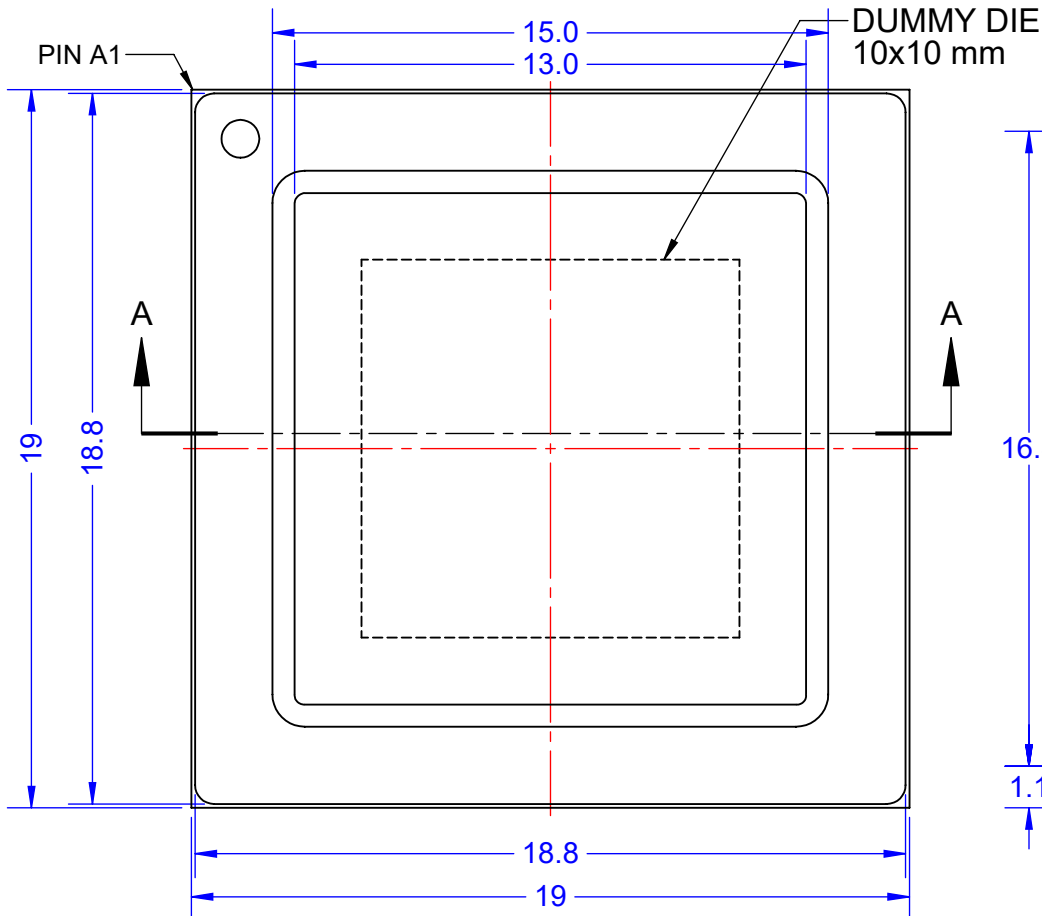
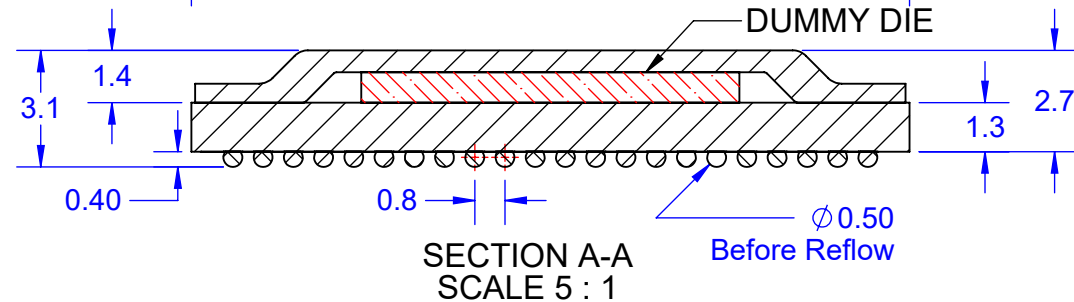
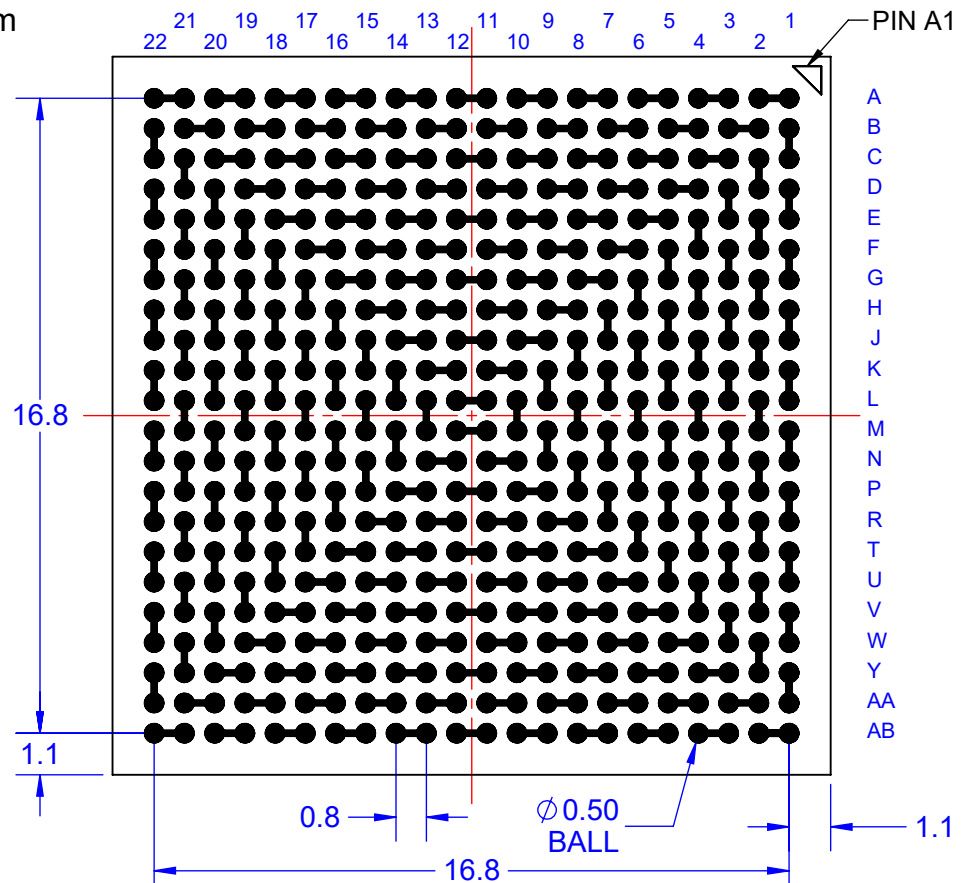


