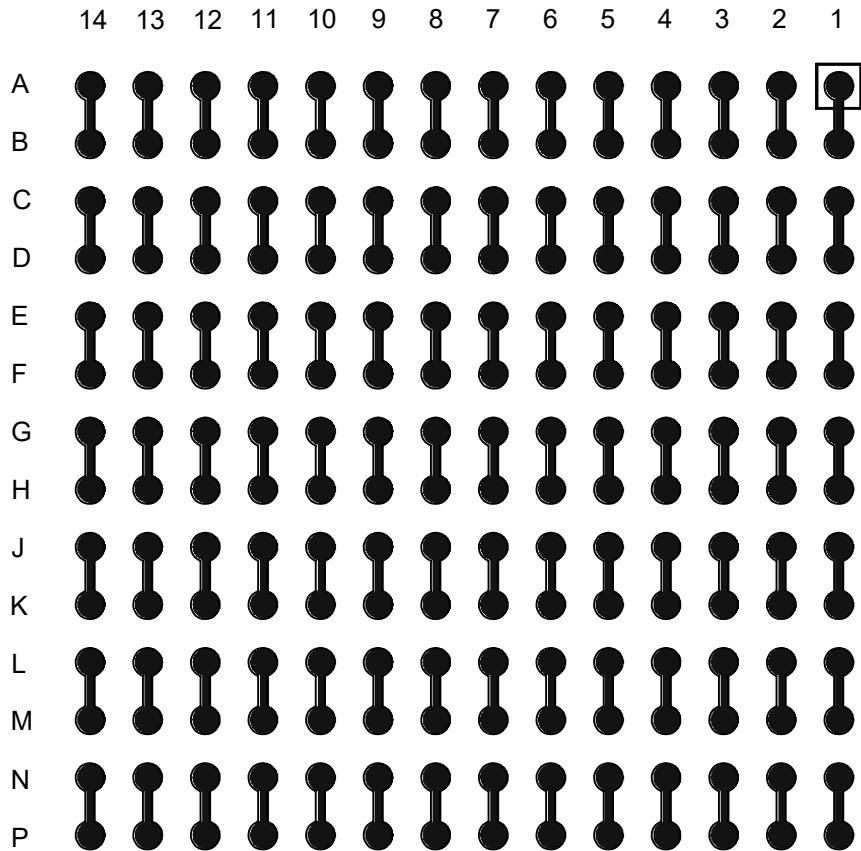


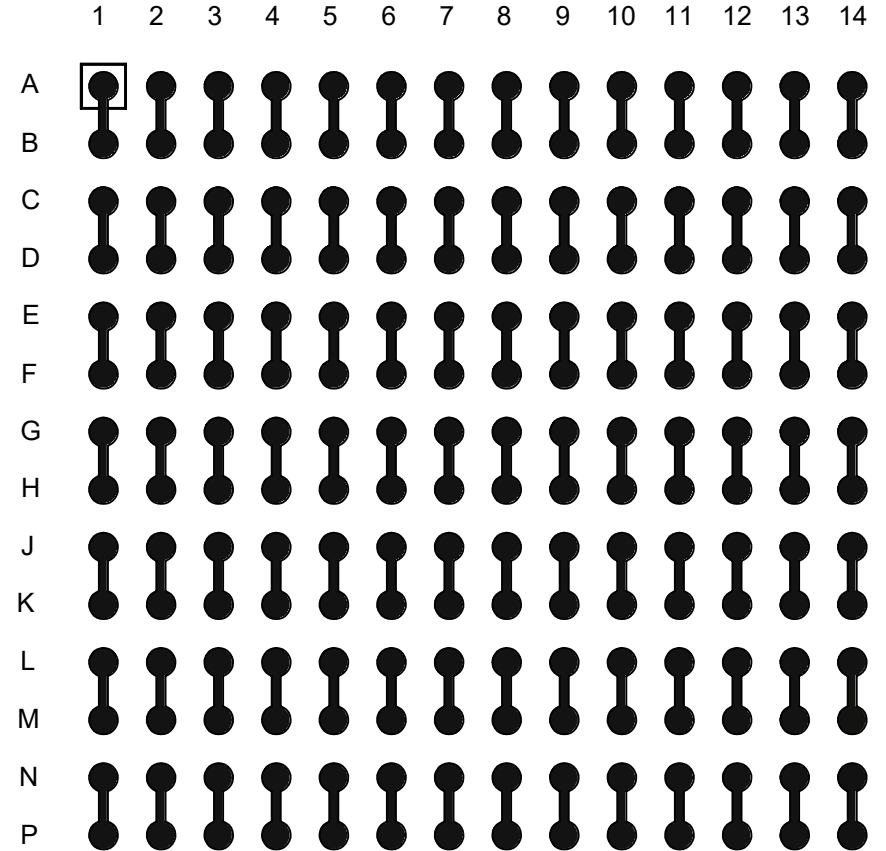




### BALL VIEW



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



