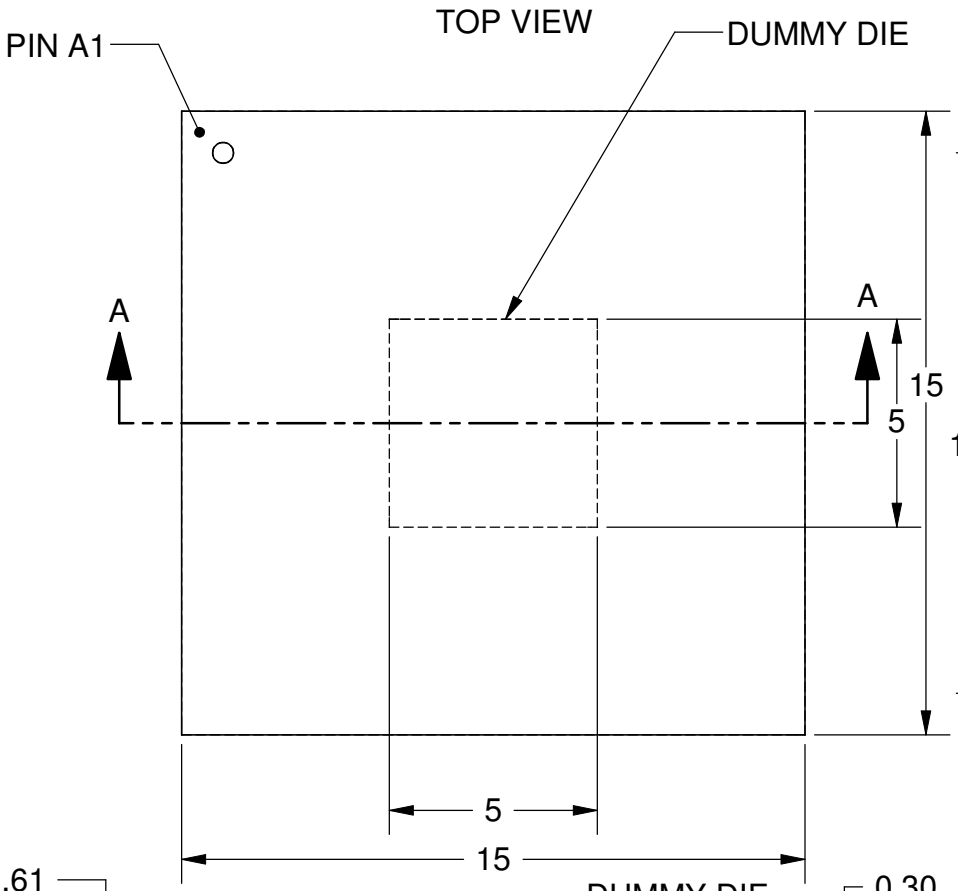
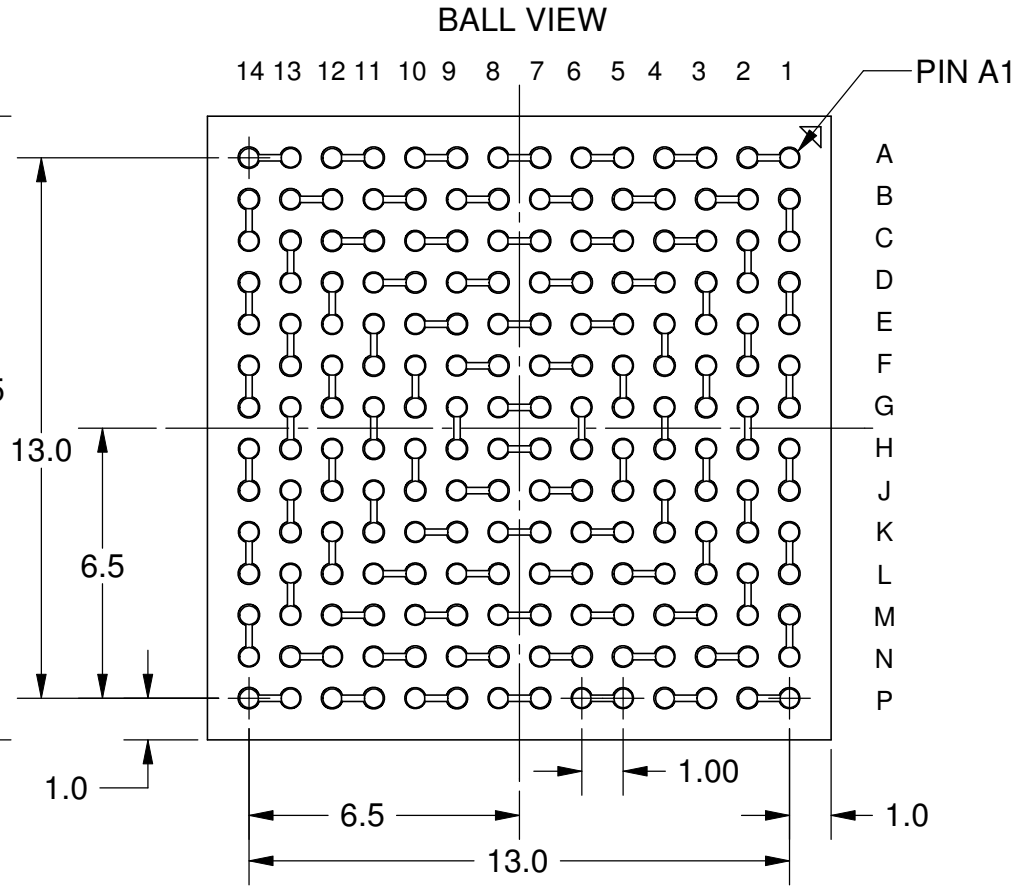
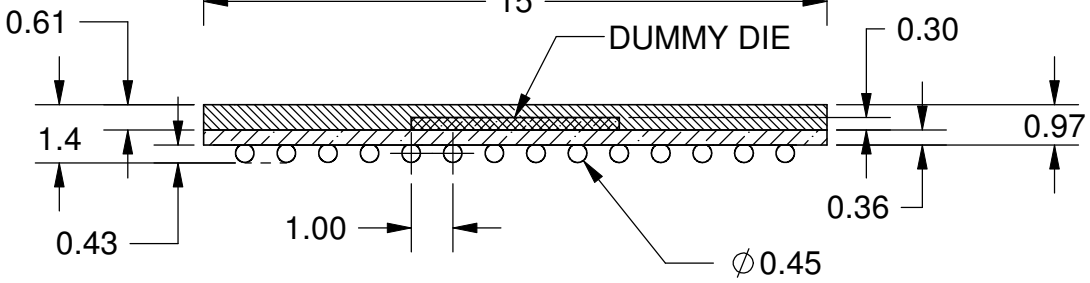