### TOP VIEW



### BALL VIEW



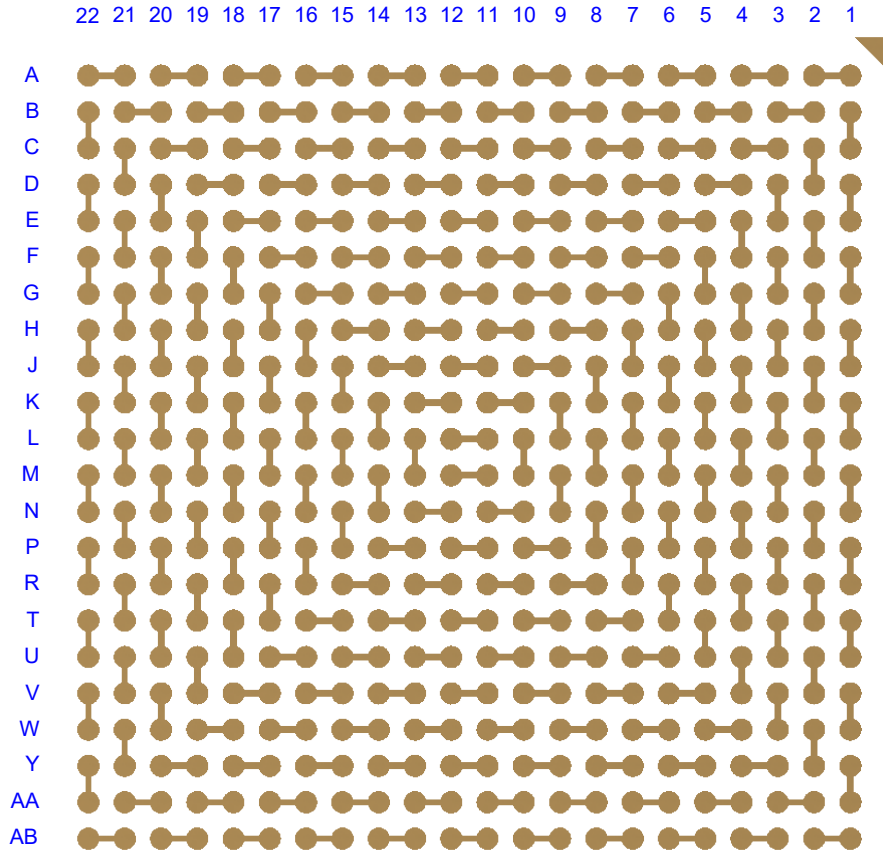
Notes: (Unless Otherwise Specified).