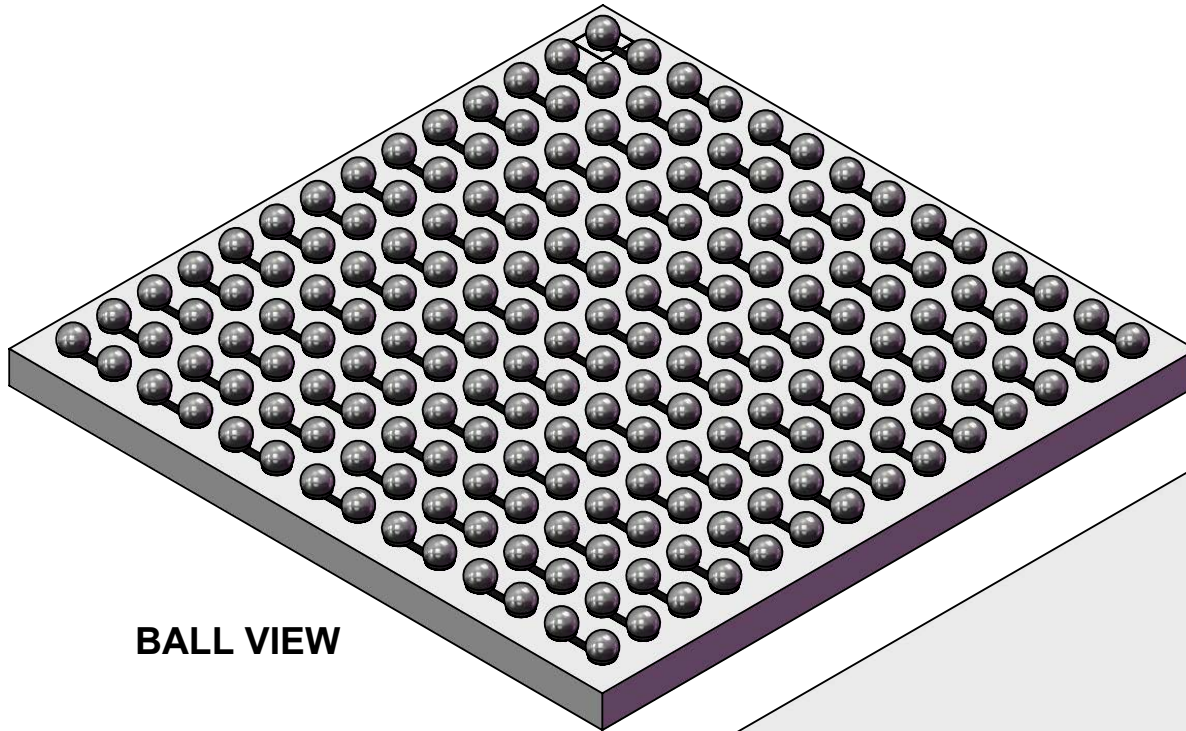
**TopLine<sup>®</sup>**

TITLE CBGA196T1.27Y-DC11  
CERAMIC BALL GRID ARRAY

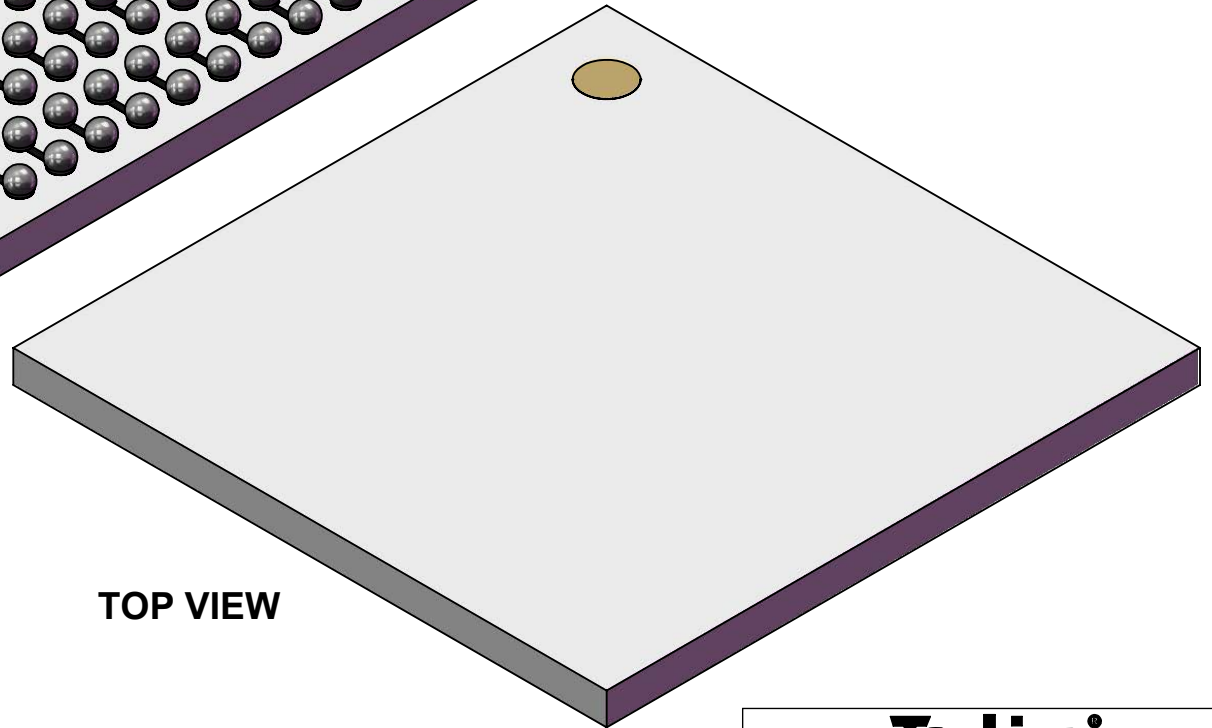
SCALE 6:1	SIZE A	DRAWING NO. 520117	REV A
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DO NOT SCALE DRAWING SHEET 3 OF 6

