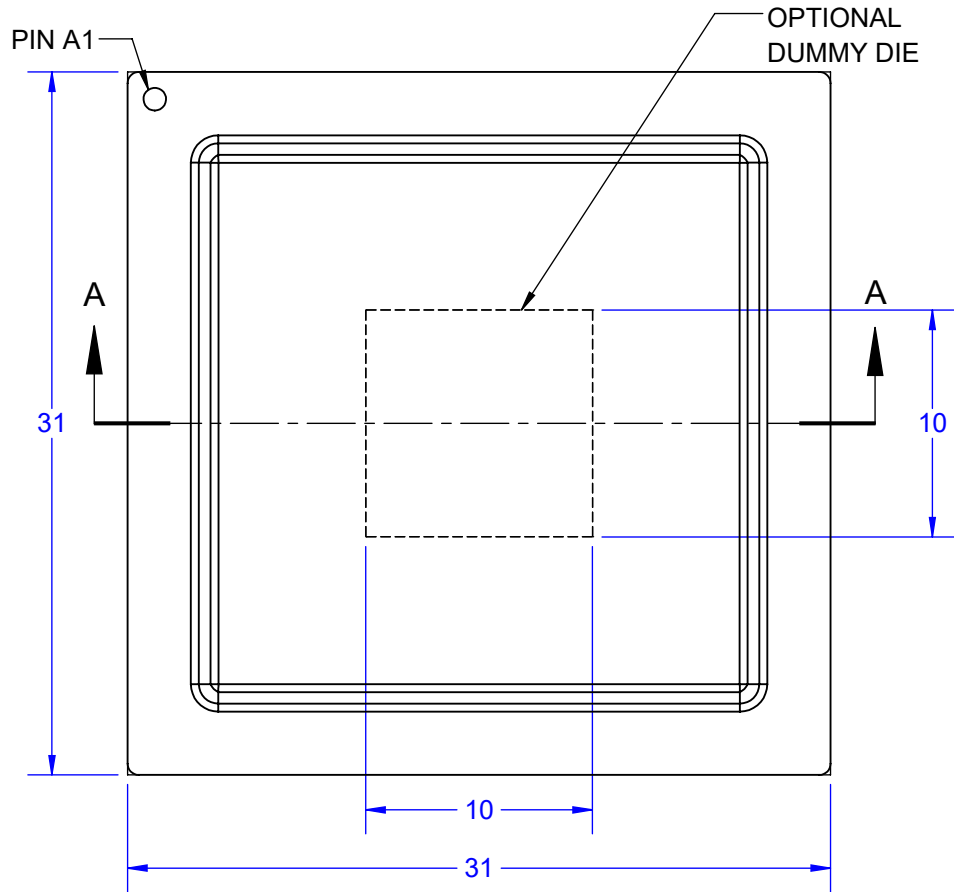
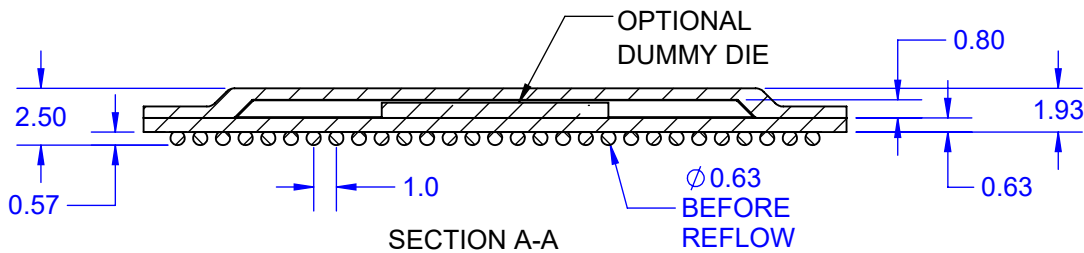
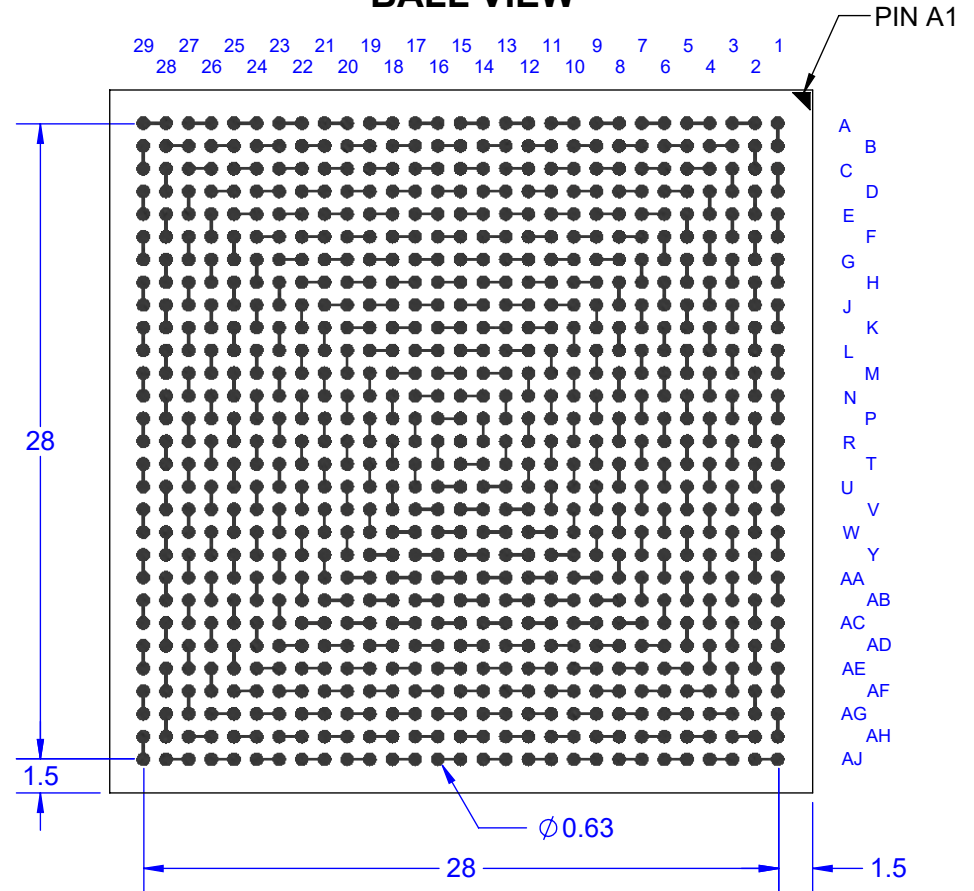


