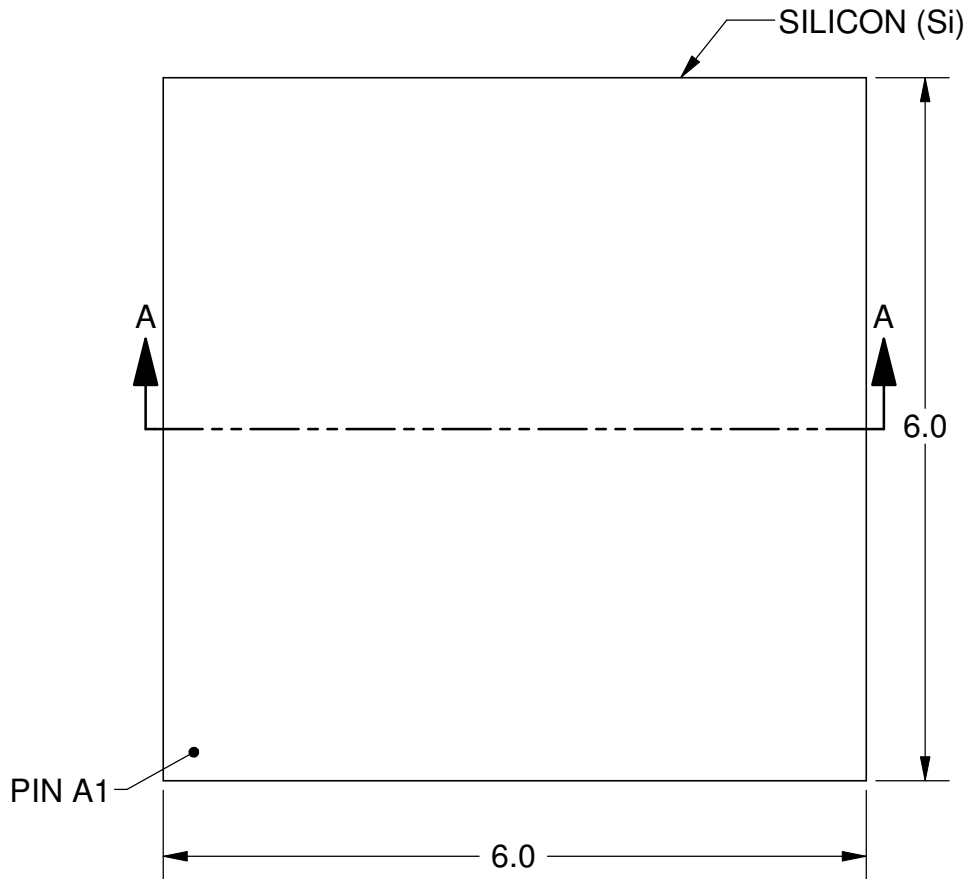
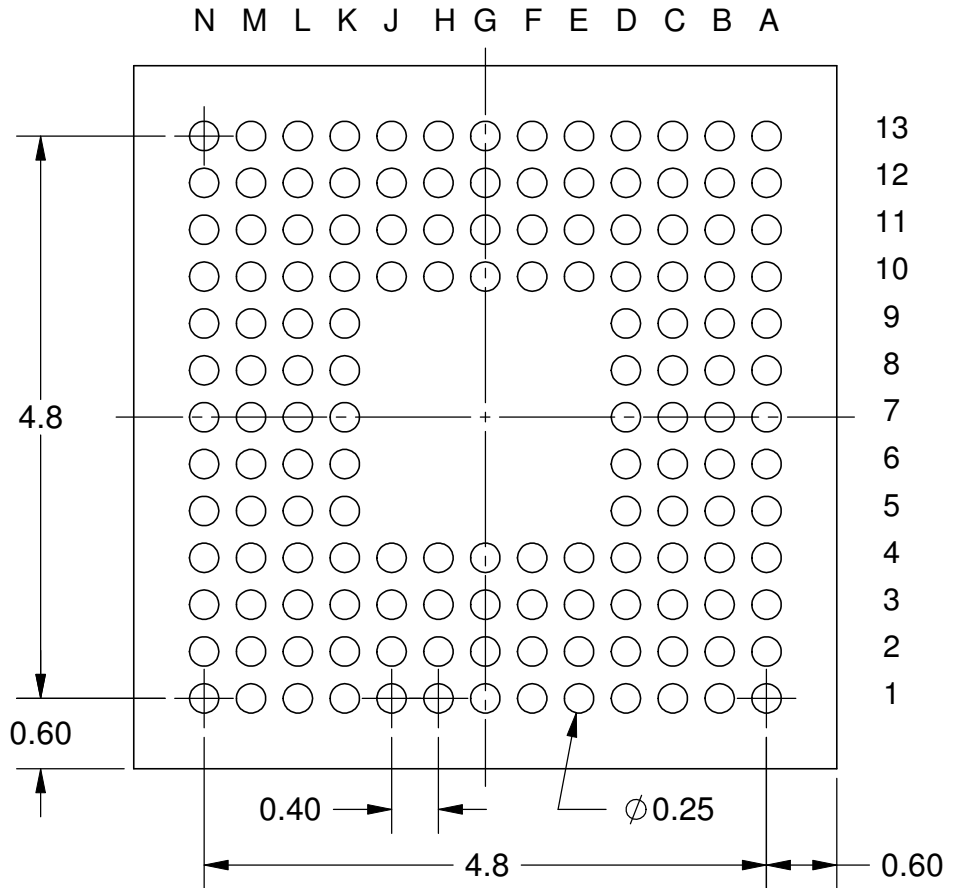


