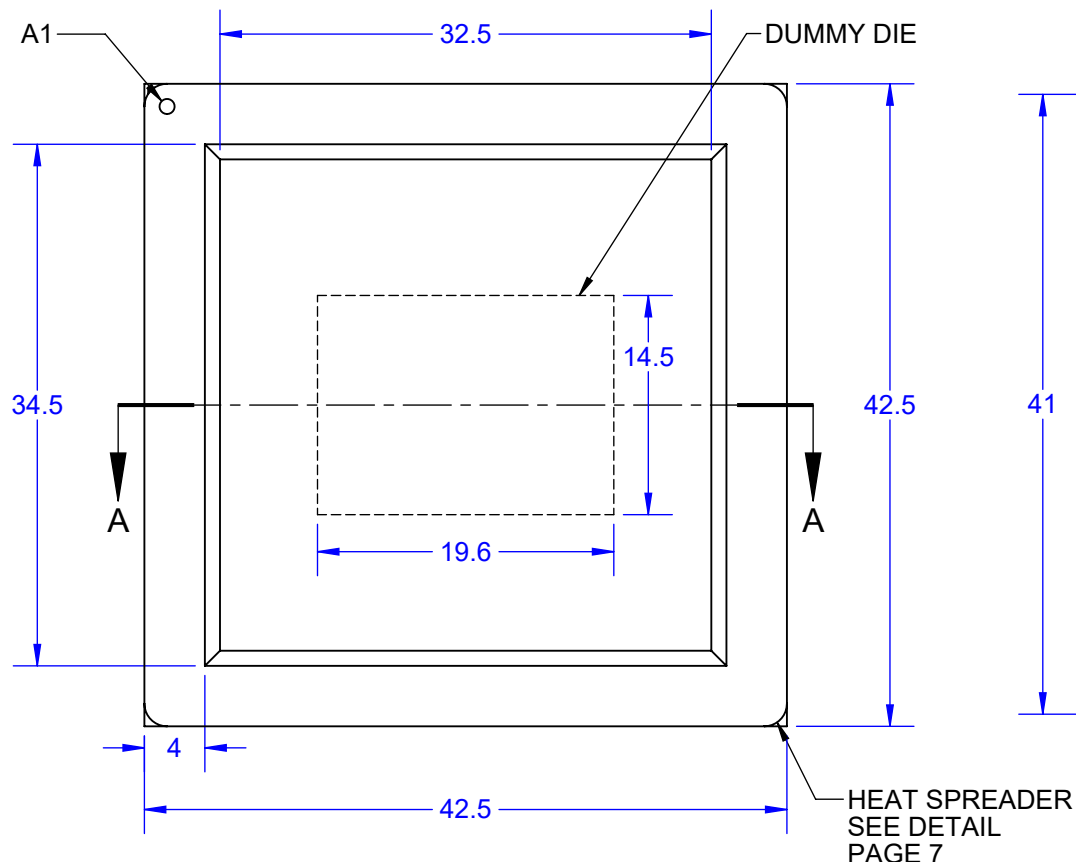
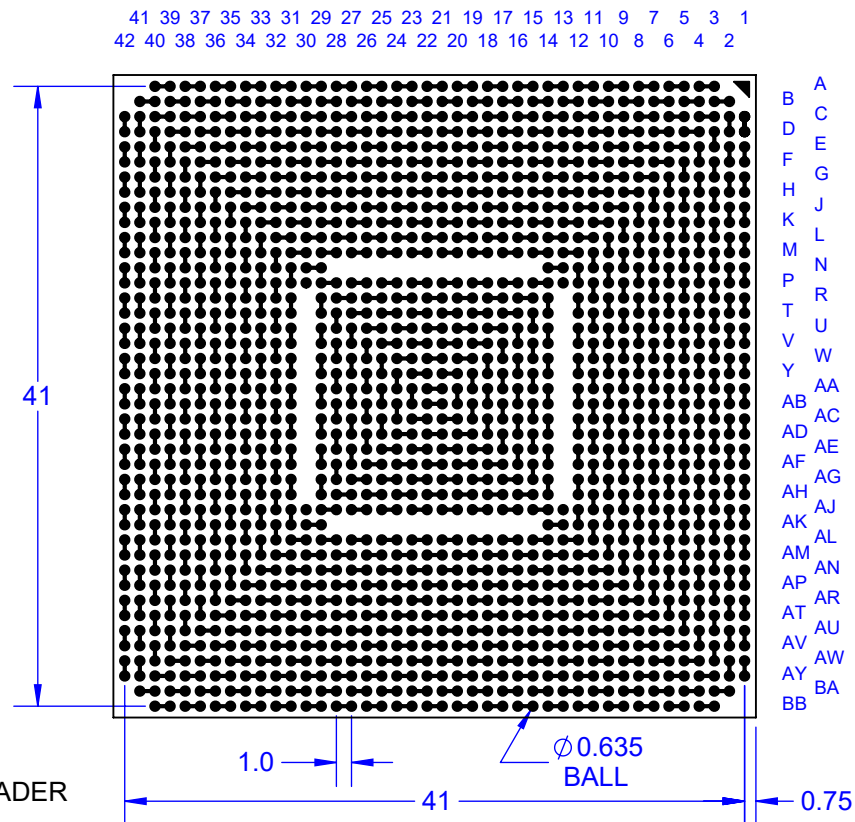


TOP VIEW

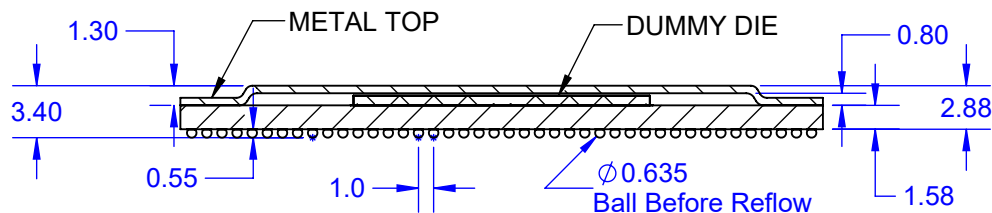


BALL VIEW



Notes: (Unless Otherwise Specified).