TOP VIEW



BALL VIEW



Notes: (Unless Otherwise Specified).

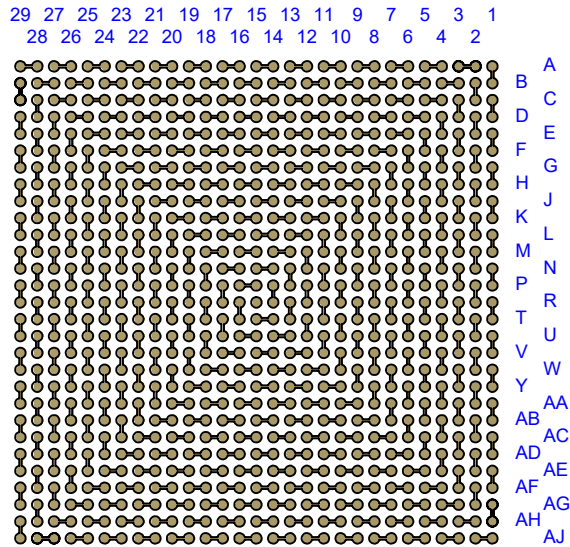
- 1) ALL DIMENSIONS ARE IN MM.
- 2) SOLDER BALL ALLOY: SEE PART NUMBER TABLE.
- 3) BALL DIAMETER (BEFORE REFLOW): 0.63mm (25 MIL).
- 4) SOLDER MASK DEFINED PAD OPENING: 0.50mm (19.7 MIL).
- 5) PAD Cu DIAMETER: 0.63mm (25 MIL).
- 6) SUBSTRATE MATERIAL: BT (ALTERNATIVE FR4).
- 7) DUMMY DIE IS OPTIONAL.
- 8) DAISY CHAIN PATTERN (SEE PAGE 2).
- 9) MSL-3 RECOMMENDED BAKING 24 HOURS @ 125°C TO REMOVE MOISTURE PRIOR SOLDERING TO PC BOARD.

PART NUMBER TABLE

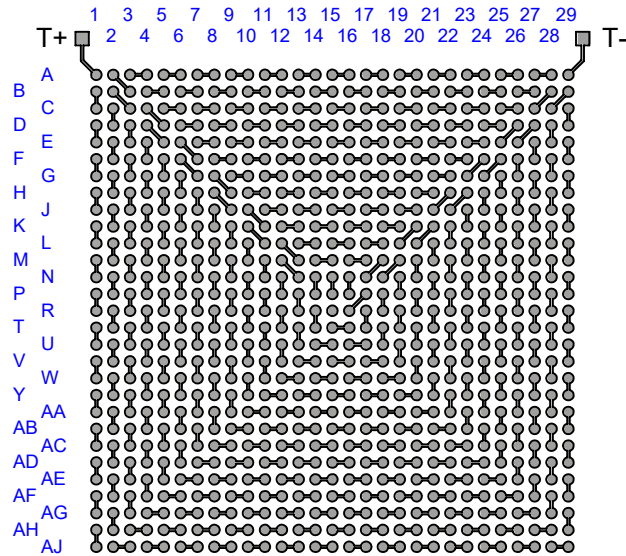
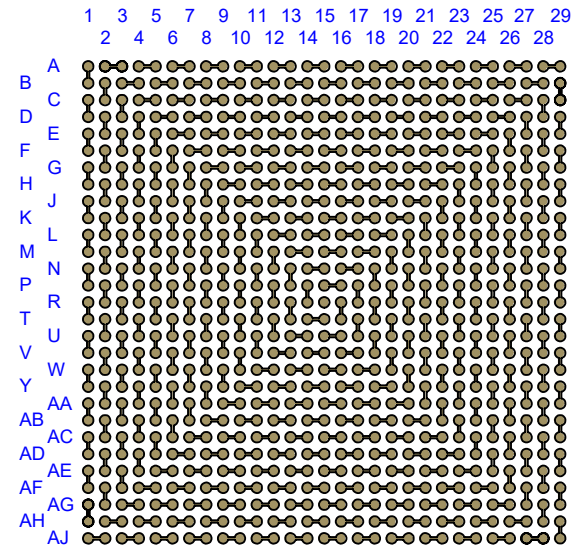
PART NUMBER	BALL ALLOY	Pb-FREE	RoHS	Si DIE
SBGA841T1.0C-DC299D	Sn96.5/Ag3.0/Cu0.5	YES	YES	YES
SBGA841T1.0-DC299D	Sn63/Pb37	NO	NO	YES

