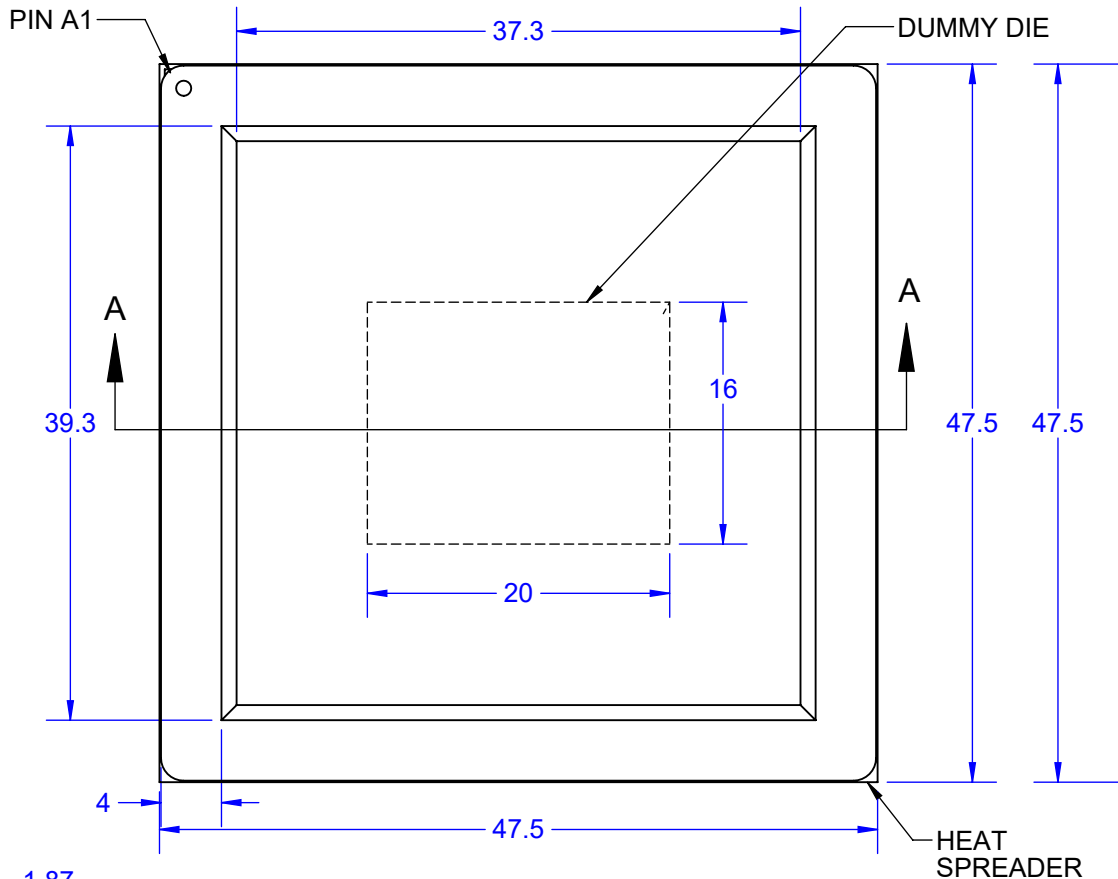
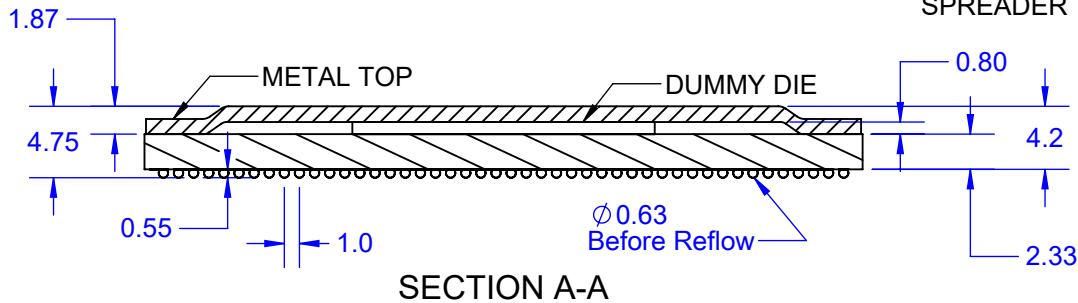
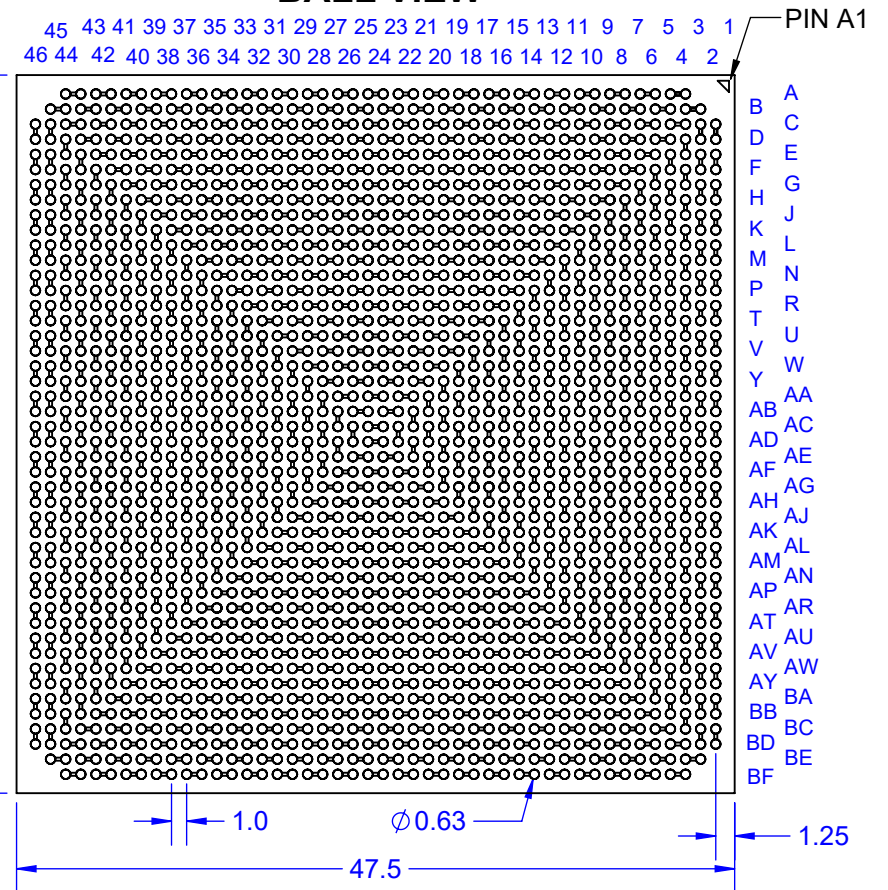