- 1) ALL DIMENSIONS ARE IN MM.
- 2) SOLDER BALL ALLOY: SEE PART NUMBER TABLE.
- 3) BALL DIAMETER (BEFORE REFLOW) 0.635mm [25mil].
- 4) SOLDER MASK DEFINED PAD OPENING: 0.508mm [20mil].
- 5) PAD Cu DIAMETER: 0.635 [25 mil].
- 6) SUBSTRATE MATERIAL: FR4.
- 7) DUMMY DIE: Si (SILICON).
- 8) DAISY CHAIN PATTERN (SEE PAGE 2).
- 9) MSL-3 RECOMMENDED BAKING 24 HOURS @ 125°C TO REMOVE MOISTURE PRIOR TO SOLDERING TO PC BOARD.



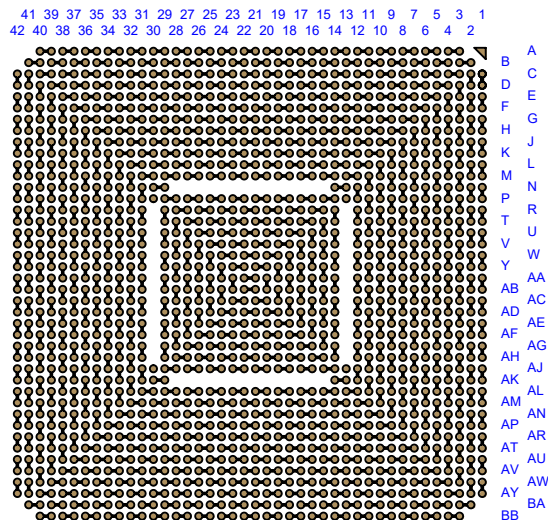
SECTION A-A

PART NUMBER TABLE

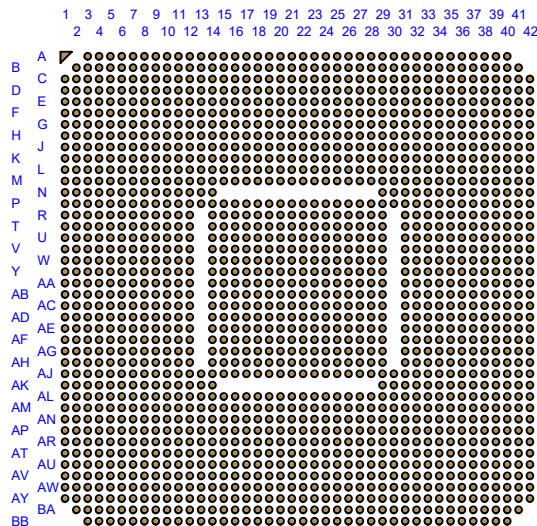
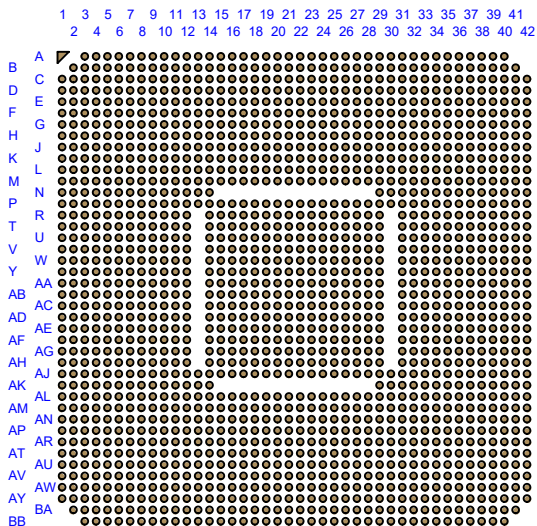
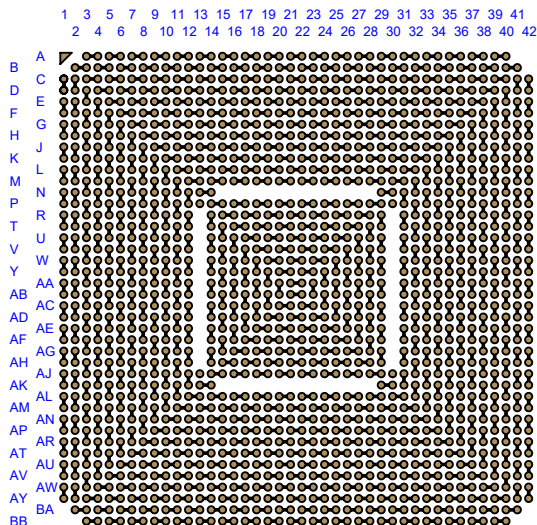
PART NUMBER	BALL METAL	BALL ALLOY	RoHS	Si DIE
SBGA1696T1.0C-DC424D	Sn96.5/Ag3.0/Cu0.5	SAC305	YES	YES
SBGA1696T1.0-DC424D	Sn63/Pb37	Sn63	NO	YES

APPROVALS	DATE	TopLine®			
DRAWN T. Au	04/20/17				
ENG M. Hart	04/20/17	TITLE SBGA1696T1.0C-DC424D DAISY CHAIN DUMMY			
MFG		SCALE	SIZE	DRAWING NO.	REV
QA		2:1	A	514245	A
CUST		DO NOT SCALE DRAWING			SHEET 1 OF 10
REVISED					

BALL VIEW



BOTTOM SIDE (TOP X-RAY VIEW)



