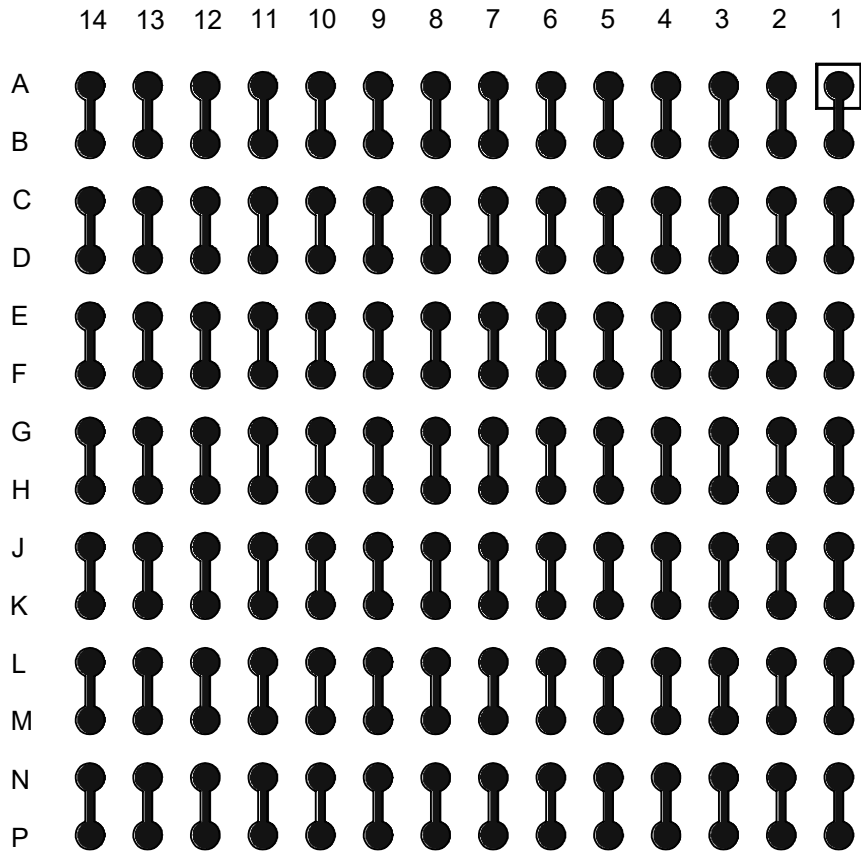
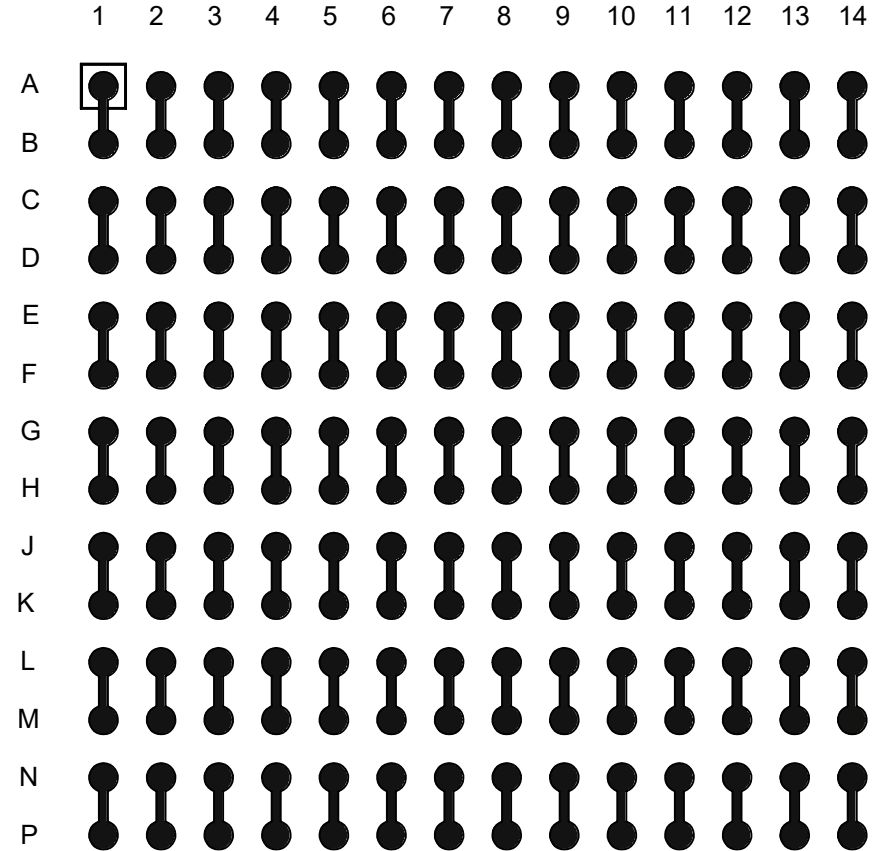