TOP VIEW



BALL VIEW

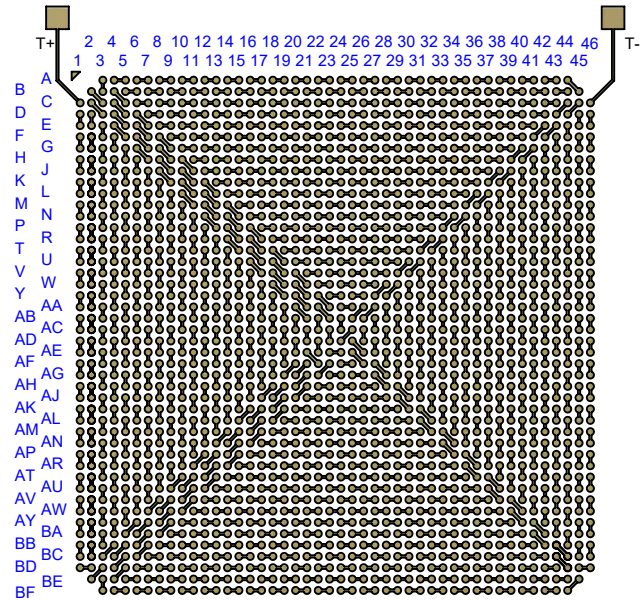
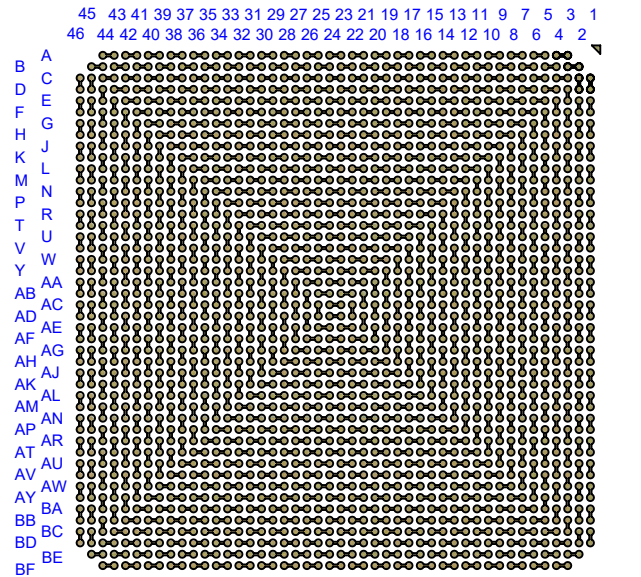


- Notes: (Unless Otherwise Specified).
- 1) ALL DIMENSIONS ARE IN MM.
 - 2) SOLDER BALL ALLOY: SEE PART NUMBER TABLE.
 - 3) BALL DIAMETER (BEFORE REFLOW): 0.635mm (25 MIL).
 - 4) SOLDER MASK DEFINED PAD OPENING: 0.508mm (20 MIL).
 - 5) PAD Cu DIAMETER: 0.635mm (25 MIL).
 - 6) SUBSTRATE MATERIAL: FR4 (ALTERNATE BT or Polyimide).
 - 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	BALL ALLOY	RoHS	Si DIE
SBGA2104T1.0C-DC467D4	Sn96.5/Ag3.0/Cu0.5	SAC305	YES	YES
SBGA2104T1.0-DC467D4	Sn63/Pb37	Sn63	NO	YES