TEST VEHICLE BOARD UNDER DEVELOPMENT

TEST VEHICLE BOARD UNDER DEVELOPMENT

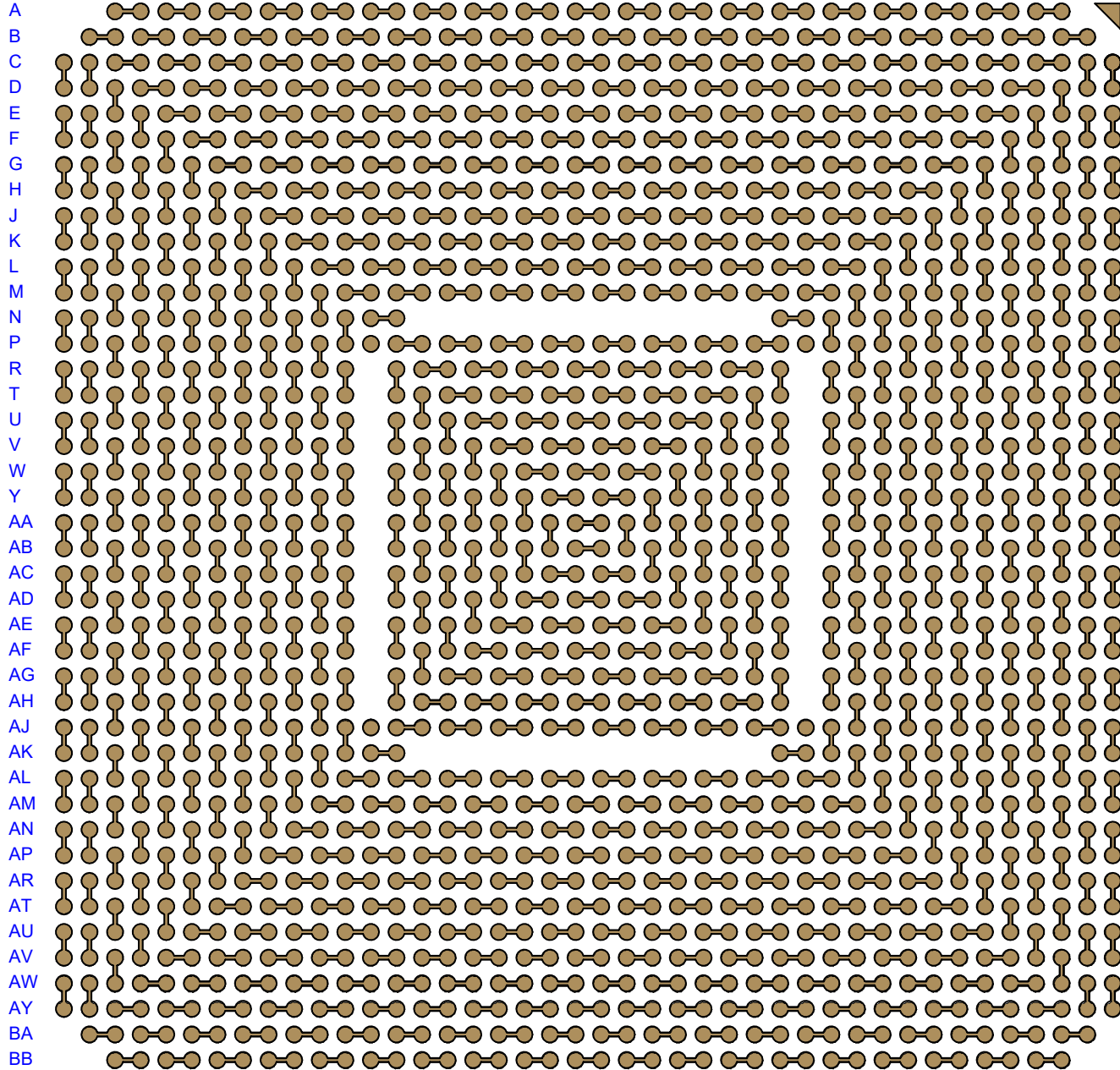
Notes: (Unless Otherwise Specified).

- 1) PCB BOARD DIMENSIONS ARE PRESENTED ONLY AS A GUIDELINE DESIGNERS SHOULD USE THEIR OWN KNOWLEDGE WHEN DESIGNING THE PCB.
- 2) PCB Cu BALL PAD DIAMETER: 0.635 [25mil].
- 3) PCB DAISY CHAIN TRACING LINE WIDTH: 0.152 [6mil].
- 4) SMD (SOLDERMASK DEFINED) PAD OPENING: 0.508mm [20mil].

TopLine®			
TITLE		SBGA1696T1.0C-DC424D DAISY CHAIN DUMMY	
SCALE	SIZE	DRAWING NO.	REV
3:2	A	514245	A
DO NOT SCALE DRAWING			SHEET 2 OF 10

BALL VIEW

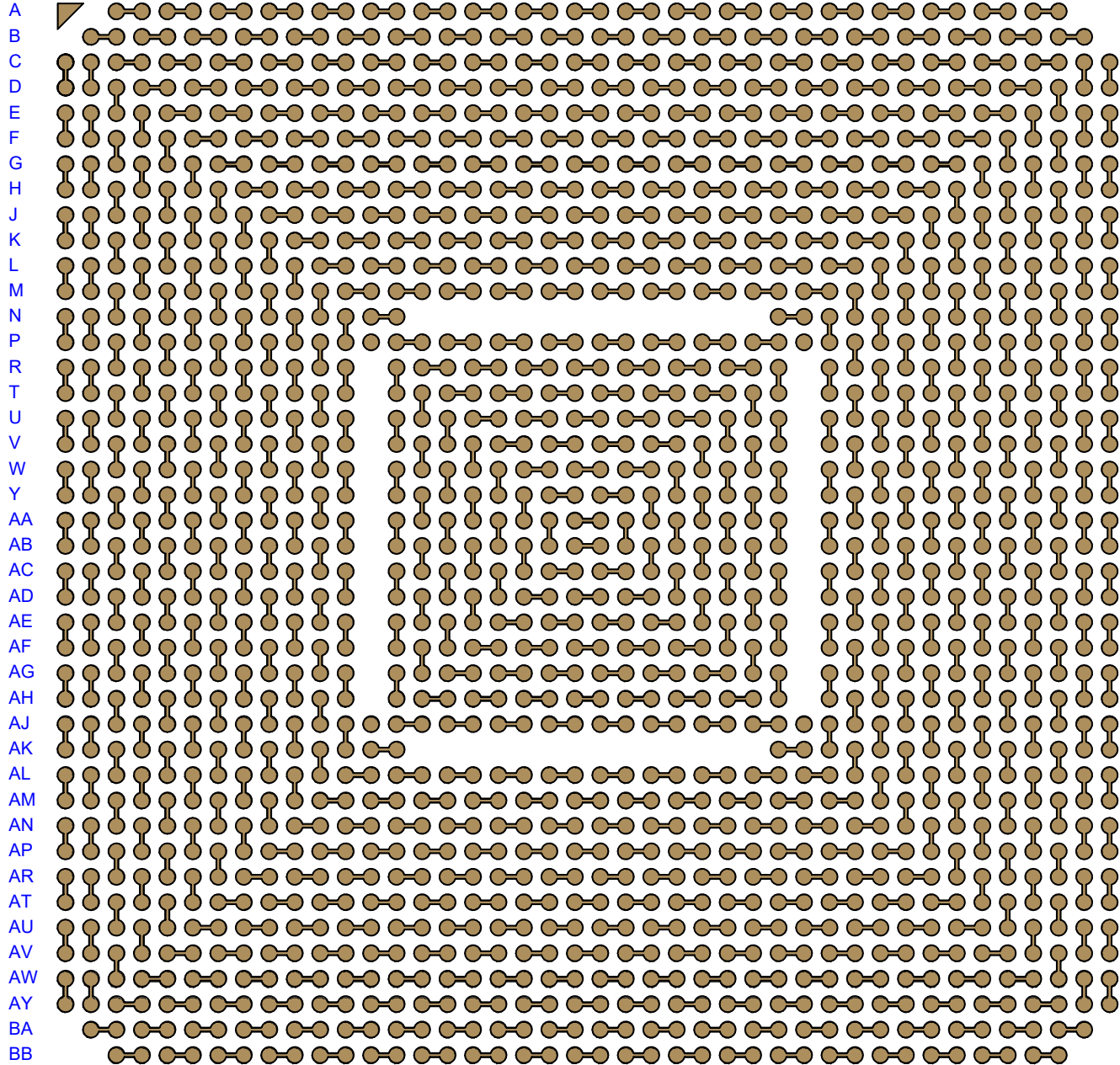
42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1