BALL VIEW



BOTTOM SIDE (TOP X-RAY VIEW)



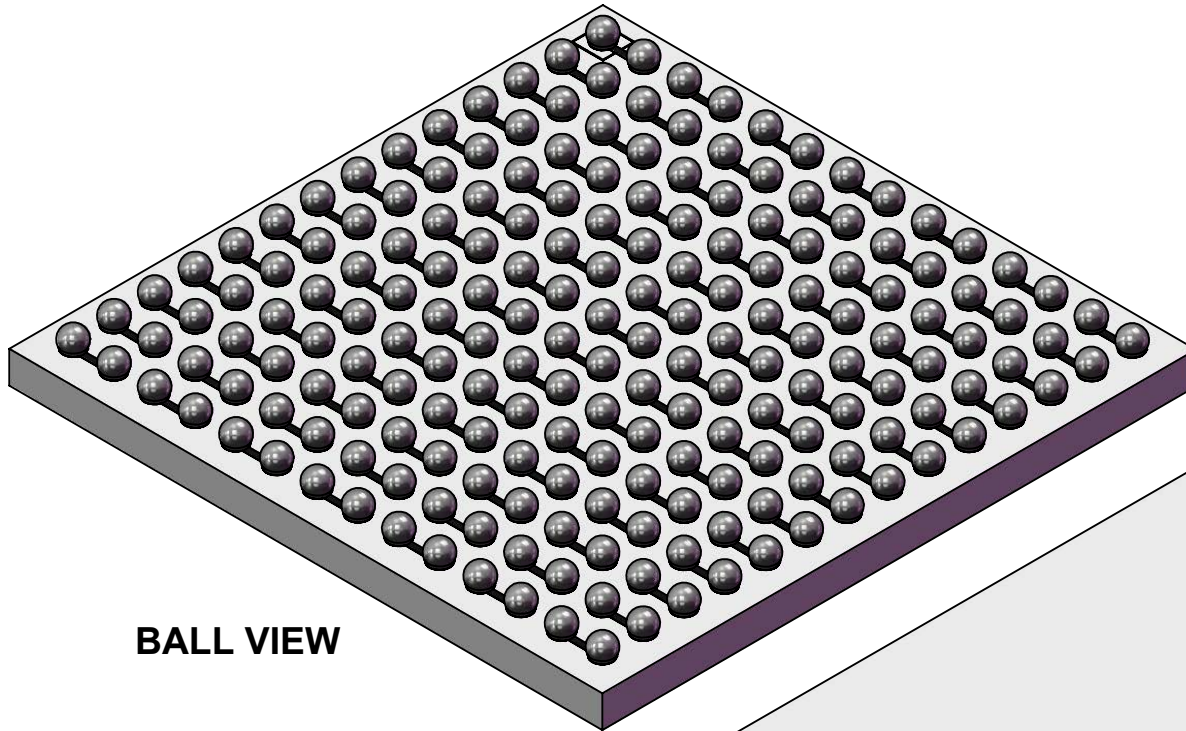
TopLine[®]