APPROVALS	DATE	TopLine®			
DRAWN T.Au	4/25/2021	TITLE SBGA841T1.0C-DC299D DAISY CHAIN DUMMY			
ENG M. Hart	4/25/2021				
MFG		SCALE 3:1	SIZE A	DRAWING NO. 512995	REV A
QA		DO NOT SCALE DRAWING			SHEET 1 OF 9
CUST					
REVISED					

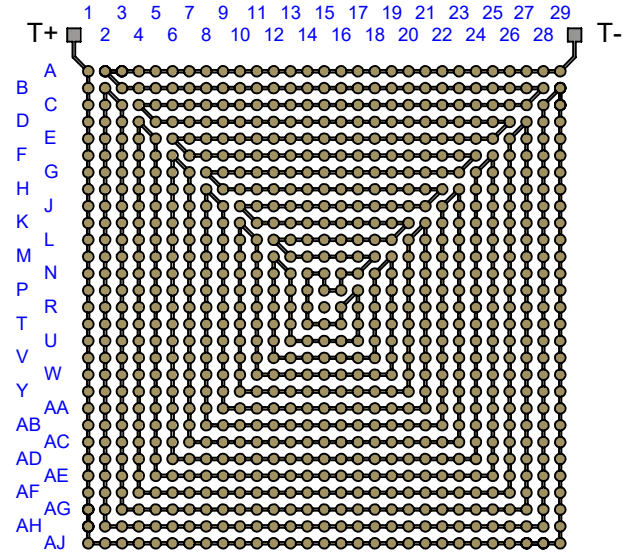
BALL VIEW



BOTTOM SIDE (TOP X-RAY VIEW)



TEST VEHICLE BOARD



AFTER MOUNTING

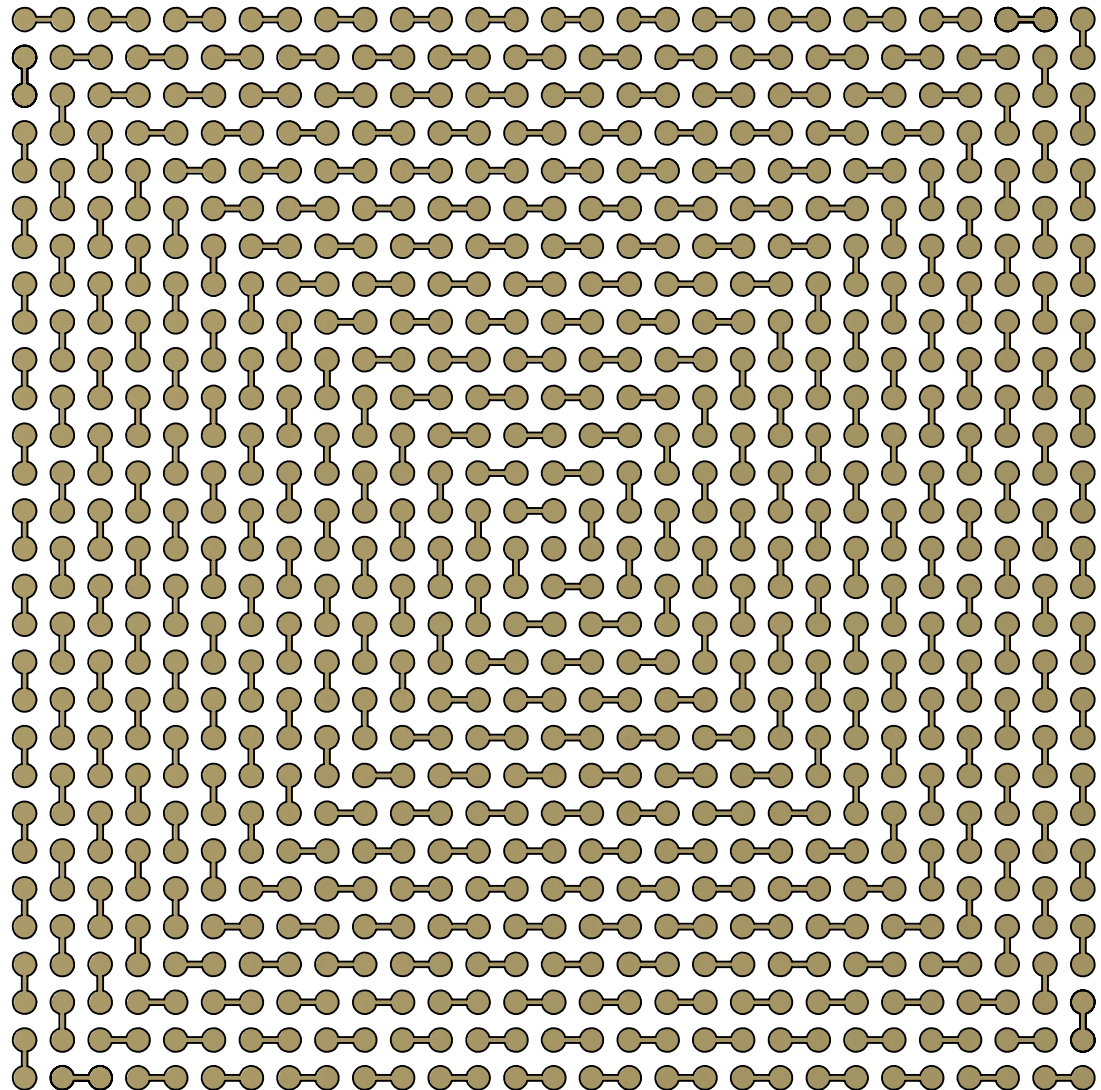
Notes:

- 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 0.63mm [25 MIL].
- 3) PCB DAISY CHAIN TRACING LINE WIDTH 0.20mm [8 MIL].
- 4) SMD (SOLDER MASK DEFINED) PAD OPENING: 0.5mm [19.7 MIL].