- 1) ALL DIMENSIONS ARE IN MM.
- 2) SOLDER BALL ALLOY: SEE PART NUMBER TABLE.
- 3) BALL DIAMETER (BEFORE REFLOW): 0.50 mm (19.7 MIL).
- 4) SOLDER MASK DEFINED PAD SRO 0.406 mm (16 MIL).
- 5) PAD Cu DIAMETER: 0.508 mm (20 MIL).
- 6) SUBSTRATE MATERIAL: BT (ALTERNATE FR4).
- 7) DUMMY DIE IS OPTIONAL.
- 8) BALL PATTERN (SEE PAGE 2).
- 9) MSL-3 RECOMMENDED BAKING 24 HOURS @ 125°C TO REMOVE MOISTURE PRIOR SOLDERING TO PC BOARD.

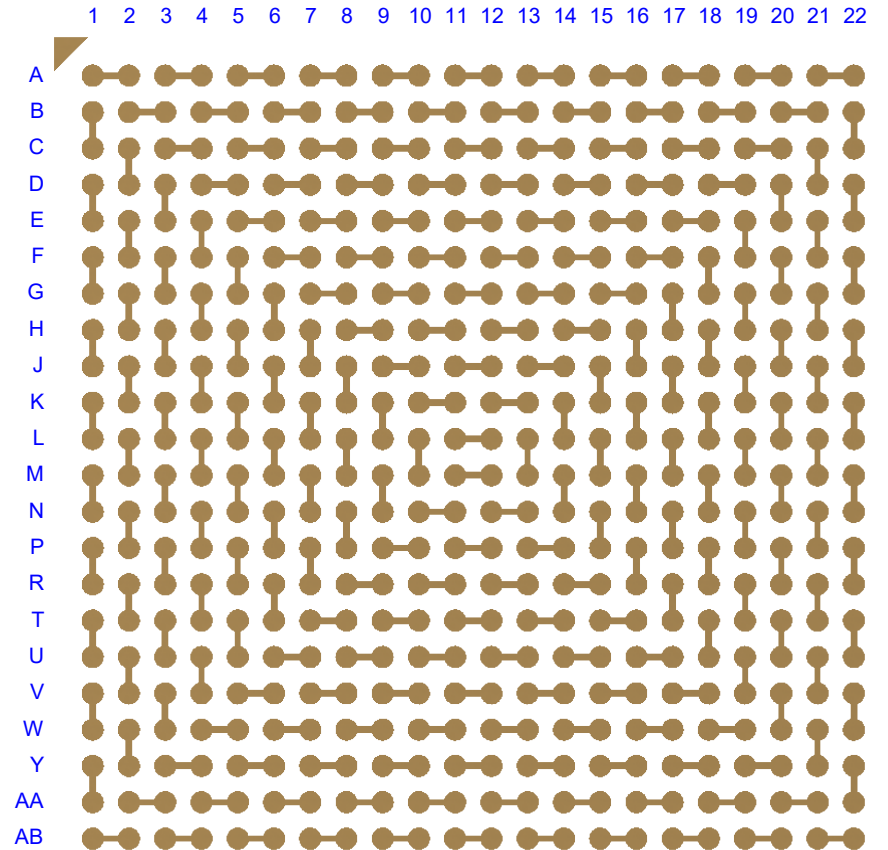
PART NUMBER TABLE				
PART NUMBER	BALL ALLOY	BALL CODE	RoHS	Si DIE
SBGA484T.8C-DC229AD	Sn96.5/Ag3.0/Cu0.5	SAC305	YES	YES
SBGA484T8-DC229AD	Sn63/Pb37	Sn63	NO	YES

APPROVALS	DATE	<b>TopLine®</b>			
DRAWN T.Au	12/11/2022				
ENG M. Hart	12/11/2022	TITLE SBGA484T.8-DC229AD DAISY CHAIN			
MFG		SCALE	SIZE	DRAWING NO.	REV
QA		5:1	A	582292	A
CUST		DO NOT SCALE DRAWING			SHEET 1 OF 6
REVISED					