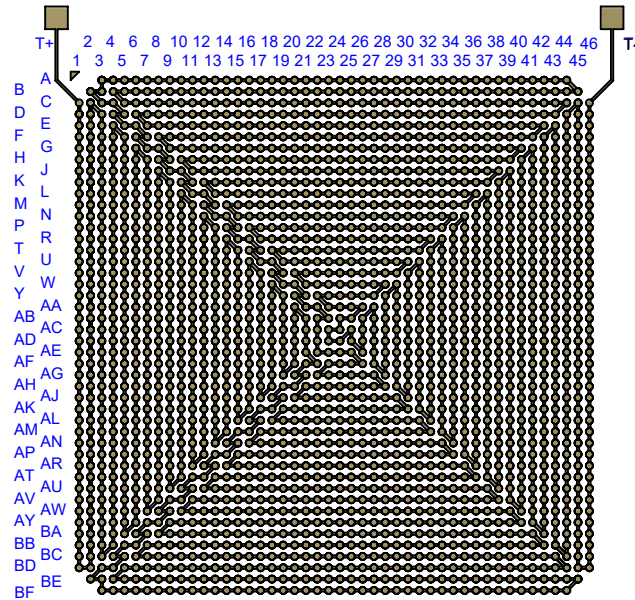
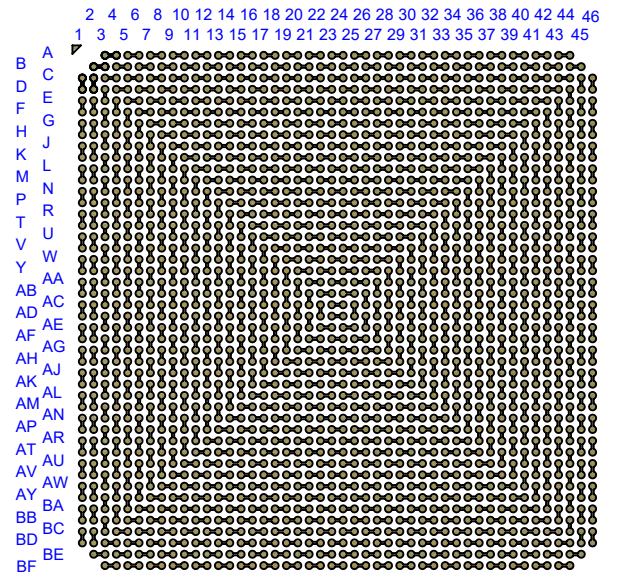
APPROVALS	DATE	TopLine®		
DRAWN T. Au	1/10/2021			
ENG M. Hart	1/10/2021	TITLE		SBGA2104T1.0C-DC467D4 DAISY CHAIN DUMMY
MFG		SCALE	SIZE	DRAWING NO.
QA		2:1	A	514676
CUST				REV A
REVISED		DO NOT SCALE DRAWING		SHEET 1 OF 9

BALL VIEW



TEST VEHICLE BOARD

BOTTOM SIDE (TOP X-RAY VIEW)



AFTER MOUNTING

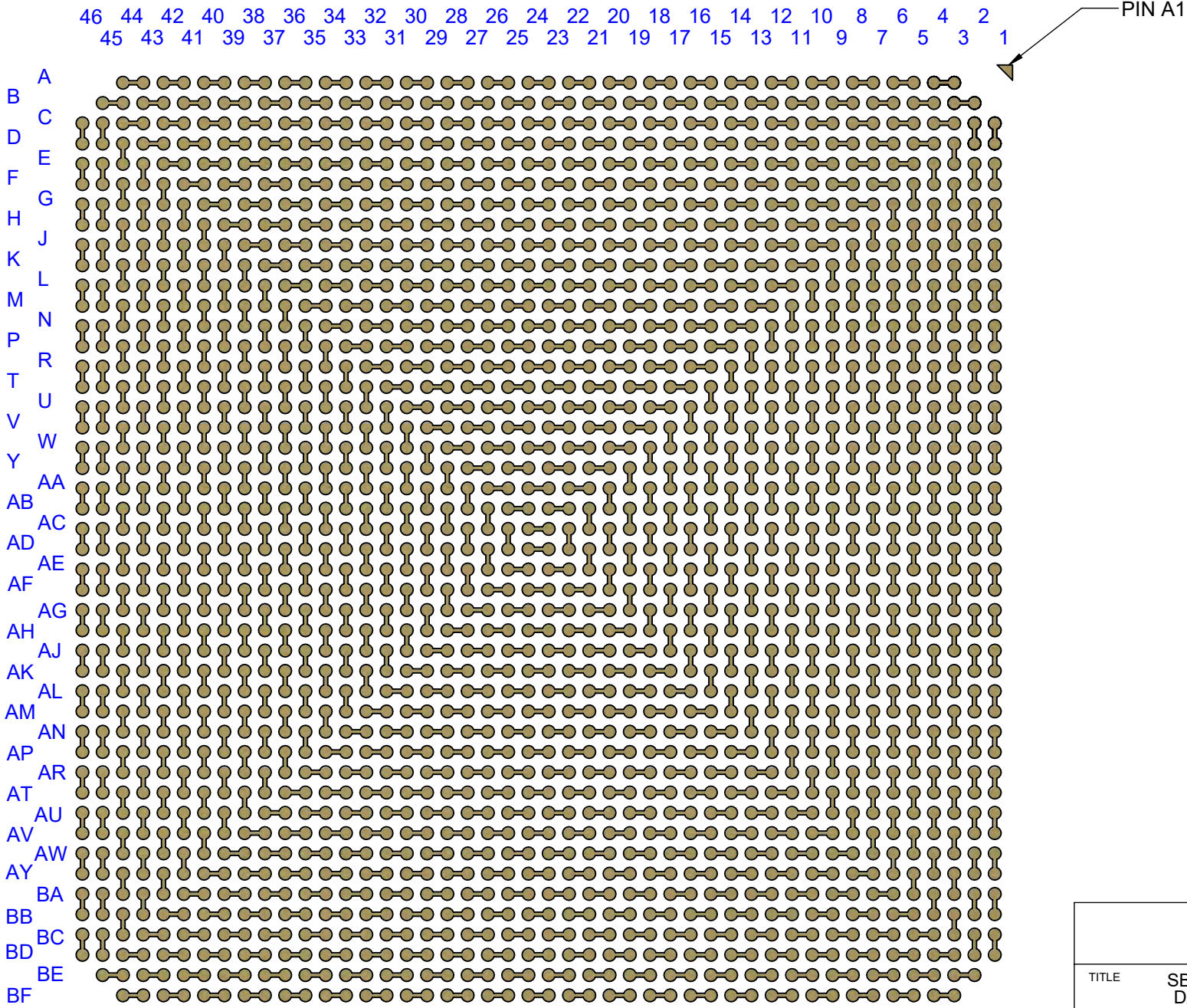
Notes:

- 1) PCB BOARD DIMENSIONS ARE PRESENTD ONLY AS A GUIDELINE. DESIGNERS SHOULD USE THEIR OWN EXPERIENCE WHEN DESIGNING PCB.
- 2) PCB Cu BALL PAD DIAMETER 0.635mm [25 MIL].
- 3) PCB DAISY CHAIN TRACING LINE WIDTH 0.204mm [8 MIL].
- 4) SMD (SOLDER MASK DEFINED) PAD OPENING 0.508mm [20 MIL].

TopLine®

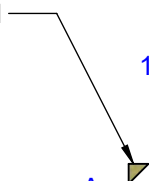
TITLE			
SBGA2104T1.0C-DC467D4 DAISY CHAIN DUMMY			
SCALE	SIZE	DRAWING NO.	REV
3:2	A	514676	A
DO NOT SCALE DRAWING			SHEET 2 OF 9

BALL VIEW



TopLine[®]			
TITLE SBGA2104T1.0C-DC467D4 DAISY CHAIN DUMMY			
SCALE 3.5:1	SIZE A	DRAWING NO. 514676	REV A
DO NOT SCALE DRAWING		SHEET 3 OF 9	

BOTTOM SIDE (TOP X-RAY VIEW)

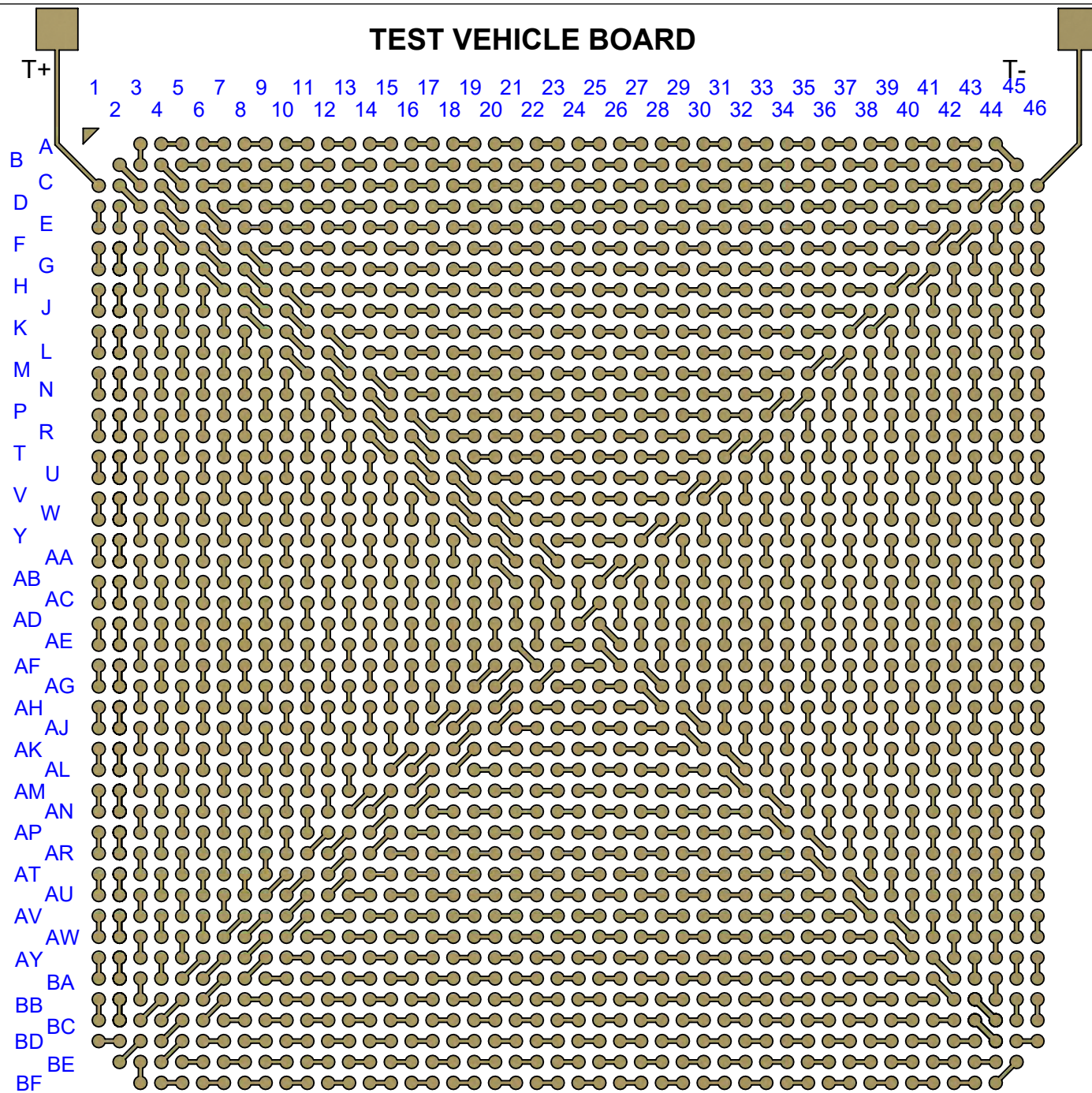
PIN A1 

1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46



TopLine®			
TITLE SBGA2104T1.0C-DC467D4 DAISY CHAIN DUMMY			
SCALE 3.5:1	SIZE A	DRAWING NO. 514676	REV A
DO NOT SCALE DRAWING			SHEET 4 OF 9

TEST VEHICLE BOARD

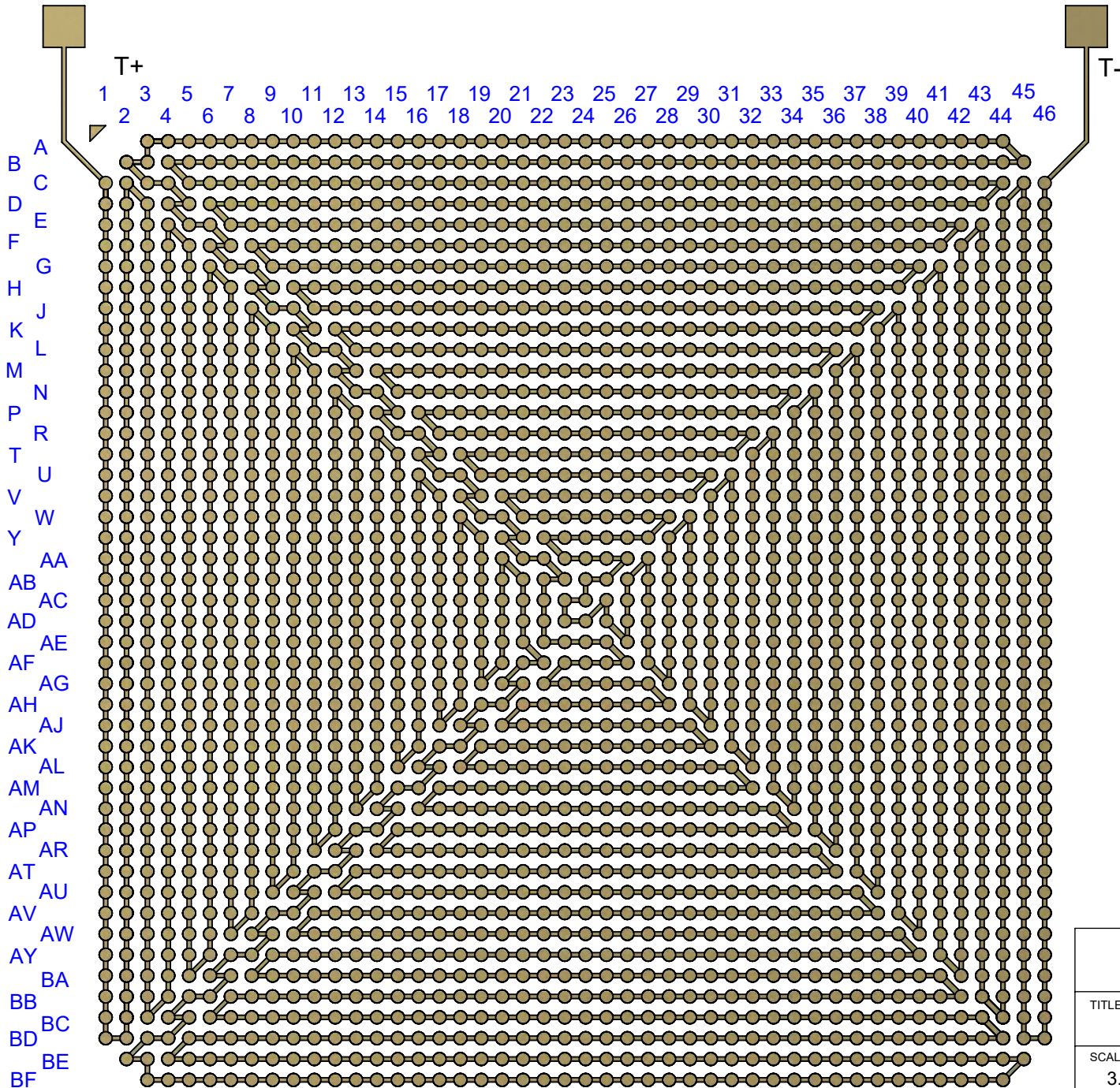


Notes:

- 1) PCB BOARD DIMENSIONS ARE PRESENTD ONLY AS A GUIDELINE. DESIGNERS SHOULD USE THEIR OWN EXPERIENCE WHEN DESIGNING PCB.
- 2) PCB Cu BALL PAD DIAMETER 0.635mm [25 MIL].
- 3) PCB DAISY CHAIN TRACING LINE WIDTH 0.204mm [8 MIL].
- 4) SMD (SOLDER MASK DEFINED) PAD OPENING 0.508mm [20 MIL].