TITLE CBGA196T1.27L-DC11
CERAMIC BALL GRID ARRAY

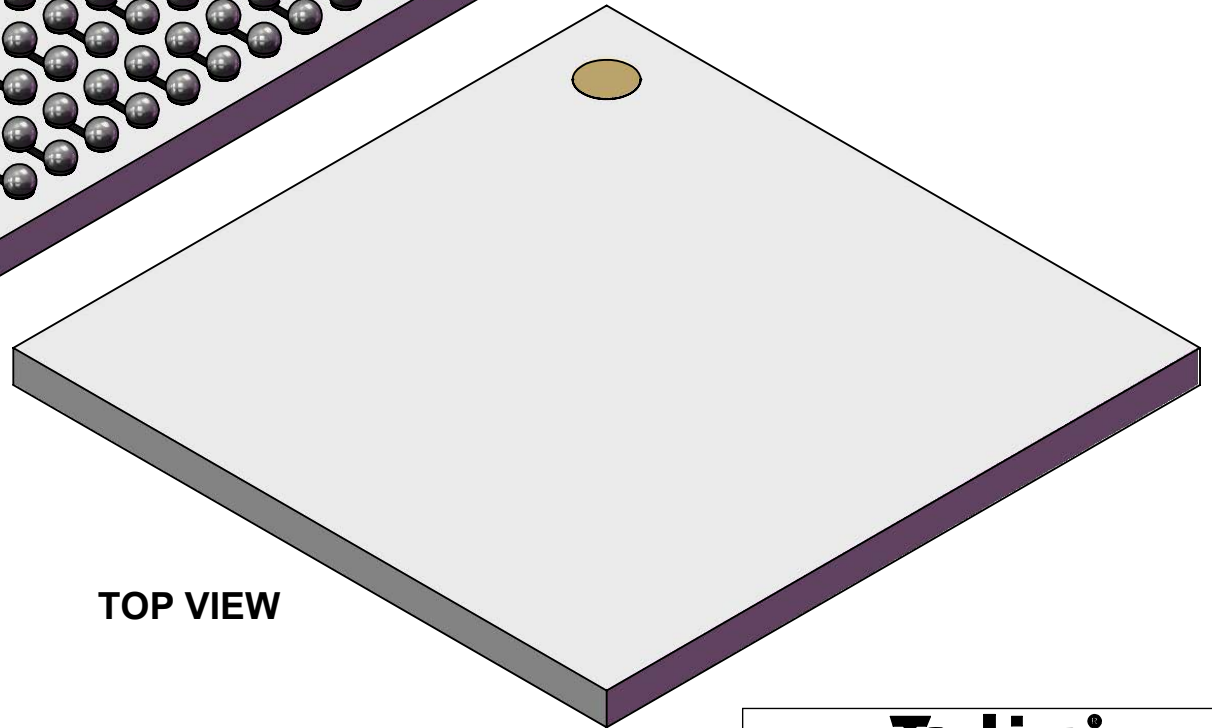
SCALE 6:1	SIZE A	DRAWING NO. 520117	REV A
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DO NOT SCALE DRAWING SHEET 3 OF 6

MODEL
CBGA WITH BALL
WITHOUT DIE



BALL VIEW



TOP VIEW

TopLine[®]