TopLine®			
TITLE SBGA1696T1.0C-DC424D DAISY CHAIN DUMMY			
SCALE	SIZE	DRAWING NO.	REV
4:1	A	514245	A
DO NOT SCALE DRAWING			SHEET 3 OF 10

BOTTOM SIDE (TOP X-RAY VIEW)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42



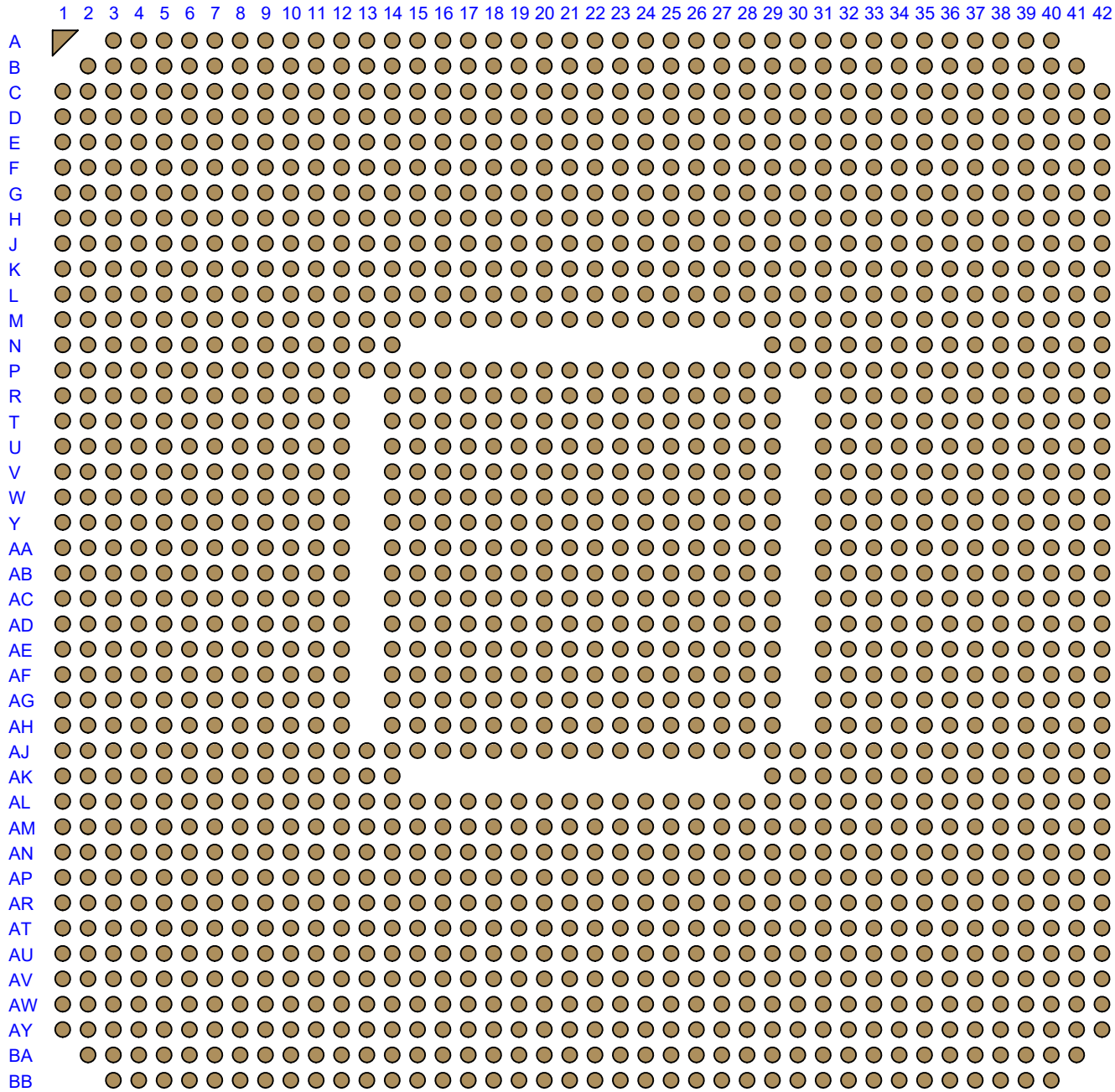
TopLine[®]