### BALL VIEW



### BOTTOM SIDE (TOP X-RAY VIEW)

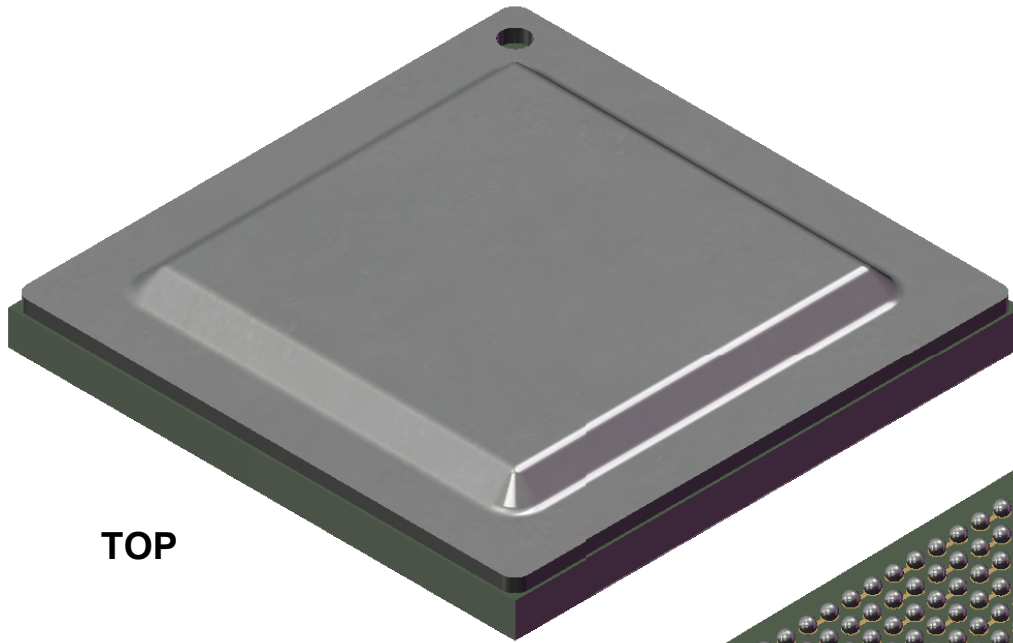


**Notes:**

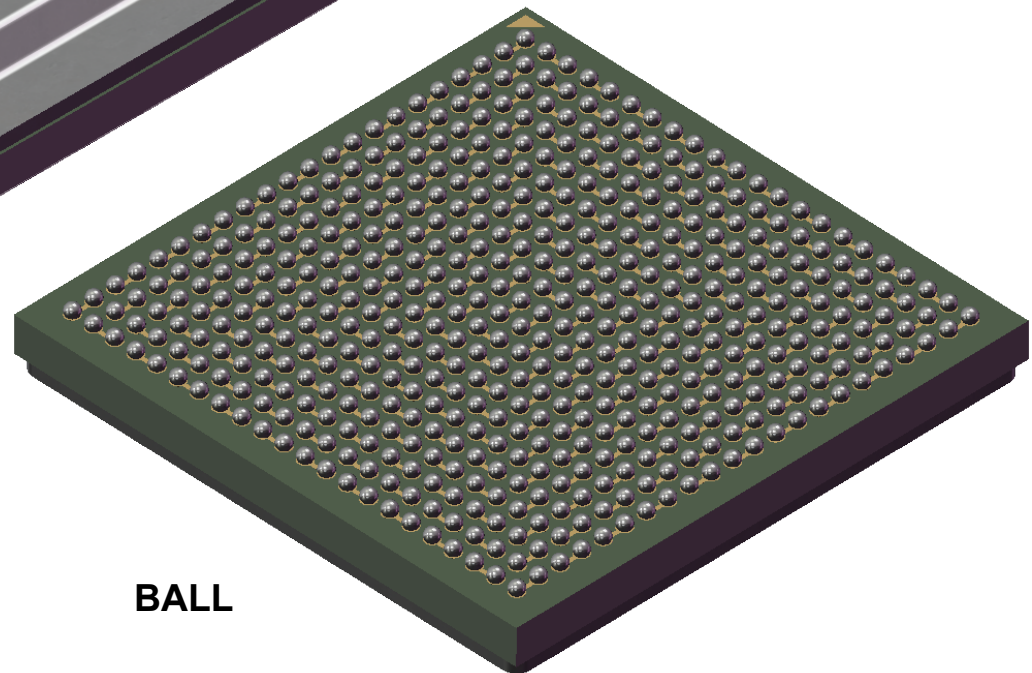
- 1) PCB BOARD DIMENSIONS ARE PRESENTED ONLY AS A GUIDELINE. DESIGNERS SHOULD USE THEIR OWN EXPERIENCE WHEN DESIGNING PCB.
- 2) PCB Cu BALL PAD DIAMETER 0.50 mm (19.7 MIL).
- 3) SMD (SOLDER MASK DEFINED) PAD OPENING: 0.406 mm (16 MIL).
- 4) PCB TRACING LINE WIDTH 0.152 mm [ 6 MIL ].