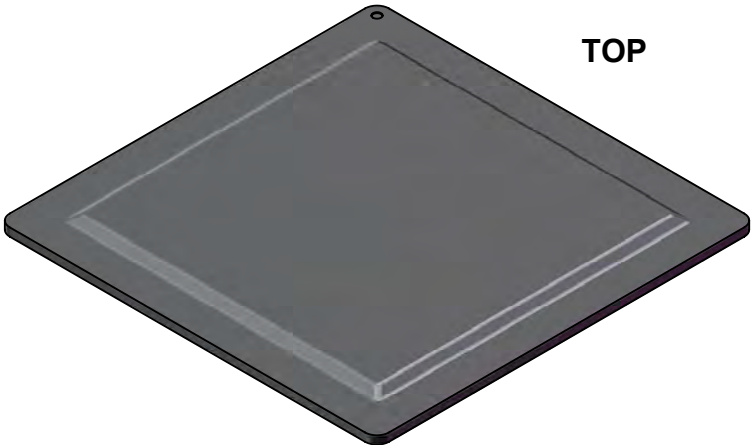
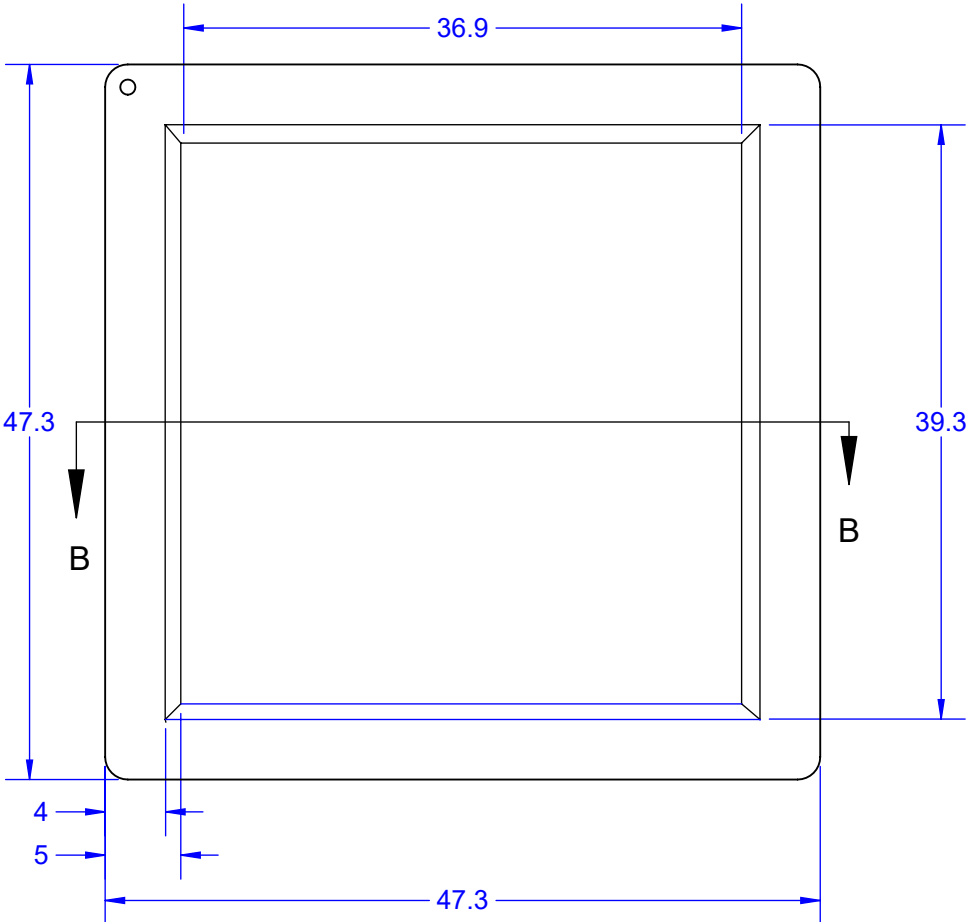
TopLine®			
TITLE SBGA2104T1.0C-DC467D4 DAISY CHAIN DUMMY			
SCALE	SIZE	DRAWING NO.	REV
3.5:1	A	514676	A
DO NOT SCALE DRAWING			SHEET 5 OF 9

AFTER MOUNTING



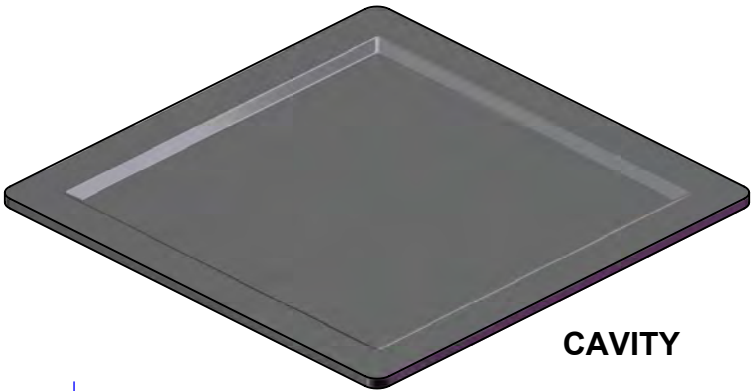
TopLine®			
TITLE SBGA2104T1.0C-DC467D4 DAISY CHAIN DUMMY			
SCALE 3.5:1	SIZE A	DRAWING NO. 514676	REV A
DO NOT SCALE DRAWING			SHEET 6 OF 9