MODEL  
CBGA WITH BALL  
WITHOUT DIE



BALL VIEW



TOP VIEW

**TopLine**<sup>®</sup>

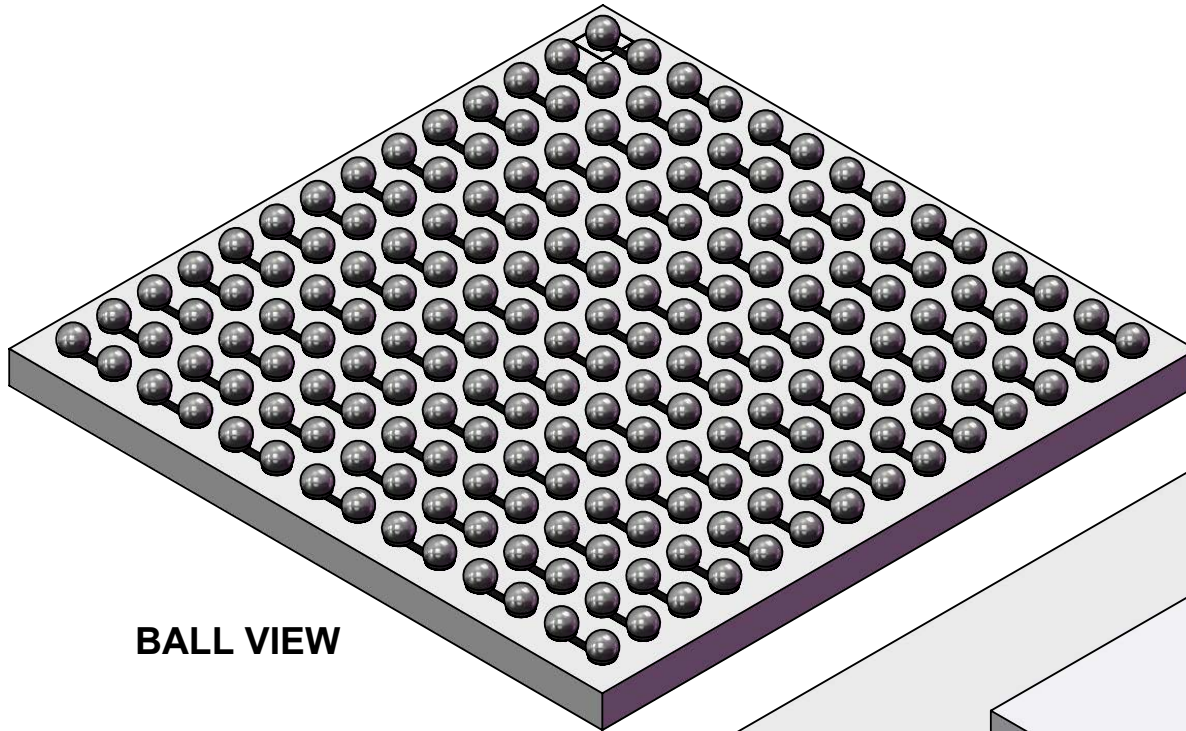
TITLE CBGA196T1.27Y-DC11  
CERAMIC BALL GRID ARRAY

SCALE	SIZE	DRAWING NO.	REV
6:1	A	520117	A

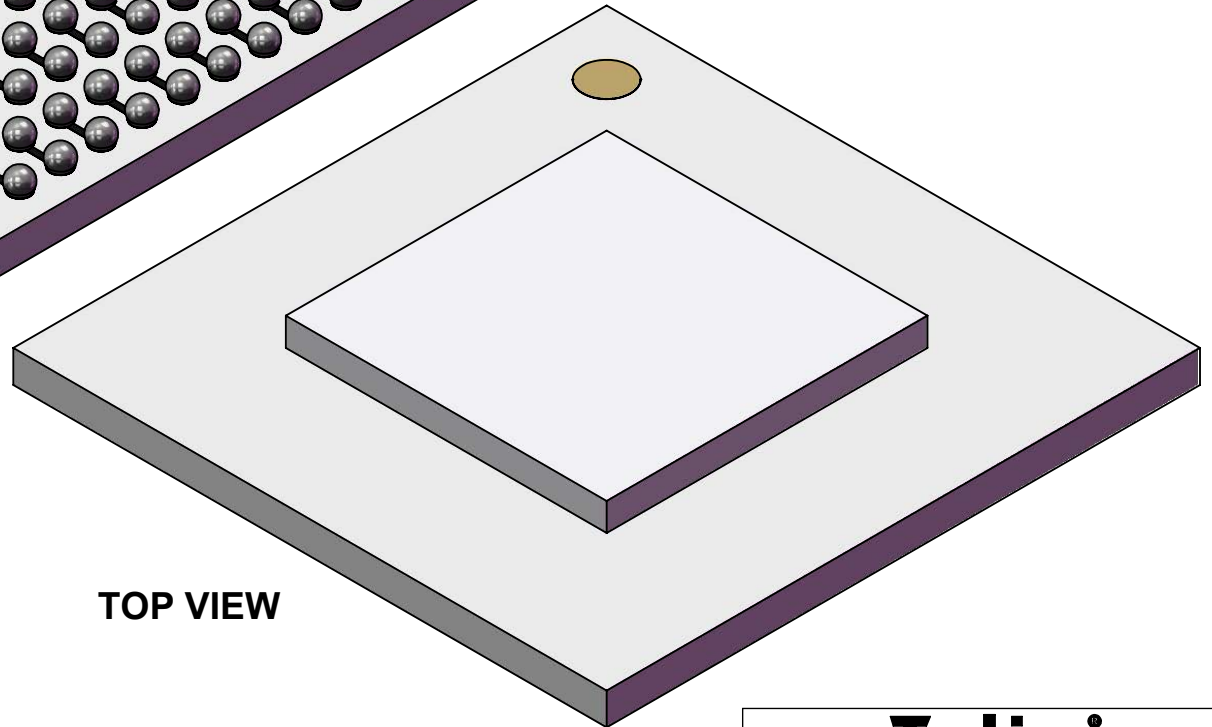
DO NOT SCALE DRAWING

SHEET 4 OF 6

MODEL  
CBGA WITH BALL  
WITH DIE



BALL VIEW



TOP VIEW

**TopLine®**

TITLE CBGA196T1.27Y-DC11  
CERAMIC BALL GRID ARRAY

SCALE 6:1	SIZE A	DRAWING NO. 520117	REV A
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DO NOT SCALE DRAWING

SHEET 5 OF 6

# PART NUMBER SYSTEM

**CBGA**

**196**

**T**

**1.27**

**X**

**-**

**DC11**

**D**

**SERIES**

CBGA = CERAMIC  
BALL GRID ARRAY

**BALLS**

NBR SOLDER  
BALLS

**TRAY**

T = JEDEC