<b>TopLine®</b>			
TITLE SBGA484T.8-DC229AD DAISY CHAIN			
SCALE 6:1	SIZE A	DRAWING NO. 582292	REV A
DO NOT SCALE DRAWING			SHEET 2 OF 6

**MODEL  
BGA WITH BALL**



**TOP**



**BALL**

**TopLine®**

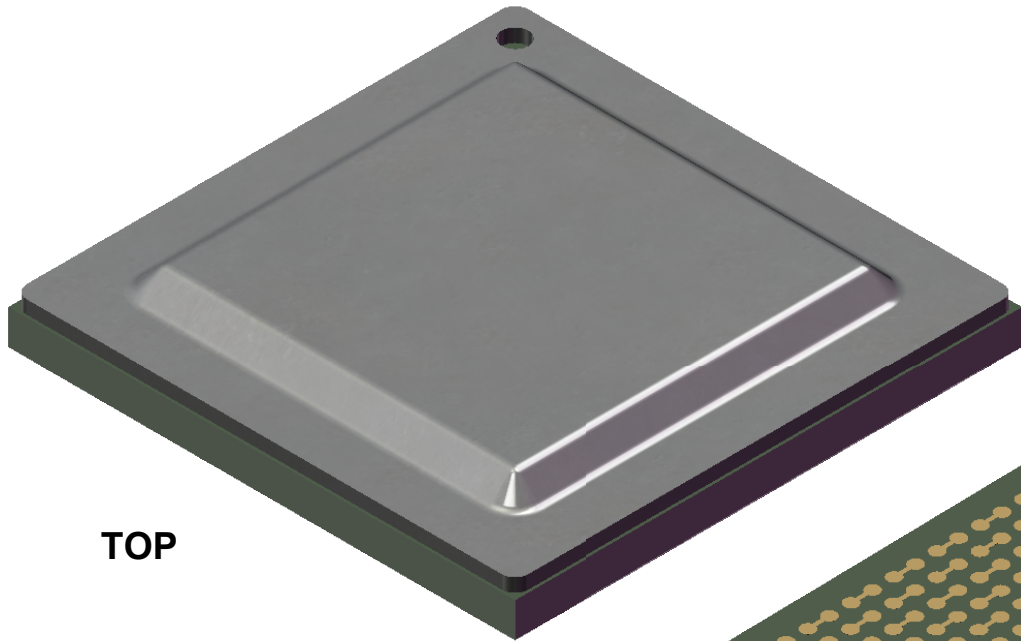
TITLE SBGA484T.8-DC229AD  
DAISY CHAIN

SCALE 5:1	SIZE A	DRAWING NO. 582292	REV A
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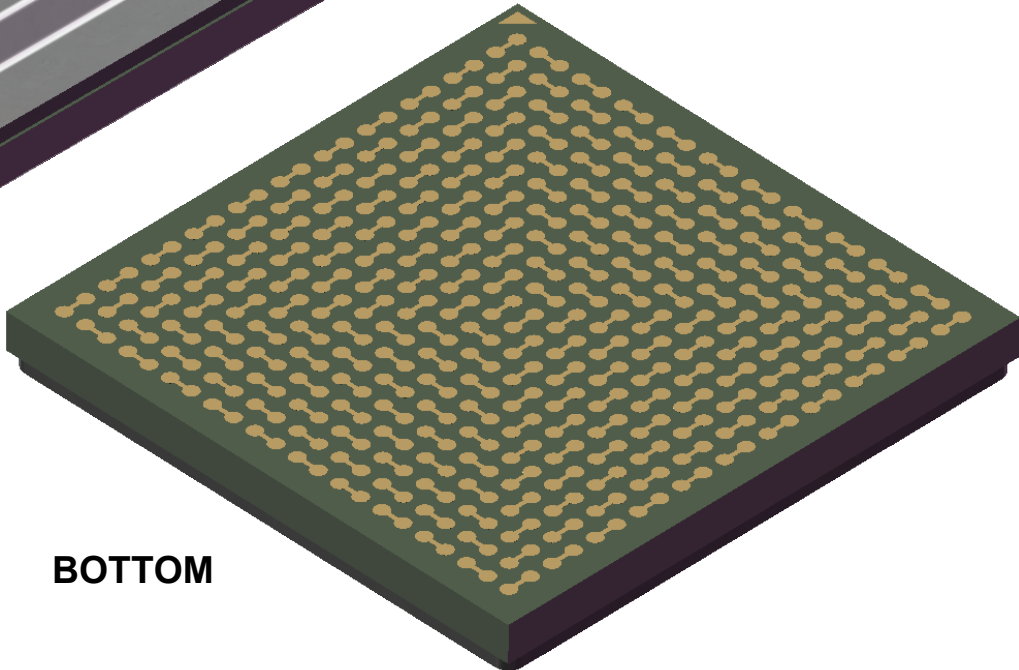
DO NOT SCALE DRAWING