SECTION A-A

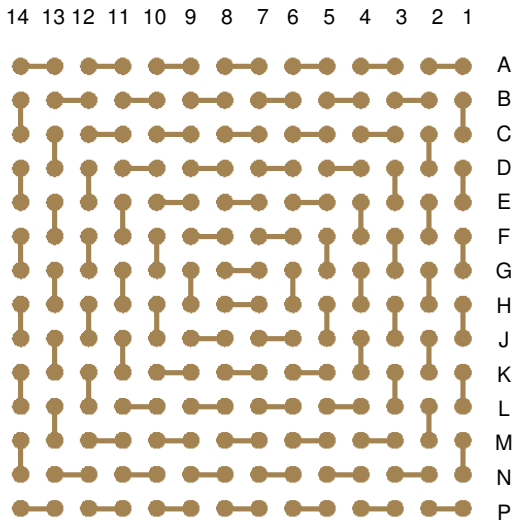
Notes: (Unless Otherwise Specified).
1) ALL DIMENSIONS ARE IN MM.
2) SOLDER BALL ALLOY: SEE PART NUMBER TABLE.
3) BALL DIAMETER (BEFORE REFLOW): 0.45mm.
4) SOLDER MASK DEFINED PAD OPENING: 0.36mm [14 MIL].
5) PAD Cu DIAMETER: 0.508mm [20 MIL].
6) SUBSTRATE MATERIAL: FR4 (ALTERNATE BT).
7) DUMMY DIE IS OPTIONAL.
8) DAISY CHAIN PATTERN (SEE PAGE 2).
9) MSL-3 RECOMMEND BAKING 24 HOURS @ 125C TO REMOVE MOISTURE PRIOR TO SOLDERING TO PC BOARD.