TITLE SBGA1696T1.0C-DC424D
DAISY CHAIN DUMMY

SCALE 4:1	SIZE A	DRAWING NO. 514245	REV A
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DO NOT SCALE DRAWING SHEET 4 OF 10

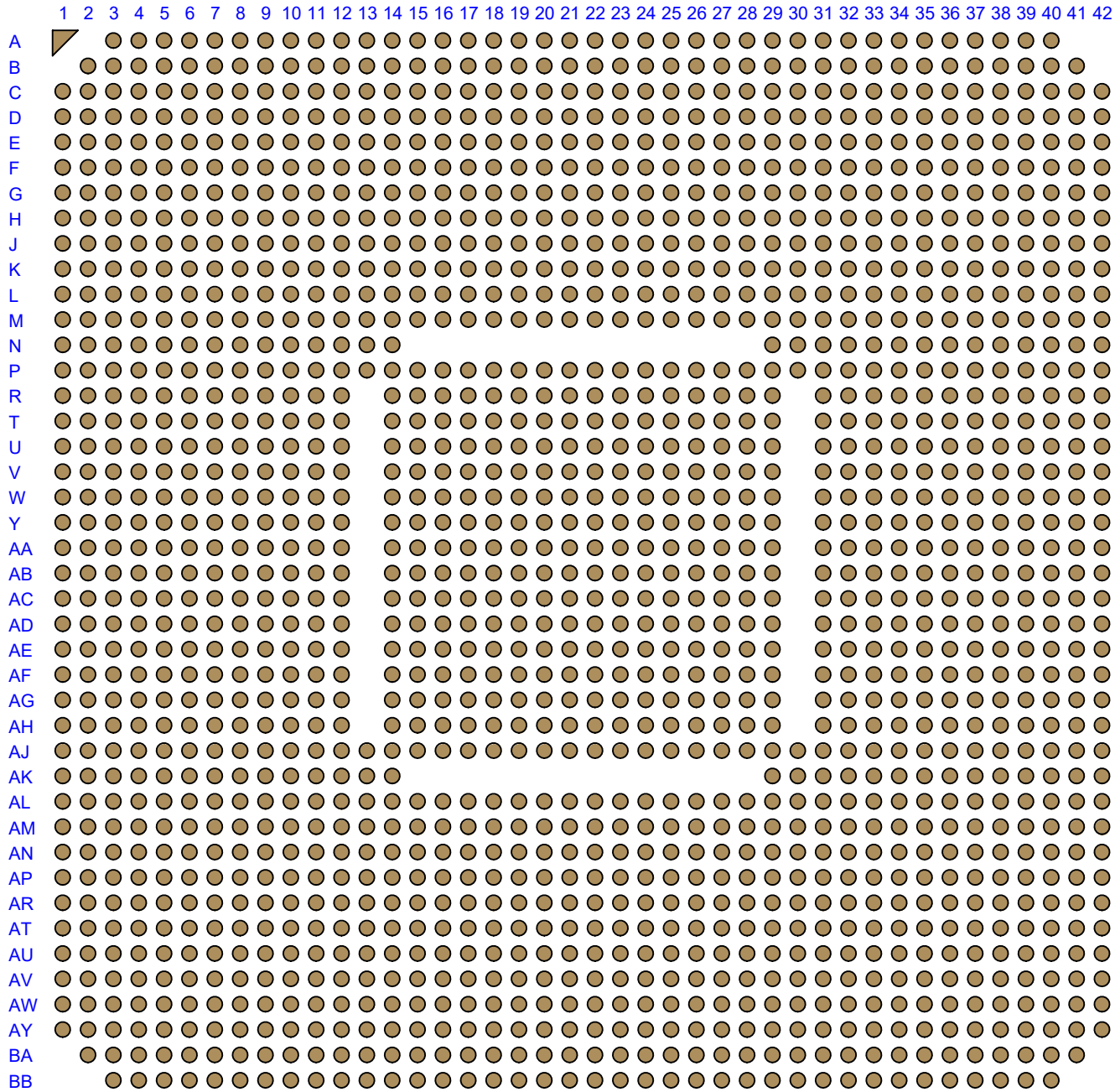
TEST VEHICLE BOARD



**UNDER
DEVELOPMENT**

TopLine®			
TITLE		SGBA1696T1.0C-DC424D DAISY CHAIN DUMMY	
SCALE	SIZE	DRAWING NO.	REV
4:1	A	514245	A
DO NOT SCALE DRAWING			SHEET 5 OF 10