SHEET 3 OF 6

**MODEL  
LGA WITHOUT BALL**



**TOP**



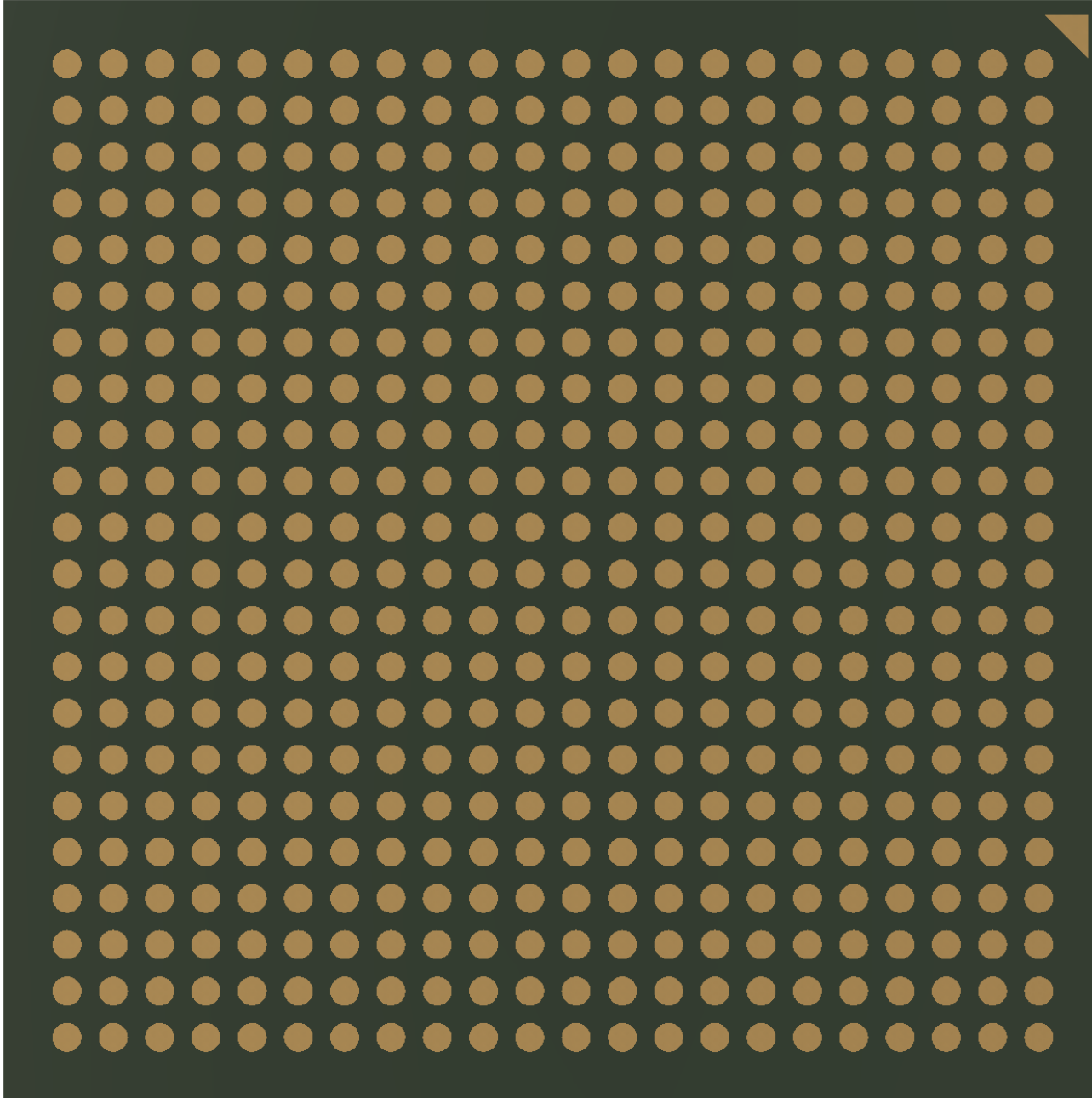
**BOTTOM**

<b>TopLine<sup>®</sup></b>			
TITLE		SBGA484T.8-DC229AD DAISY CHAIN	
SCALE	SIZE	DRAWING NO.	REV
5:1	A	582292	A
DO NOT SCALE DRAWING			SHEET 4 OF 6