TOP VIEW

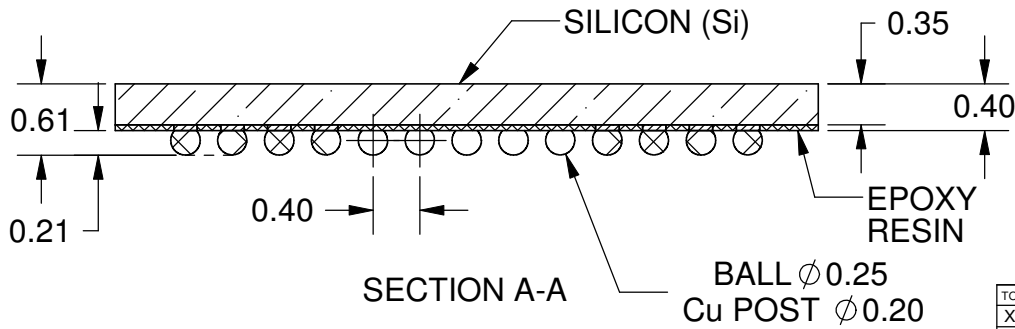


BALL VIEW



Notes: (Unless Otherwise Specified).

- 1) ALL DIMENSIONS ARE IN MM.
- 2) SOLDER BALL ALLOY:
STANDARD: SAC305 (Sn96.5/Ag3.0/Cu0.5).
SPECIAL: LF35 (Sn98.3/Ag1.2/Cu0.5).
- 3) BALL DIAMETER (BEFORE REFLOW): 0.25mm.
- 4) NON-SOLDER MASK DEFINED PAD.
- 5) PAD Cu DIAMETER: 0.20mm.
- 6) SUBSTRATE MATERIAL: Si (SILICON).
- 7) DAISY CHAIN PATTERN (SEE PAGE 2).

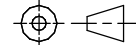


PART NUMBER TABLE

PART NUMBER	BALL ALLOY	Pb-FREE	RoHS	Si DIE
WLP144T.4C-DC133D	Sn96.5/Ag3.0/Cu0.5	YES	YES	YES
WLP144T.4C1-DC133D	Sn98.3/Ag1.2/Cu0.5	YES	YES	YES

TOLERANCE UNLESS NOTED	
X.X	+/- 0.3
X.XX	+/- 0.03
X.XXX	+/- 0.003
ANGLES	+/- 0.5°
ALL DIMENSIONS IN	
<input type="checkbox"/> INCHES	<input checked="" type="checkbox"/> MILLIMETERS

