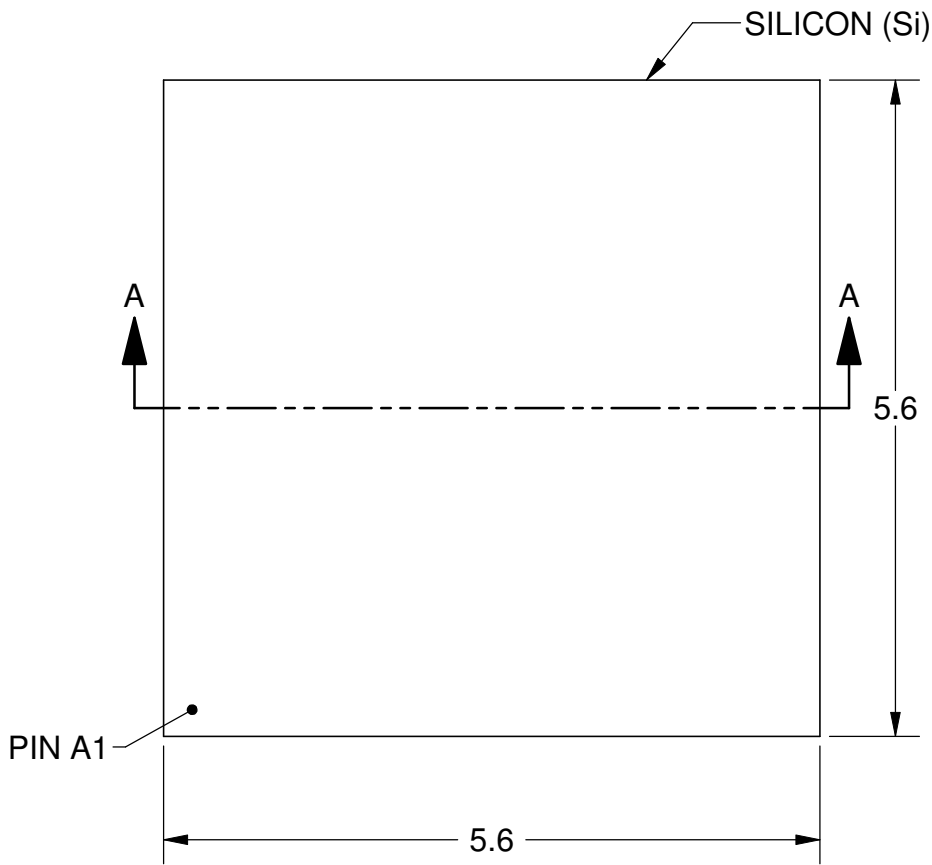
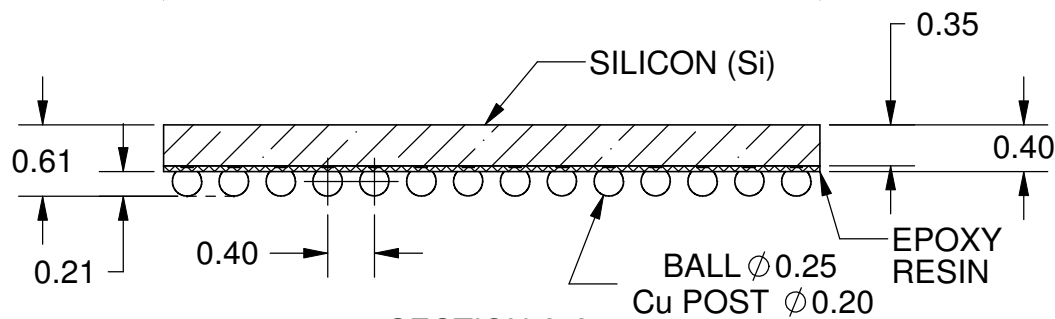
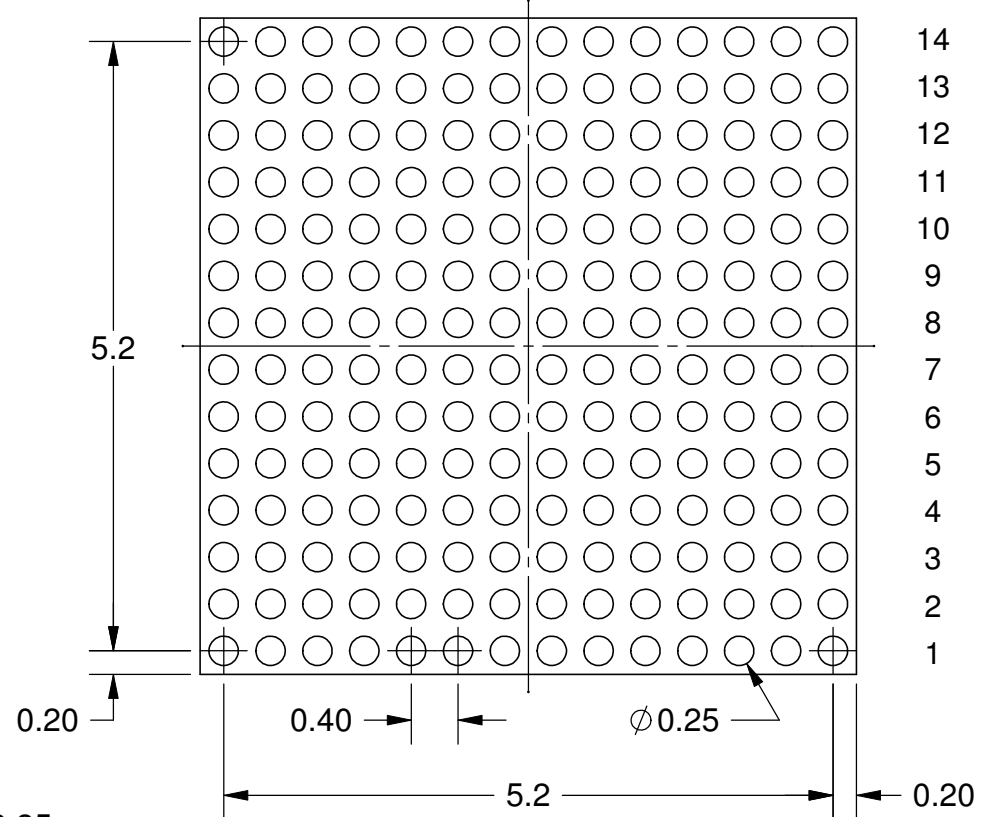