**BOTTOM SOLDER MASK  
(RIGHT READING)**

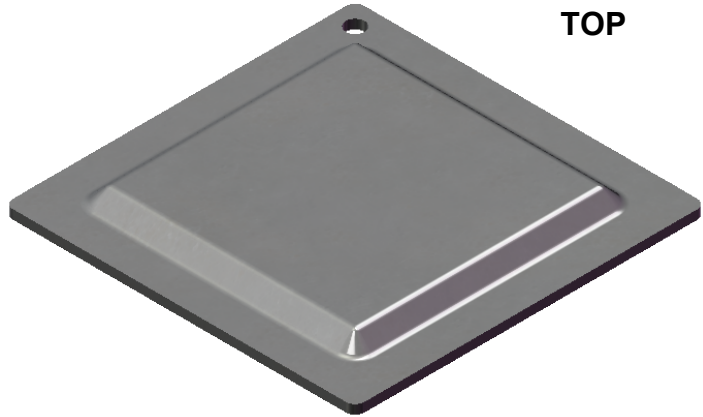
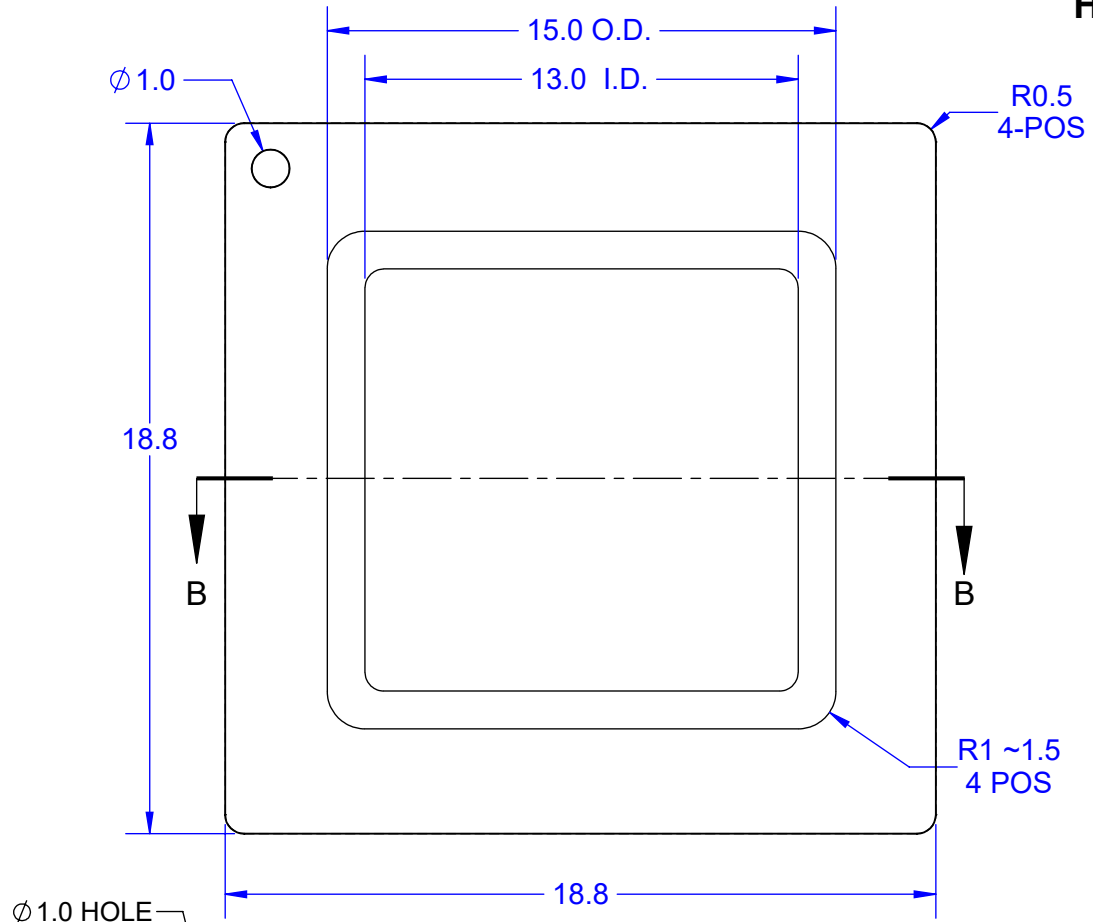
22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A  
B  
C  
D  
E  
F  
G  
H  
J  
K  
L  
M  
N  
P  
T  
R  
V  
U  
W  
Y  
AA  
AB