TopLine®			
TITLE		SBGA841T1.0C-DC299D DAISY CHAIN DUMMY	
SCALE	SIZE	DRAWING NO.	REV
3:1	A	512995	A
DO NOT SCALE DRAWING			SHEET 2 OF 9

BALL VIEW

29 27 25 23 21 19 17 15 13 11 9 7 5 3 1
 28 26 24 22 20 18 16 14 12 10 8 6 4 2



A
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TopLine®			
TITLE SBGA841T1.0C-DC299D DAISY CHAIN DUMMY			
SCALE 3:1	SIZE A	DRAWING NO. 512995	REV A
DO NOT SCALE DRAWING			SHEET 3 OF 9

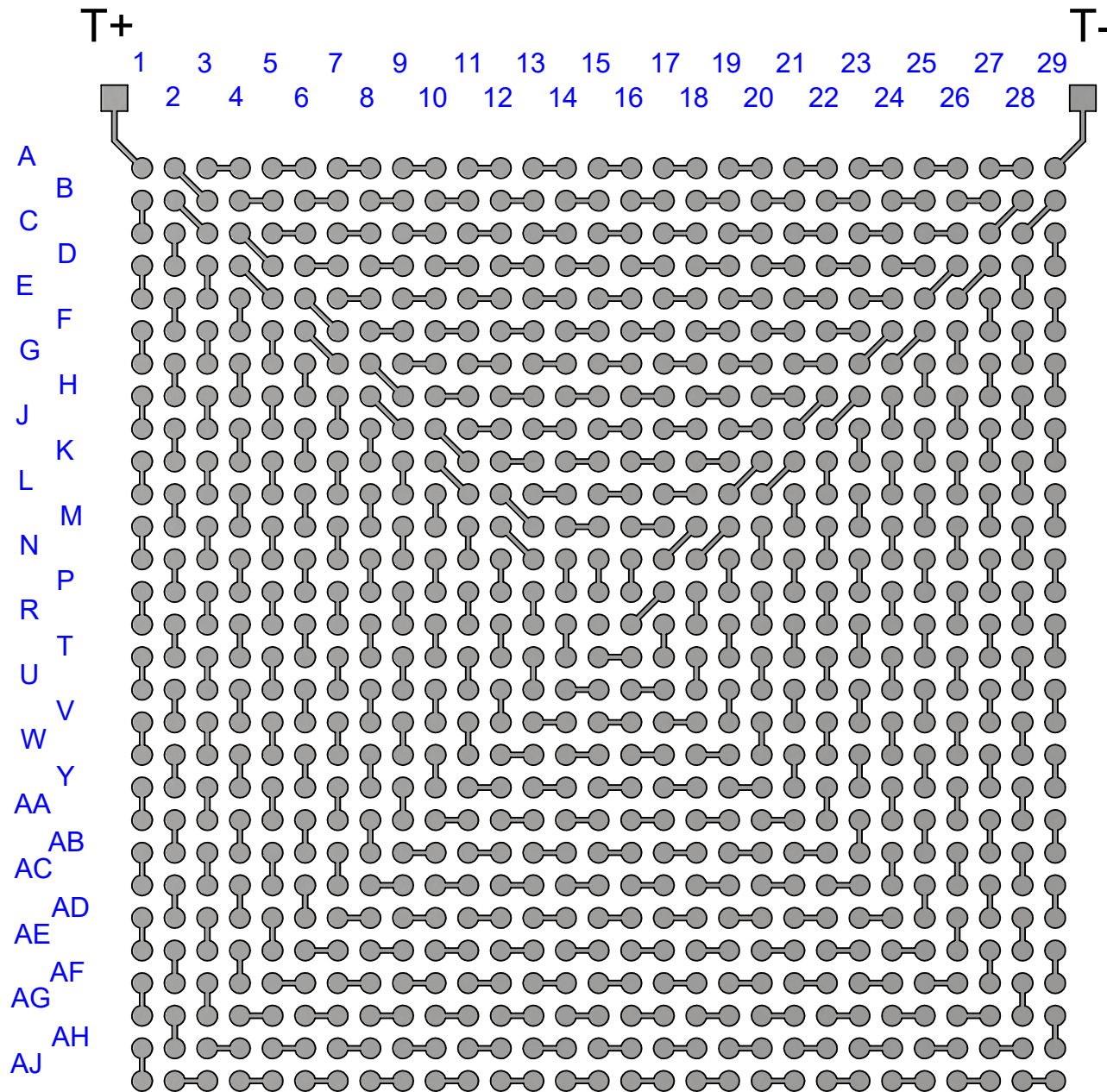
BOTTOM SIDE (TOP X-RAY VIEW)