PART NUMBER TABLE

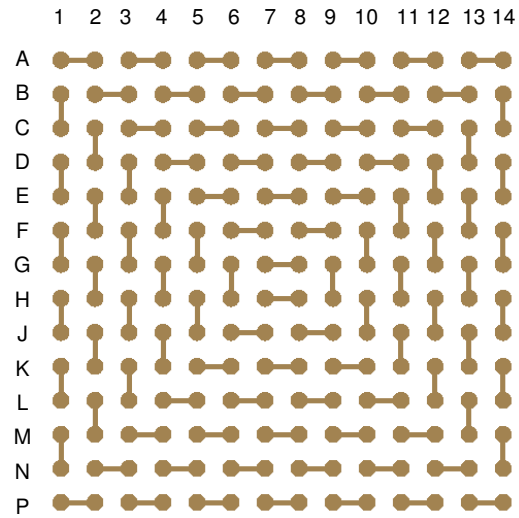
PART NUMBER	BALL ALLOY	BALL CODE	RoHS	Si DIE
BGA196T1.0C-DC149AD	Sn96.5/Ag3.0/Cu0.5	SAC305	YES	YES
BGA196T1.0C-DC149AD	Sn63/Pb37	Sn63	NO	YES

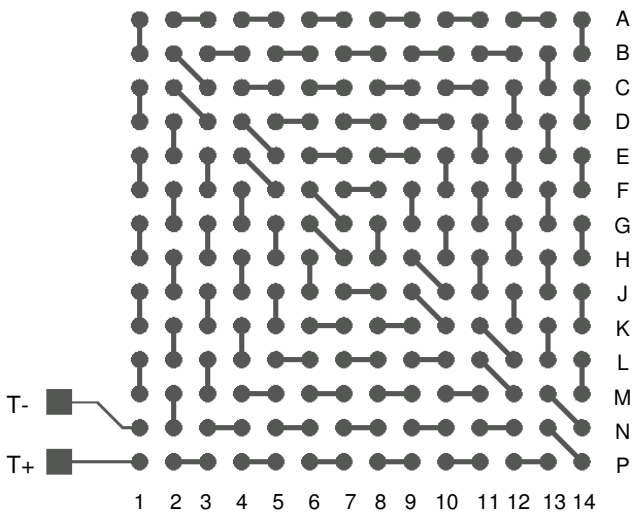
TOLERANCE UNLESS NOTED		APPROVALS	DATE	TopLine®
X.X	+/- 0.3			
X.XX	+/- 0.03	DRAWN J. Hines	8/14/2012	TITLE BGA196T1.0-DC149AD DAISY CHAIN DUMMY
X.XXX	+/- 0.003			
ANGLES	+/- 0.5°	ENG		
ALL DIMENSIONS IN ☐ INCHES ☒ MILLIMETERS		MFG		
THIRD ANGLE PROJECTION		QA		SCALE 5.5:1 / SIZE A / DRAWING NO. 511490 / REV A
		CUST		
		REVISED		DO NOT SCALE DRAWING / SHEET 1 OF 2

BALL VIEW

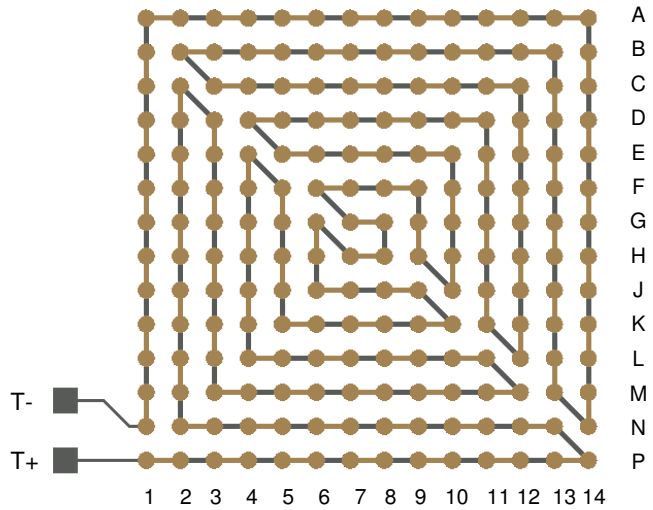


BOTTOM SIDE (TOP X-RAY VIEW)





TEST VEHICLE BOARD



AFTER MOUNTING

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 0.508mm [20 MIL].
3) PCB DAISY CHAIN TRACING LINE WIDTH 0.152mm [6 MIL].
4) SMD (SOLDER MASK DEFINED) PAD OPENING 0.36mm [14 MIL].

TopLine®

TITLE	BGA196T1.0-DC149AD DAISY CHAIN DUMMY		
SCALE 4.5:1	SIZE A	DRAWING NO. 511490	REV A
DO NOT SCALE DRAWING		SHEET 2 OF 2	