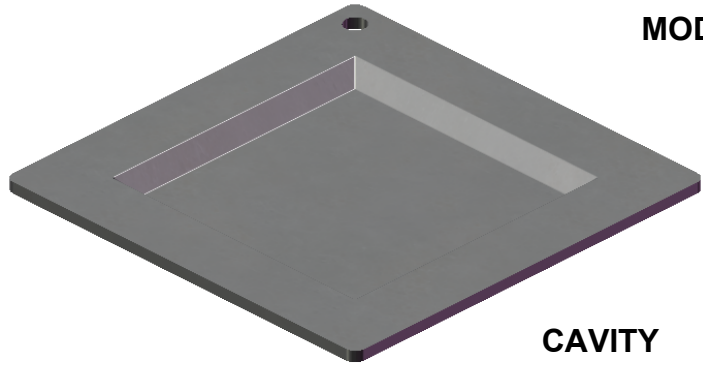


<b>TopLine®</b>			
TITLE SBGA484T.8-DC229AD DAISY CHAIN			
SCALE 5:1	SIZE A	DRAWING NO. 582292	REV A
DO NOT SCALE DRAWING			SHEET 5 OF 6

# HEAT SPREADER

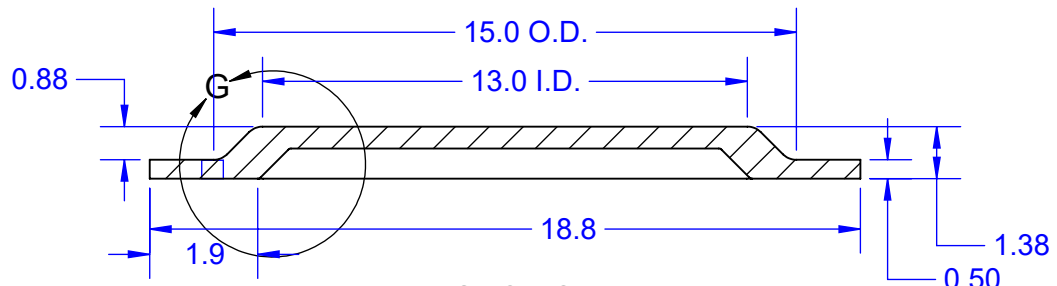
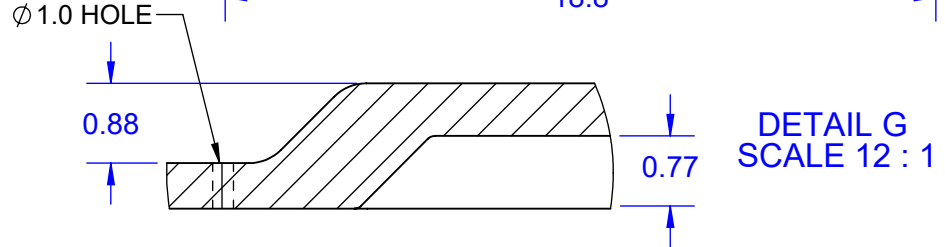


TOP



MODEL

CAVITY



SECTION B-B  
SCALE 5 : 1

**NOTES:**

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

APPROVALS	DATE	<b>TopLine®</b>			
DRAWN T.Au	11/16/2022				
ENG M. Hart	11/16/2022	TITLE H-CAP19A HEAT SPREADER			
MFG		SCALE 3:1	SIZE A	DRAWING NO. 219710	REV A
QA					
CUST		DO NOT SCALE DRAWING			SHEET 6 OF 6
REVISED					