1 3 5 7 9 11 13 15 17 19 21 23 25 27 29
 2 4 6 8 10 12 14 16 18 20 22 24 26 28



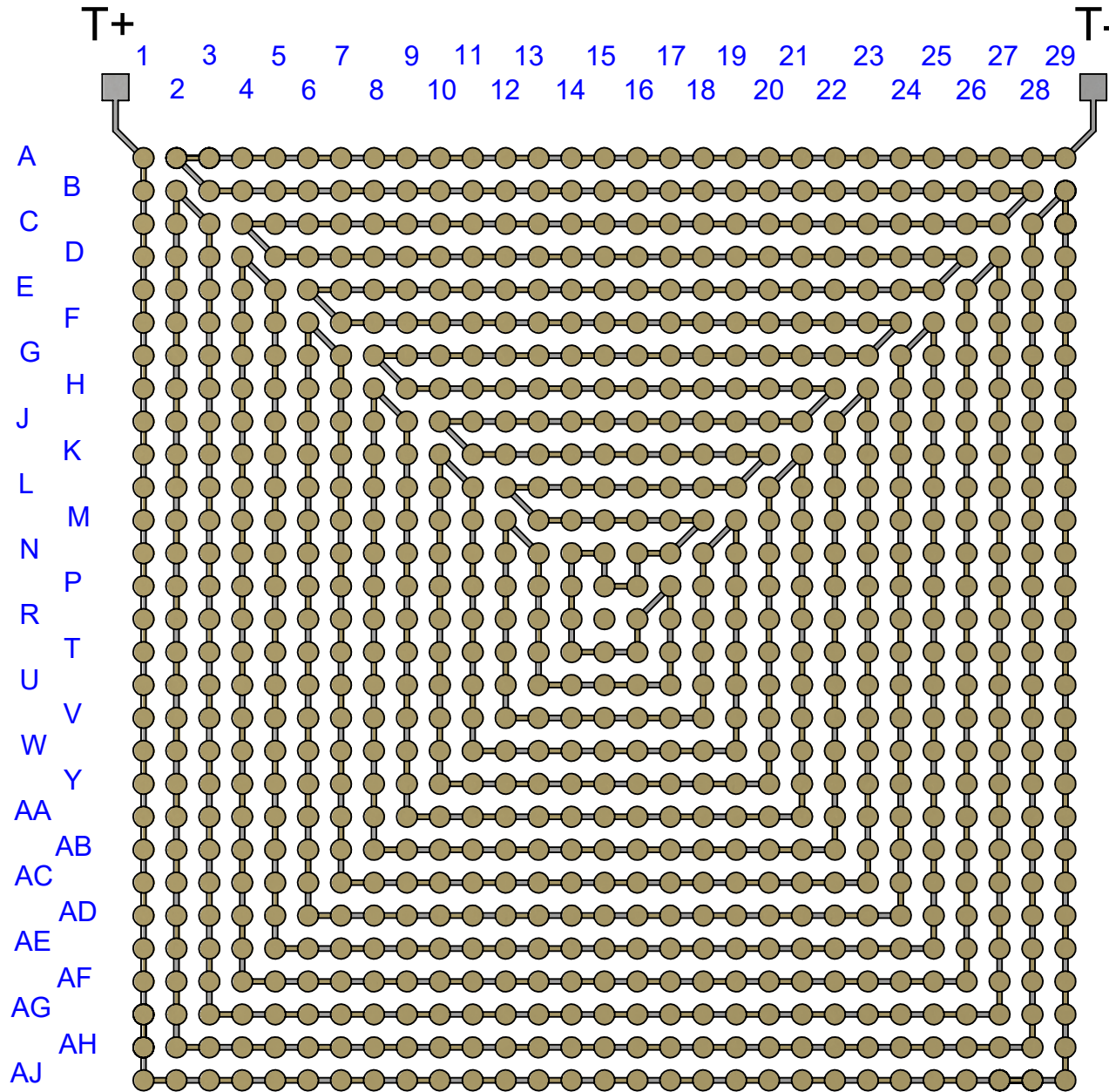
TopLine®			
TITLE SBGA841T1.0C-DC299D DAISY CHAIN DUMMY			
SCALE 3:1	SIZE A	DRAWING NO. 512995	REV A
DO NOT SCALE DRAWING			SHEET 4 OF 9