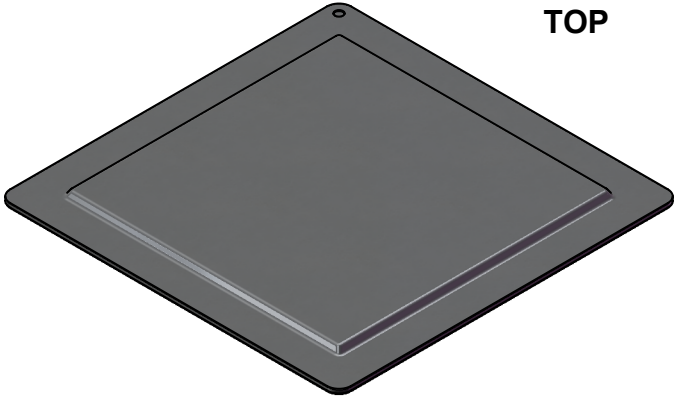
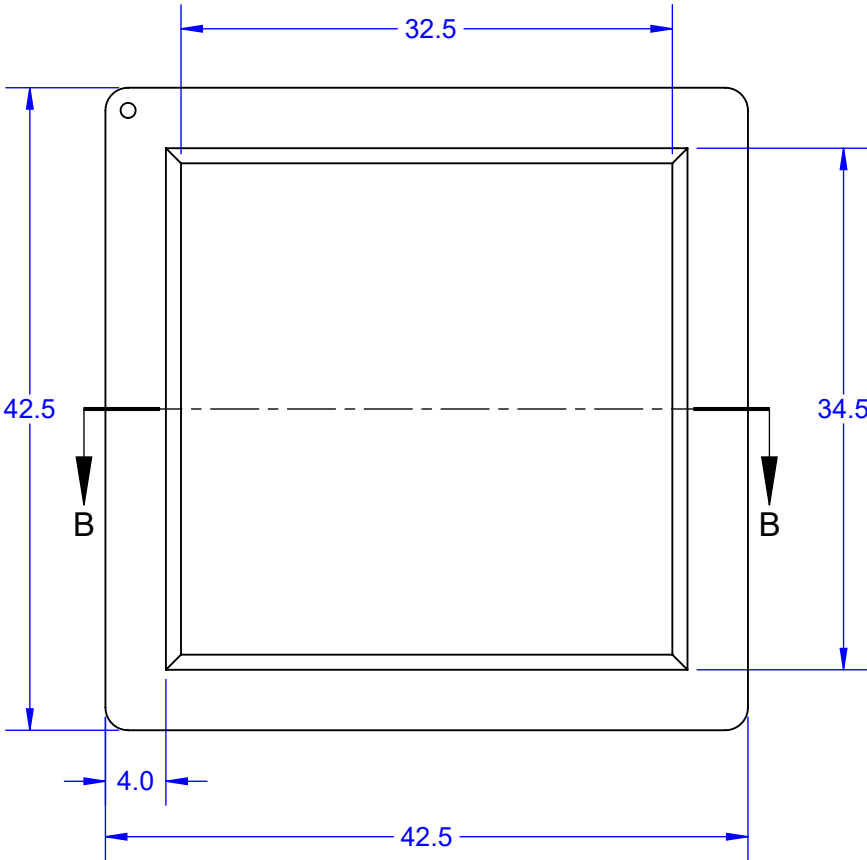
AFTER MOUNTING TO TEST BOARD



**UNDER
DEVELOPMENT**

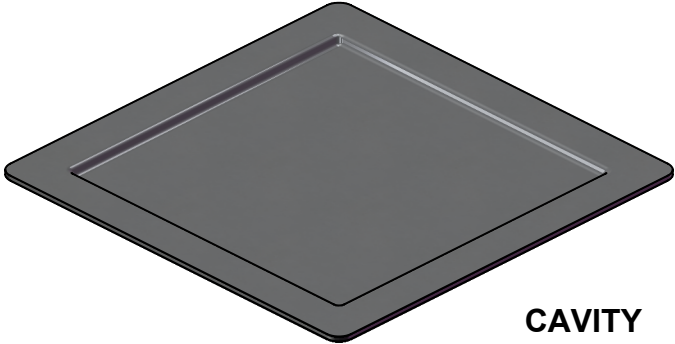
TopLine®			
TITLE		SBGA1696T1.0C-DC424D DAISY CHAIN DUMMY	
SCALE	SIZE	DRAWING NO.	REV
4:1	A	514245	A
DO NOT SCALE DRAWING			SHEET 6 OF 10

