYERS 1 OZ/SQFT CU INNER LAYERS 1 OZ/SQFT CU FINISHED .062 +/-10%. VENDOR MAY ADJUST THICKNESS TO FULFILL NOTE 9.
 - PLATING: ADDITIONAL CU PLATING 1 OZ/SQFT ALL HOLES PLATED THROUGH, EXCEPT AS NOTED IN HOLE LEGEND. MINIMUM PTH BARREL THICKNESS = 0.0008" MINIMUM AVERAGE PER IPC-6012B 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%): ALL .007" TRACES TO BE 90 OHM DIFFERENTIAL PAIRS. ALL .005" TRACES TO BE 50 OHM SINGLE ENDED.
 - NON-FUNCTIONAL COPPER THIEVING IS ALLOWED ON OPEN AREAS.
 - 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 (.012) REQUIRE TANGENCY ONLY, INSTEAD OF ANNULAR RING.
 - TEARDROP PADS ARE ACCEPTABLE WHERE NEEDED.
 - REMOVAL OF NON-FUNCTIONAL PADS ON LAYERS 3 AND 4 IS ACCEPTABLE.
 - USE IPC-D-356A NETLIST AS SUPPLIED FOR CHECKING.
 - V SCORE 1 LINE ON BOTH SIDES OF THE BOARD. SEE DETAIL.
 - BUILD AS 1-UP PCB.
 - ALL .005" HOLES TO BE FILLED WITH NON-CONDUCTIVE EPOXY AND PLATED OVER (VIA-IN-PAD).



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE : .XX +/- .010 .XXX +/- .005	CONTRACT NO.		2 Elizabeth Drive Chelmsford, MA 01824
	APPROVALS	DATE	
MATERIAL	DRAWN C.C.D.	1/09/17	FABRICATION DRAWING ADuCM4050 WL CSP EZ-KIT
SEE NOTES	CHECKED		
FINISH	ENGINEERING		SIZE B
SEE NOTES	QUALITY		DWG. NO. A0919-2016
DO NOT SCALE THIS DRAWING	MANUFACTURING		SCALE 1 : 1
			SHEET 1 OF 1