TEST VEHICLE BOARD



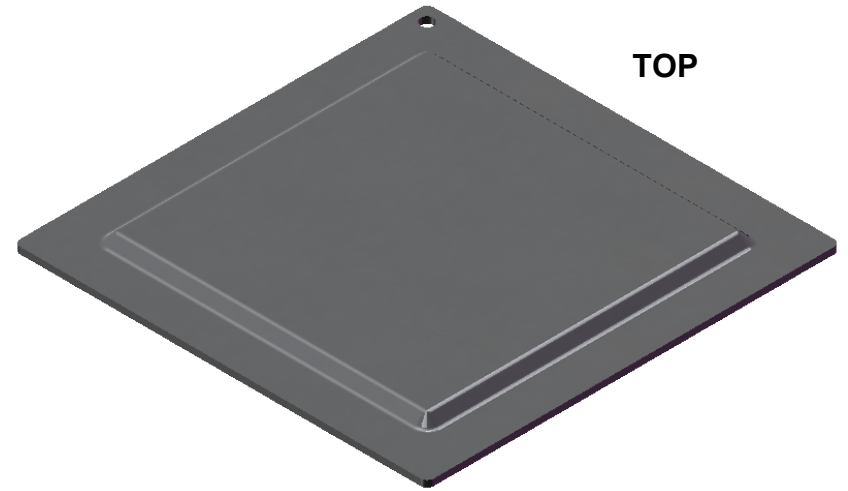
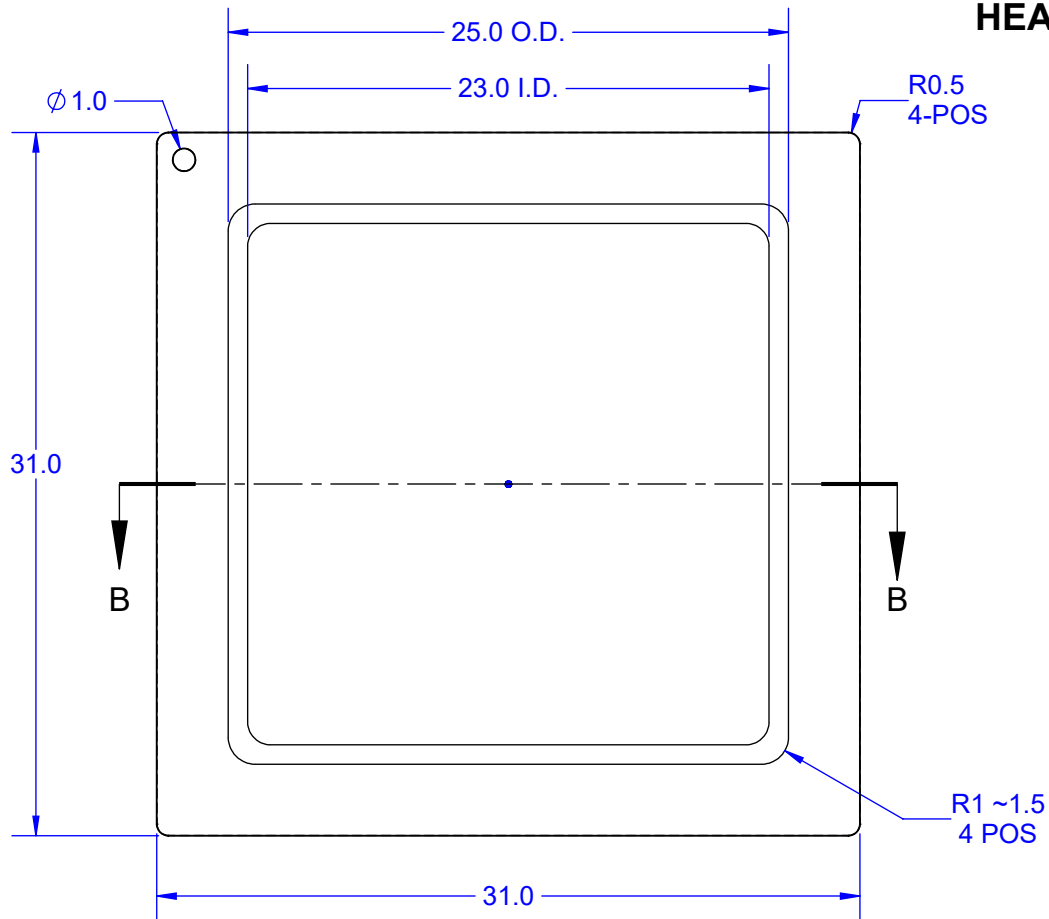
TopLine®			
TITLE SBGA841T1.0C-DC299D DAISY CHAIN DUMMY			
SCALE 3:1	SIZE A	DRAWING NO. 512995	REV A
DO NOT SCALE DRAWING			SHEET 5 OF 9

AFTER MOUNTING

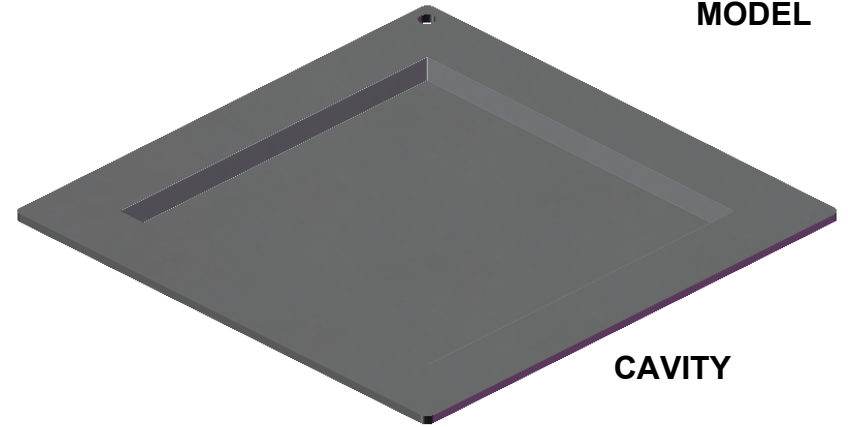


TopLine®			
TITLE SBGA841T1.0C-DC299D DAISY CHAIN DUMMY			
SCALE 3:1	SIZE A	DRAWING NO. 512995	REV A
DO NOT SCALE DRAWING			SHEET 6 OF 9

HEAT SPREADER

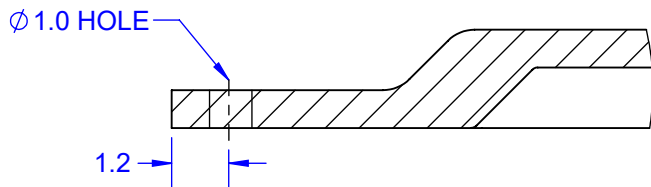


TOP

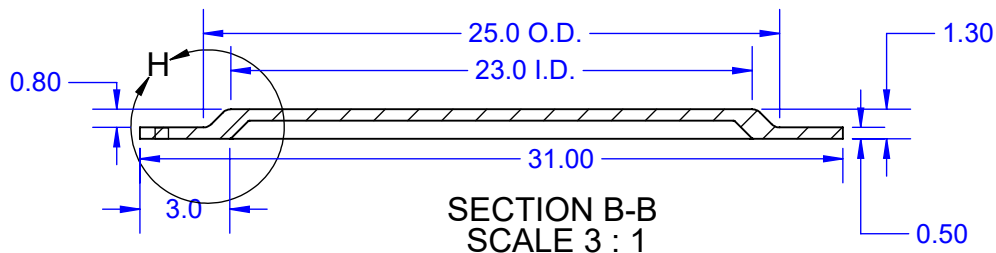


MODEL

CAVITY



DETAIL H
SCALE 10 : 1



SECTION B-B
SCALE 3 : 1

NOTES:

1. DIMENSION in MM
2. MATERIAL: COPPER ALLOY C1020 OR C1100
HALF HARD, OXYGEN FREE
3. PLATING: NICKEL 5um MIN (SEMI FINISH)

TopLine®

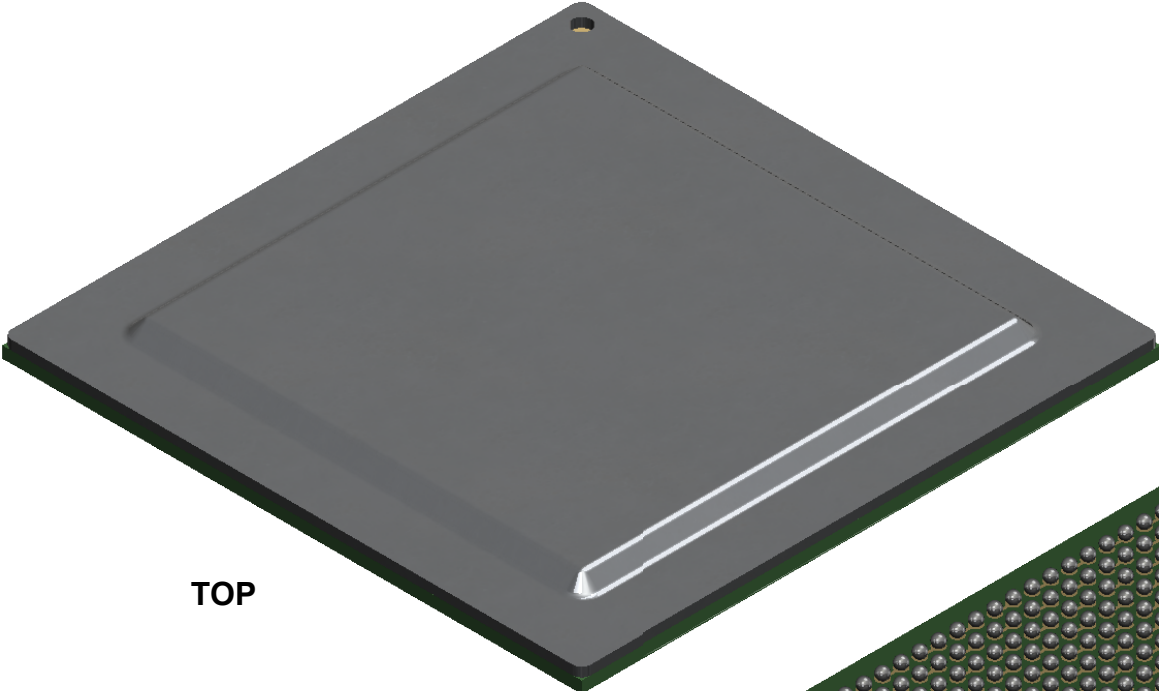
TITLE SBGA841T1.0C-DC299D
DAISY CHAIN DUMMY

SCALE	SIZE	DRAWING NO.	REV
3:1	A	512995	A

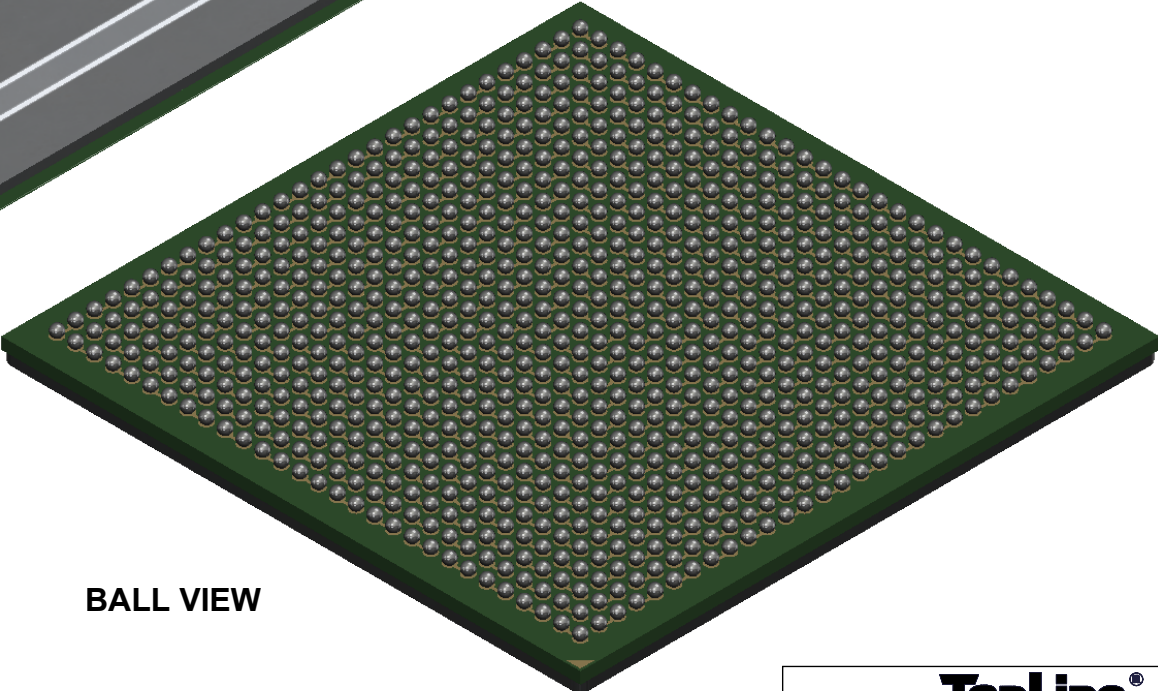
DO NOT SCALE DRAWING

SHEET 7 OF 9

MODEL



TOP

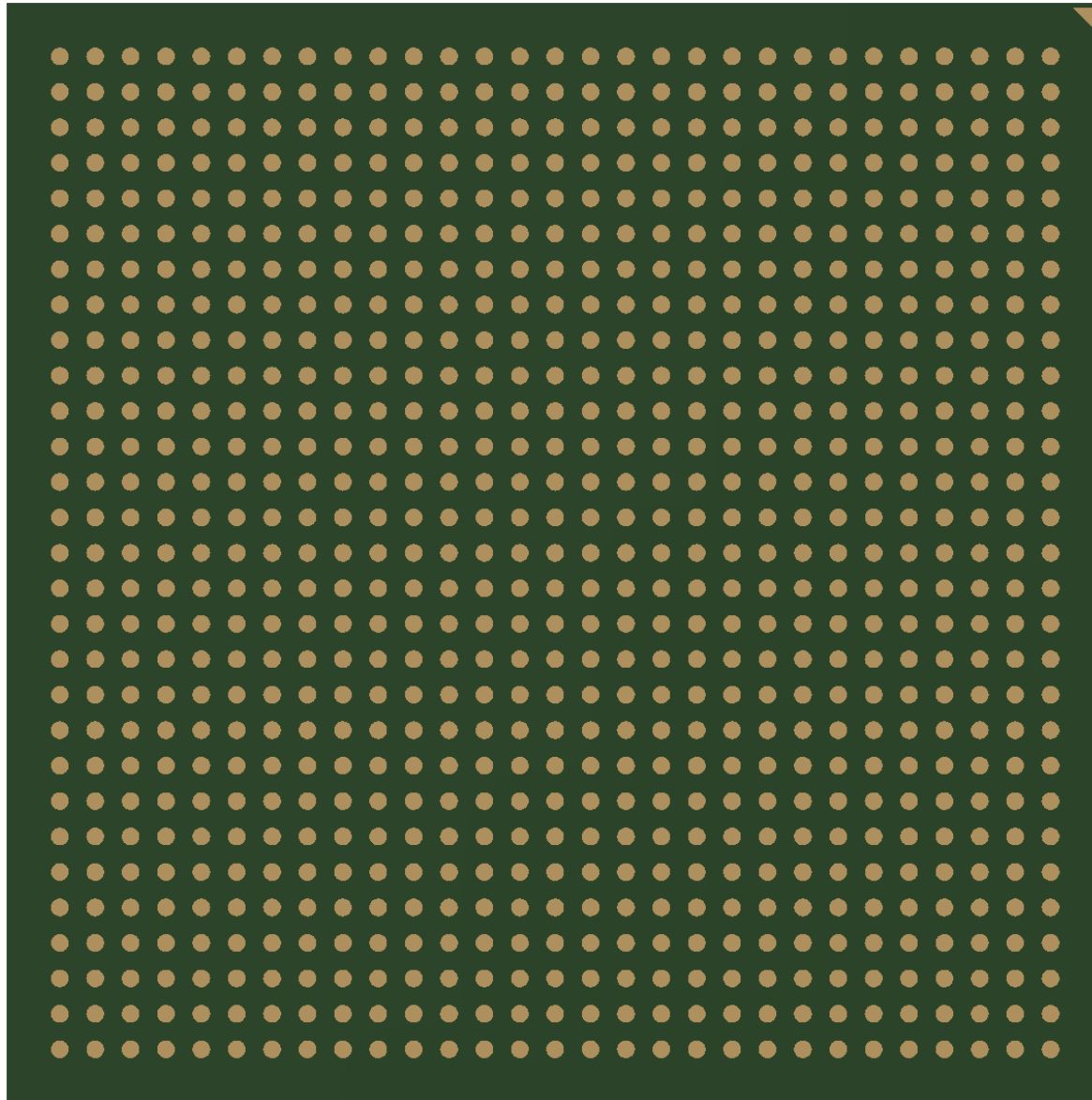


BALL VIEW

TopLine®			
TITLE		SBGA841T1.0C-DC299D DAISY CHAIN DUMMY	
SCALE	SIZE	DRAWING NO.	REV
3:1	A	512995	A
DO NOT SCALE DRAWING			SHEET 8 OF 9

BOTTOM SOLDER MASK (RIGHT READING)

29 27 25 23 21 19 17 15 13 11 9 7 5 3 1
28 26 24 22 20 18 16 14 12 10 8 6 4 2



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AF
AG
AH
AJ

TopLine[®]			
TITLE SBGA841T1.0C-DC299D DAISY CHAIN DUMMY			
SCALE 3:1	SIZE A	DRAWING NO. 512995	REV A
DO NOT SCALE DRAWING			SHEET 9 OF 9