TOP VIEW



BALL VIEW

P N M L K J H G F E D C B A


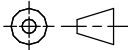


SECTION A-A

Notes: (Unless Otherwise Specified).

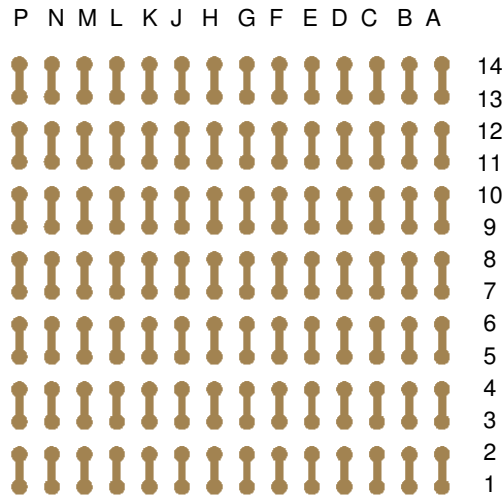
- 1) ALL DIMENSIONS ARE IN MM.
- 2) SOLDER BALL ALLOY:  
STANDARD: SAC305 (Sn96.5/Ag3.0/Cu0.5).  
SPECIAL: LF35 (Sn98.3/Ag1.2/Cu0.5).
- 3) BALL DIAMETER (BEFORE REFLOW): 0.25mm.
- 4) NON-SOLDER MASK DEFINED PAD.
- 5) PAD Cu DIAMETER: 0.20mm.
- 6) SUBSTRATE MATERIAL: Si (SILICON).
- 7) DAISY CHAIN PATTERN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

PART NUMBER TABLE				
PART NUMBER	BALL ALLOY	Pb-FREE	RoHS	Si DIE
WLP196T.4C-DC148D	Sn96.5/Ag3.0/Cu0.5	YES	YES	YES
WLP196T.4C1-DC148D	Sn98.3/Ag1.2/Cu0.5	YES	YES	YES