HEAT SPREADER

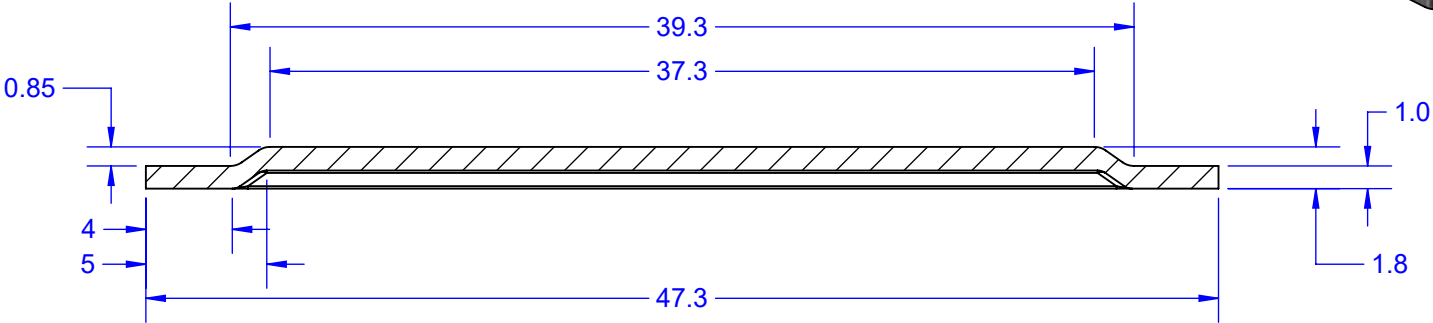


TOP

MODEL



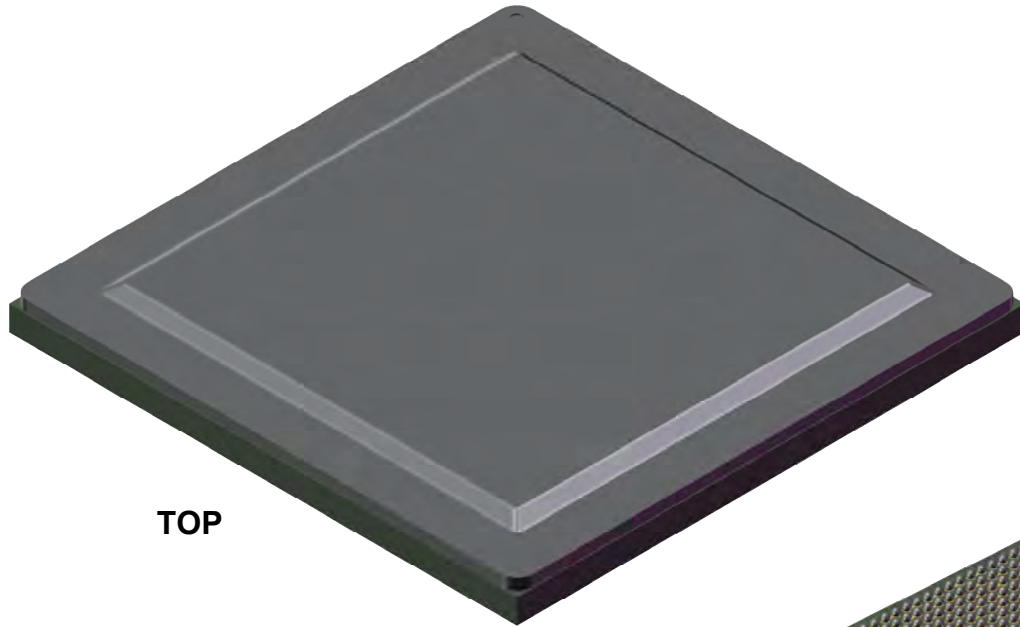
CAVITY



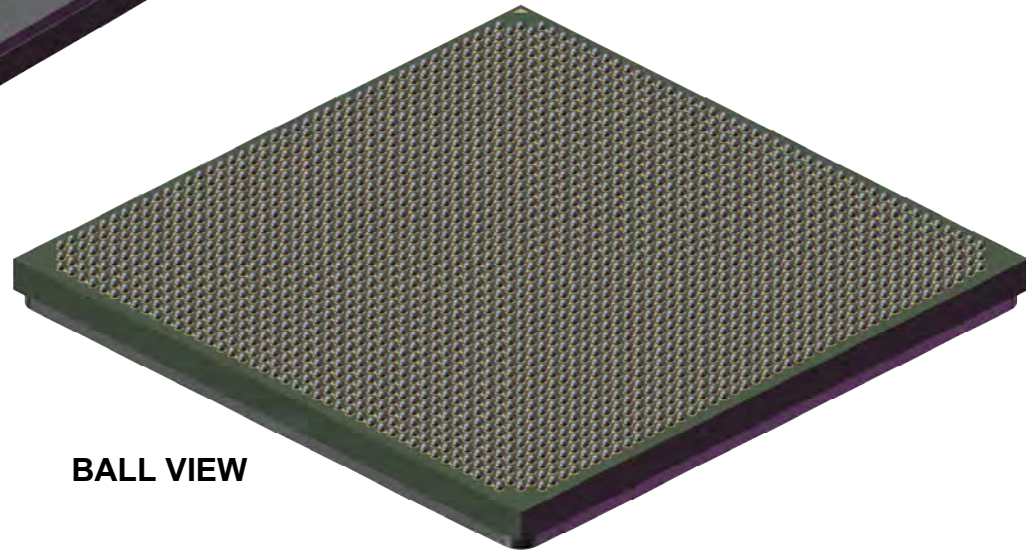
SECTION B-B

TopLine®			
TITLE SBGA2104T1.0C-DC467D4 DAISY CHAIN DUMMY			
SCALE 2:1	SIZE A	DRAWING NO. 514676	REV A
DO NOT SCALE DRAWING			SHEET 7 OF 9