HEAT SPREADER

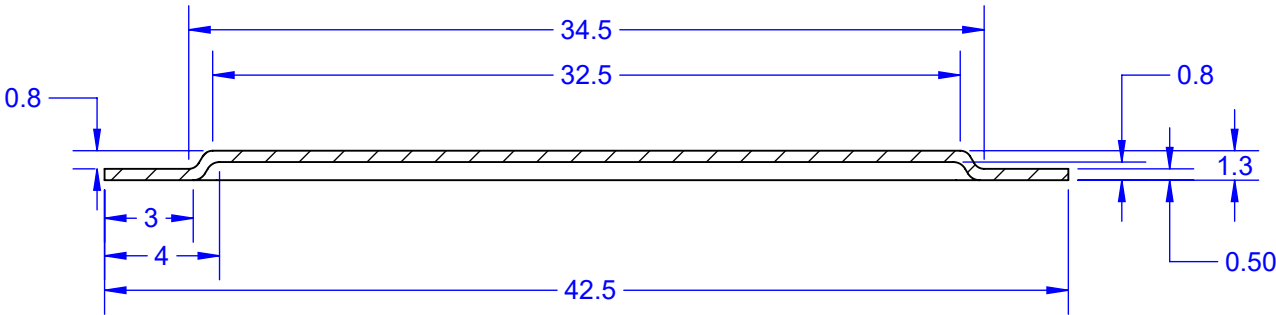


TOP

MODEL



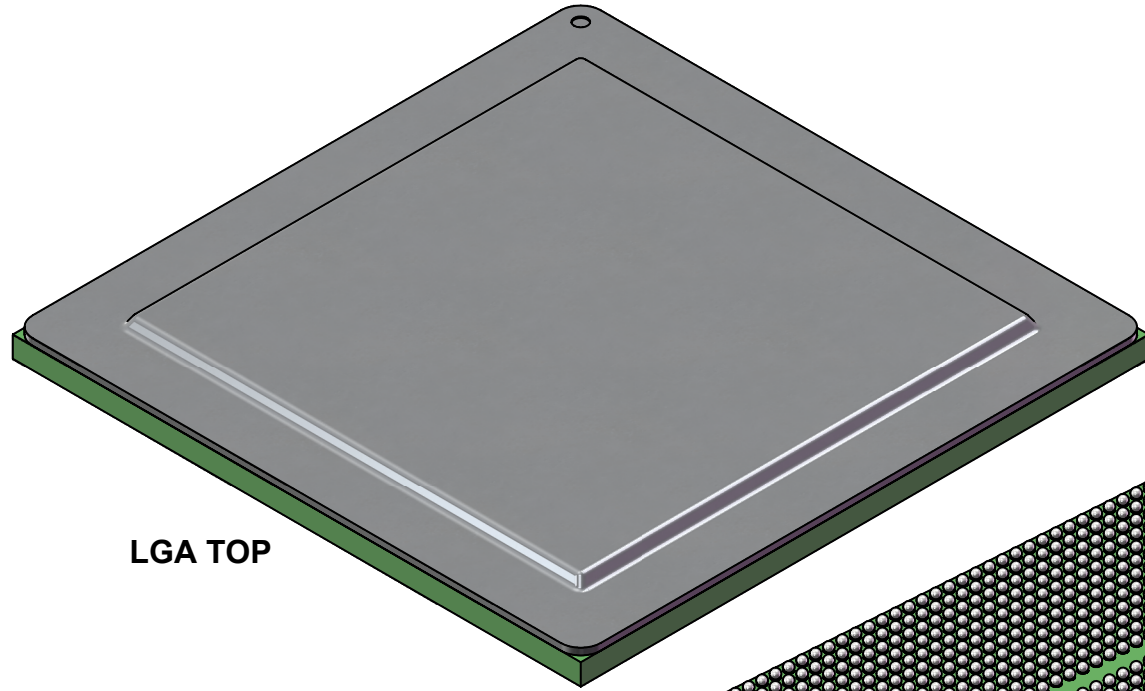
CAVITY



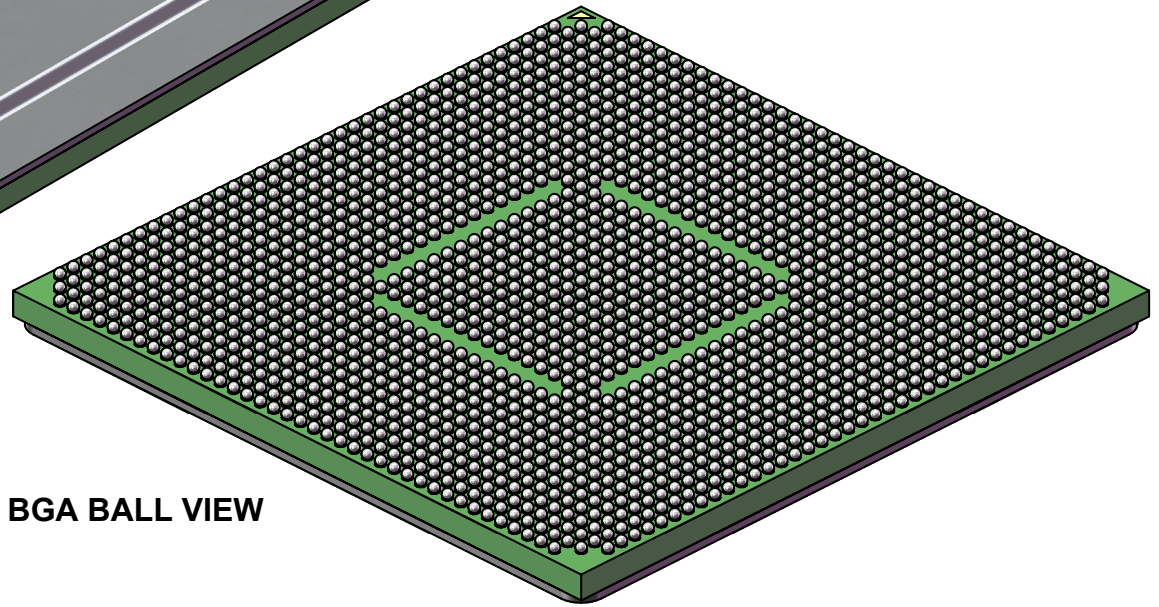
SECTION B-B
SCALE 3 : 1

TopLine®			
TITLE SBGA1696T1.0C-DC424D DAISY CHAIN DUMMY			
SCALE 2:1	SIZE A	DRAWING NO. 514245	REV A
DO NOT SCALE DRAWING			SHEET 7 OF 10

MODEL



LGA TOP



BGA BALL VIEW

TopLine[®]

TITLE SBGA1696T1.0C-DC424D
DAISY CHAIN DUMMY

SCALE 2.5:1	SIZE A	DRAWING NO. 514245	REV A
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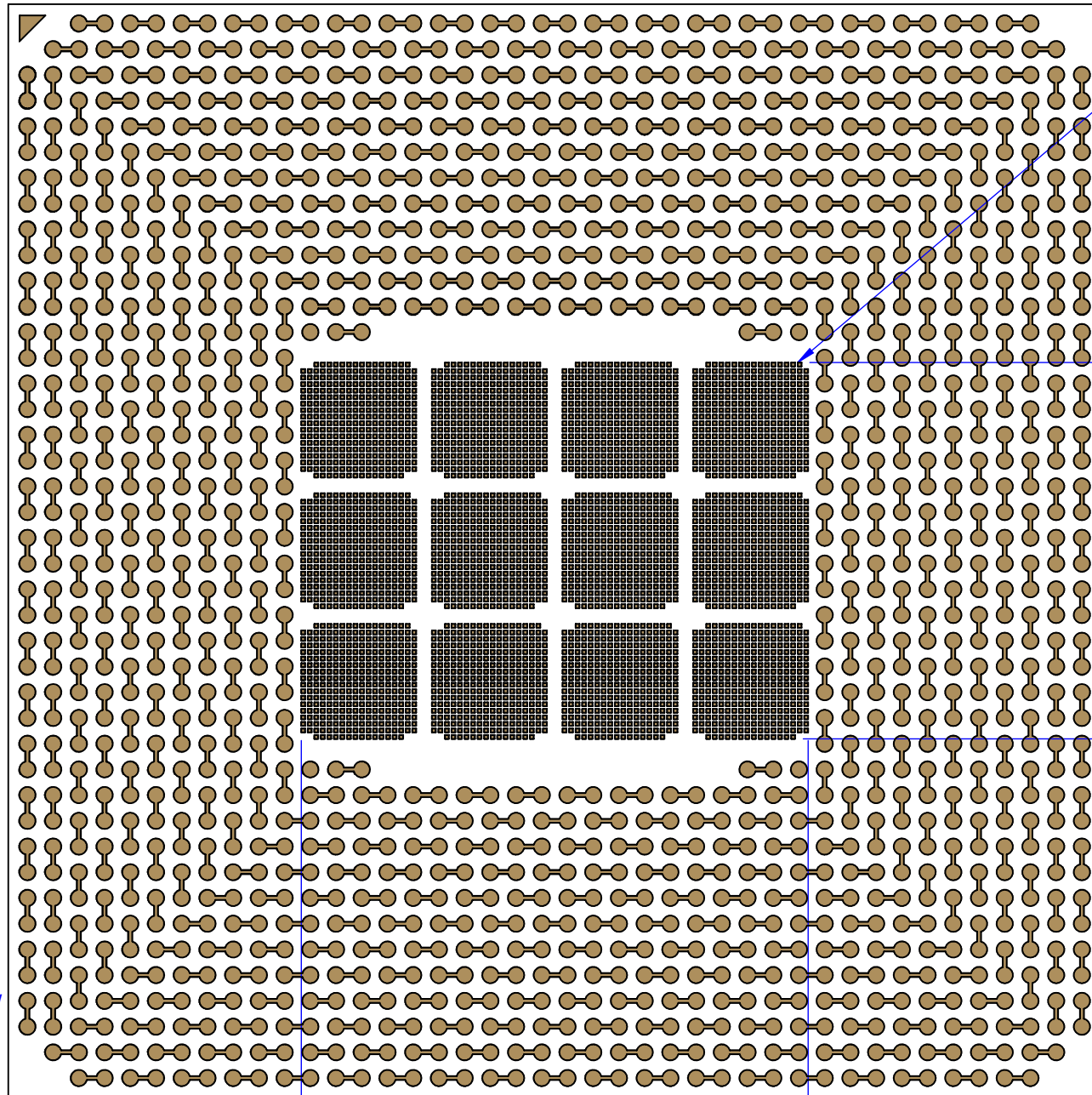
DO NOT SCALE DRAWING