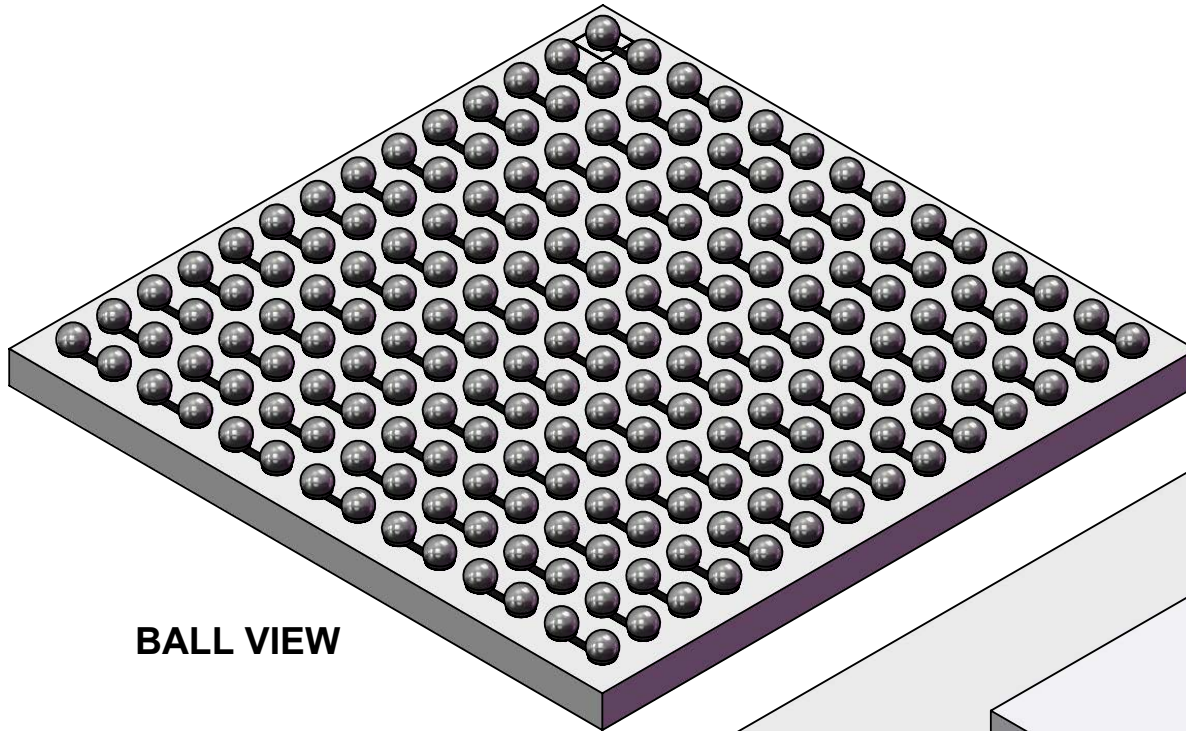
TITLE CBGA196T1.27L-DC11
CERAMIC BALL GRID ARRAY

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

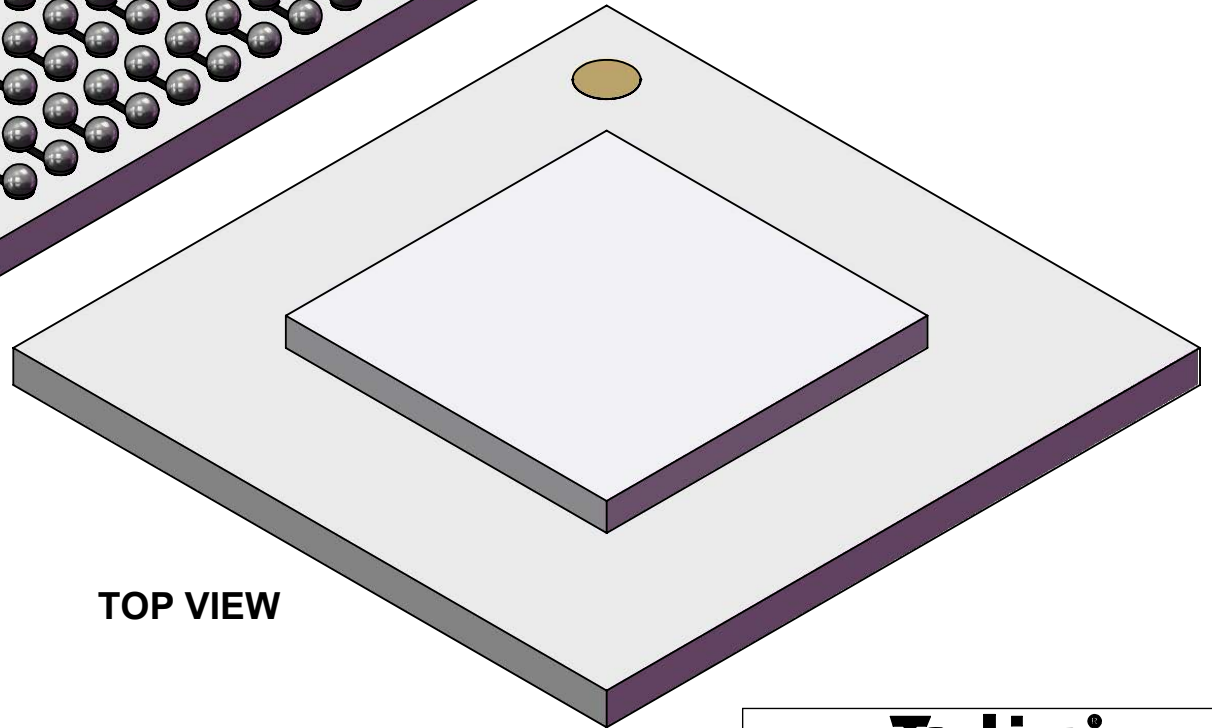
DO NOT SCALE DRAWING

SHEET 4 OF 6

**MODEL
CBGA WITH BALL
WITH DIE**



BALL VIEW



TOP VIEW

TopLine[®]

TITLE CBGA196T1.27L-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

SERIES

CBGA = CERAMIC
BALL GRID ARRAY

196

BALLS

NBR SOLDER
BALLS

T

TRAY

T = JEDEC

1.27

PITCH

1.27mm = 0.050"

X

ALLOY

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

DC11

DAISY CHAIN

DC11 = SEE PATTERN

D

DIE

D = DUMMY DIE
BLANK = WITHOUT DIE

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

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