**PITCH**

1.27mm = 0.050"

**ALLOY**

L = Sn62/Pb36/Ag2.0  
X = Sn63/Pb37  
C = SAC305  
Blank = Sn10/Pb90

**DIE**

D = DUMMY DIE  
BLANK = WITHOUT DIE

**DAISY CHAIN**

DC11 = SEE PATTERN

PART NUMBER	BALL ALLOY	CODE	LEAD FREE	DIE
CBGA196T1.27-DC11	Sn10/Pb90	Sn10	NO	NO
CBGA196T1.27-DC11D	Sn10/Pb90	Sn10	NO	YES
CBGA196T1.27L-DC11	Sn62/Pb36/Ag2.0	Sn62	NO	NO
CBGA196T1.27L-DC11D	Sn62/Pb36/Ag2.0	Sn62	NO	YES
CBGA196T1.27X-DC11	Sn63/Pb37	Sn63	NO	NO
CBGA196T1.27X-DC11D	Sn63/Pb37	Sn63	NO	YES
CBGA196T1.27C-DC11	Sn96.5/Ag3.0/Cu0.5	SAC305	YES	NO
CBGA196T1.27C-DC11D	Sn96.5/Ag3.0/Cu0.5	SAC305	YES	YES

<b>TopLine®</b>			
TITLE    CBGA196T1.27-DC11 CERAMIC BALL GRID ARRAY			
SCALE NONE	SIZE A	DRAWING NO. 520117	REV A
DO NOT SCALE DRAWING			SHEET 6 OF 6