SHEET 8 OF 10

TOP LAYER - LAYER 1

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42

A
B
C
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F
G
H
J
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AV
AW
AY
BA
BB



SEE DETAIL B
PAGE 18

15.42

19.56

42.5

TopLine[®]

TITLE SPGA1696T1.0C-DC424D
DAISY CHAIN DUMMY

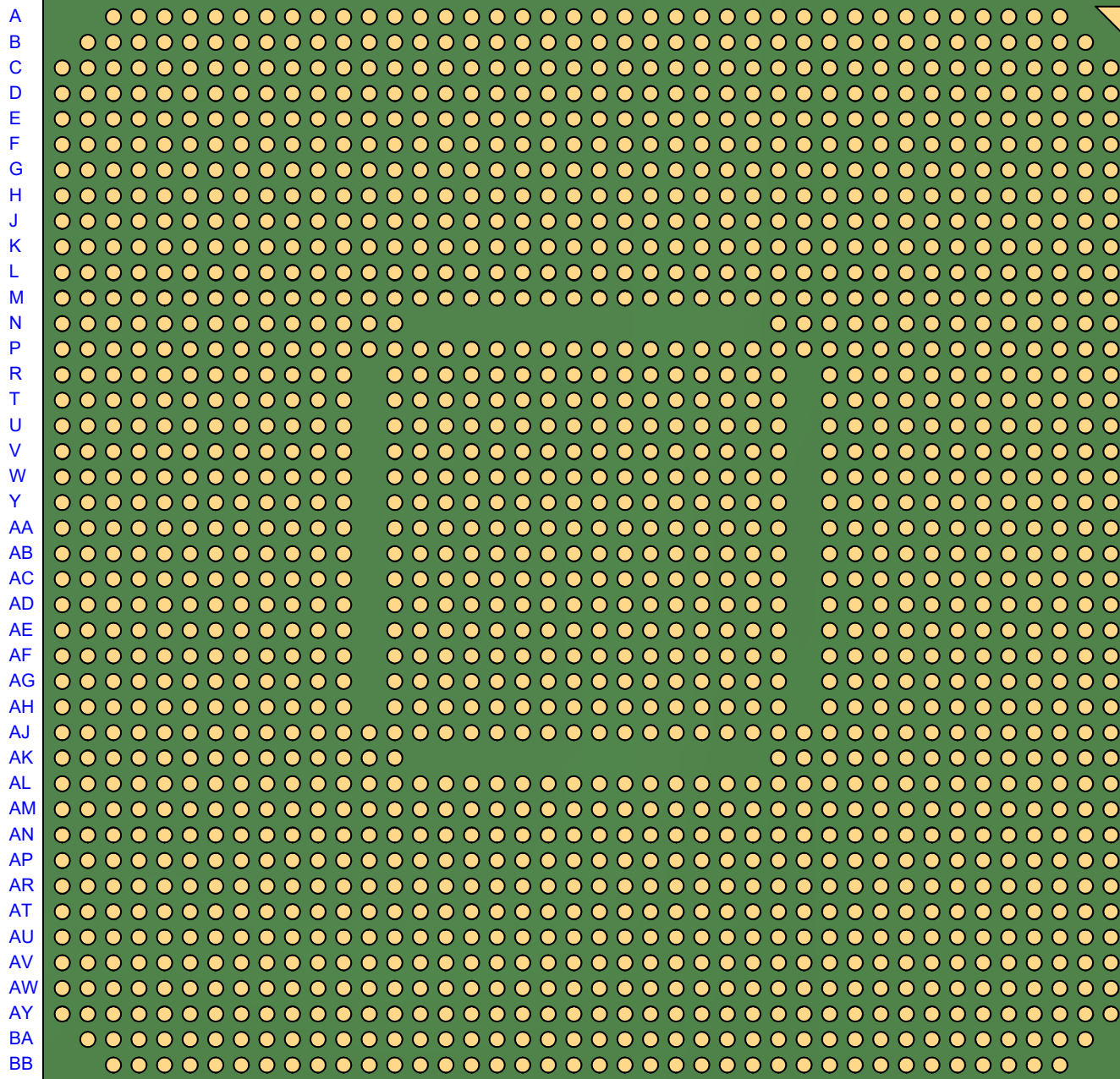
SCALE 4:1	SIZE A	DRAWING NO. 514245	REV A
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DO NOT SCALE DRAWING

SHEET 9 OF 10

BOTTOM SOLDER MASK (RIGHT READING)

42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1



TopLine®			
TITLE SBGA1696T1.0C-DC424D DAISY CHAIN DUMMY			
SCALE 4:1	SIZE A	DRAWING NO. 514245	REV A
DO NOT SCALE DRAWING			SHEET 10 OF 10