MODEL



TOP



BALL VIEW

TopLine®

TITLE SBGA2104T1.0C-DC467D4
DAISY CHAIN DUMMY

SCALE 2:1	SIZE A	DRAWING NO. 514676	REV A
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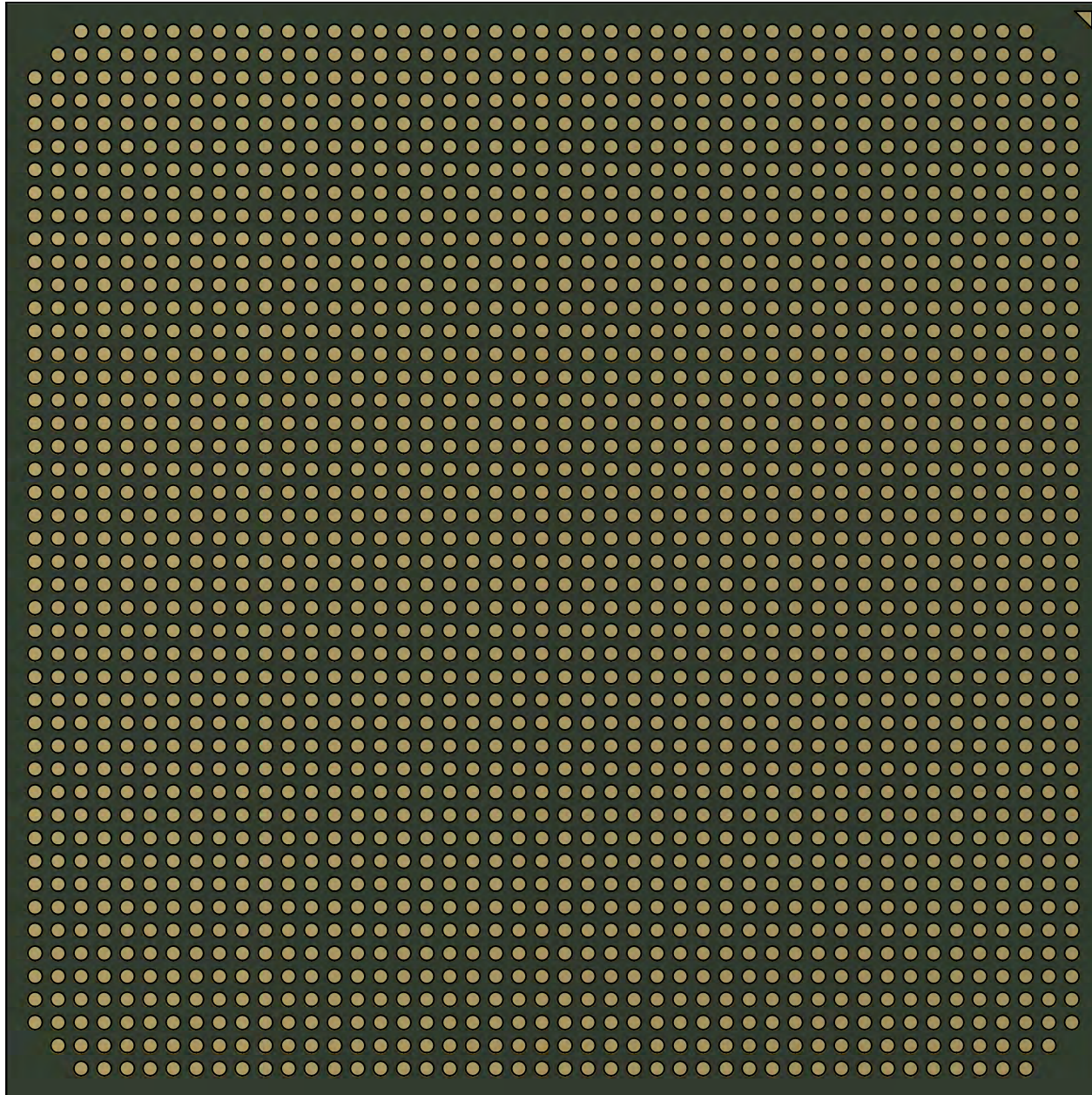
DO NOT SCALE DRAWING

SHEET 8 OF 9

BOTTOM SOLDER MASK (RIGHT READING)

46 44 42 40 38 36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2
45 43 41 39 37 35 33 31 29 27 25 23 21 19 17 15 13 11 9 7 5 3 1

A
B
C
D
E
F
G
H
J
K
L
M
N
P
R
T
U
V
W
Y
AA
AB
AC
AD
AE
AF
AG
AH
AJ
AK
AL
AM
AN
AP
AR
AT
AU
AV
AW
AY
BA
BB
BC
BD
BE
BF



TopLine®			
TITLE SBGA2104T1.0C-DC467D4 DAISY CHAIN DUMMY			
SCALE 3.75:1	SIZE A	DRAWING NO. 514676	REV A
DO NOT SCALE DRAWING			SHEET 9 OF 9