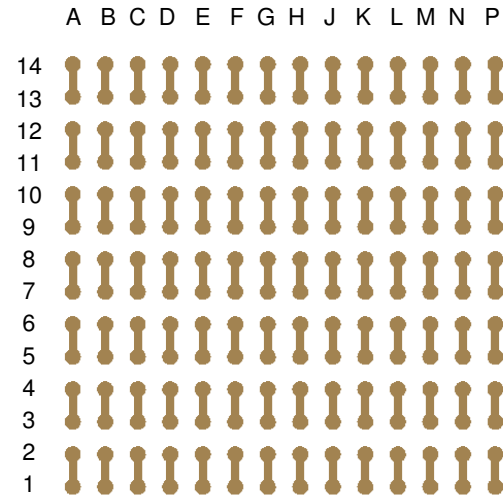
TOLERANCE UNLESS NOTED		APPROVALS		DATE				
X.X	+/- 0.3	DRAWN J. Hines		12/30/2010				
X.XX	+/- 0.03	ENG			TITLE WLP196T.4C-DC148D			
X.XXX	+/- 0.003	MFG			196-BALL P=0.4mm (TEG0408)			
ANGLES +/- 0.5°		THIRD ANGLE PROJECTION			SCALE	SIZE	DRAWING NO.	REV
ALL DIMENSIONS IN					15.5:1	A	541482	A
<input type="checkbox"/> INCHES <input checked="" type="checkbox"/> MILLIMETERS		REVISED			DO NOT SCALE DRAWING			SHEET 1 OF 2

# DAISY CHAIN PATTERN

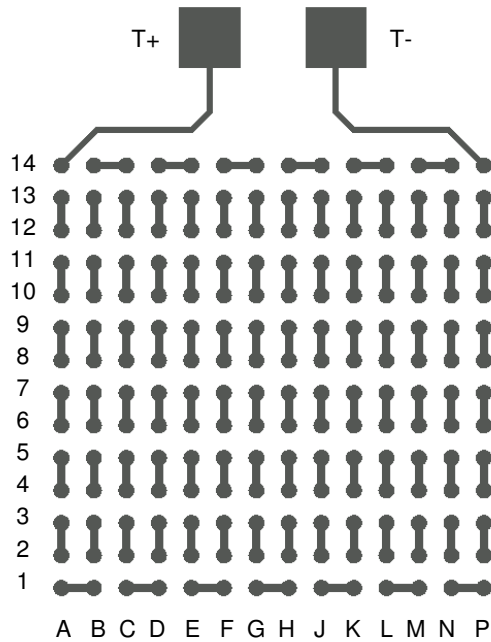
BALL VIEW



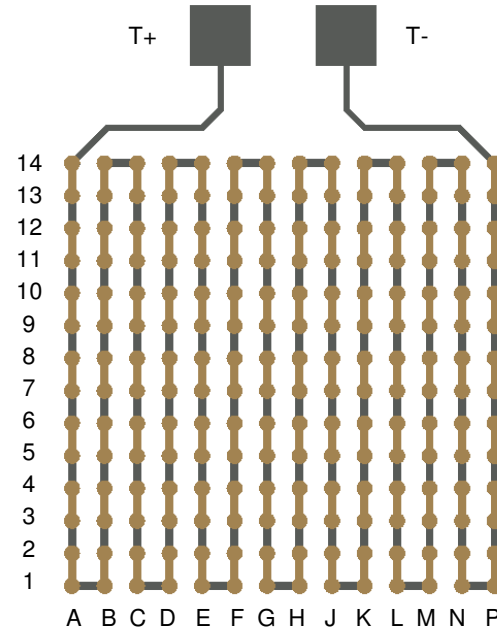
BOTTOM SIDE  
(TOP X-RAY VIEW)



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).

<b>TopLine</b> ®			
TITLE WLP196T.4C-DC148D 196-BALL P=0.4mm (TEG0408)			
SCALE 10.75:1	SIZE A	DRAWING NO. 541482	REV A
DO NOT SCALE DRAWING		SHEET 2 OF 2	