THIRD ANGLE PROJECTION

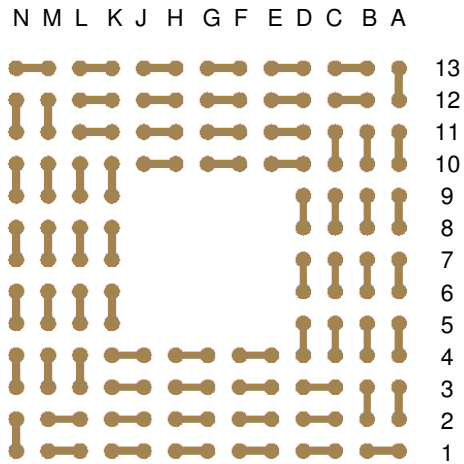


APPROVALS	DATE
DRAWN J. Hines	1/16/2011
ENG	
MFG	
QA	
CUST	
REVISED	

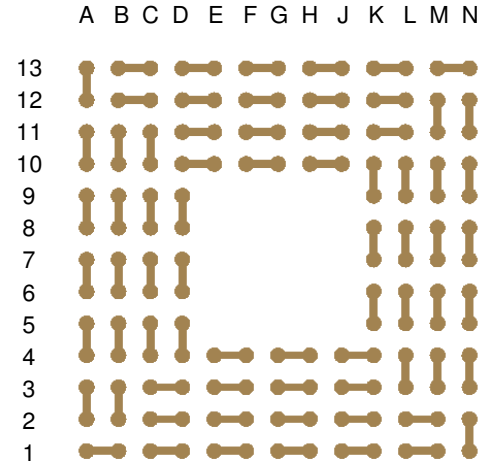
TopLine ®			
TITLE		WLP144T.4C-DC133D	
		144-BALL P=0.4mm	
SCALE	SIZE	DRAWING NO.	REV
15.5:1	A	541332	A
DO NOT SCALE DRAWING			SHEET 1 OF 2

DAISY CHAIN PATTERN

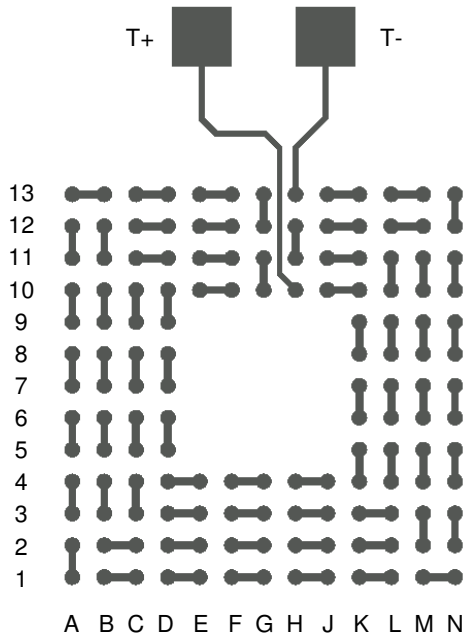
BALL VIEW



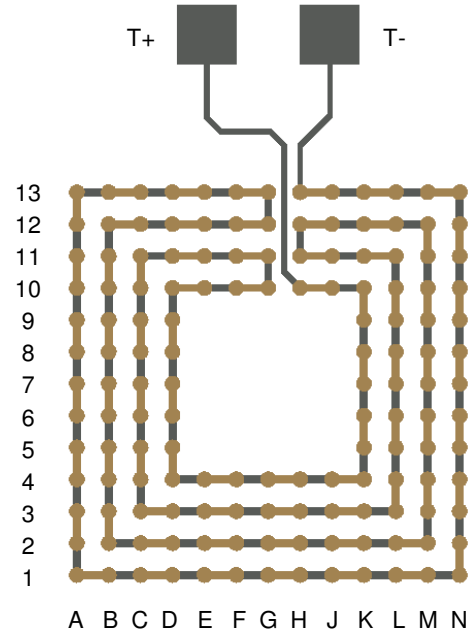
BOTTOM SIDE
(TOP X-RAY VIEW)



TOP VIEW



AFTER MOUNTING
TO TEST BOARD
(TOP X-RAY VIEW)



TEST VEHICLE BOARD

Notes:

- 1) PCB BOARD DIMENSIONS ARE PRESENTED ONLY AS A GUIDELINE. DESIGNERS SHOULD USE THEIR OWN EXPERIENCE WHEN DESIGNING PCB.
- 2) PCB Cu BALL PAD DIAMETER 0.20mm (7.8mil).
- 3) PCB DAISY CHAIN TRACING LINE WIDTH 0.10mm (3.9mil).

TopLine [®]			
TITLE		WLP144T.4C-DC133D 144-BALL P=0.4mm	
SCALE	SIZE	DRAWING NO.	REV
10.55:1	A	541332	A
DO NOT SCALE DRAWING		SHEET 2 OF 2	