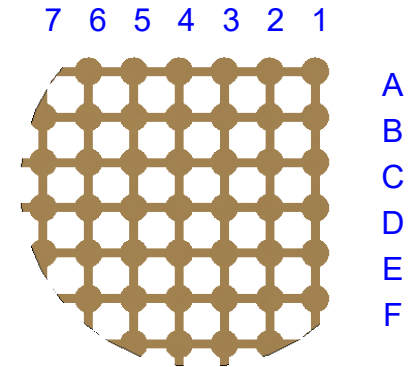
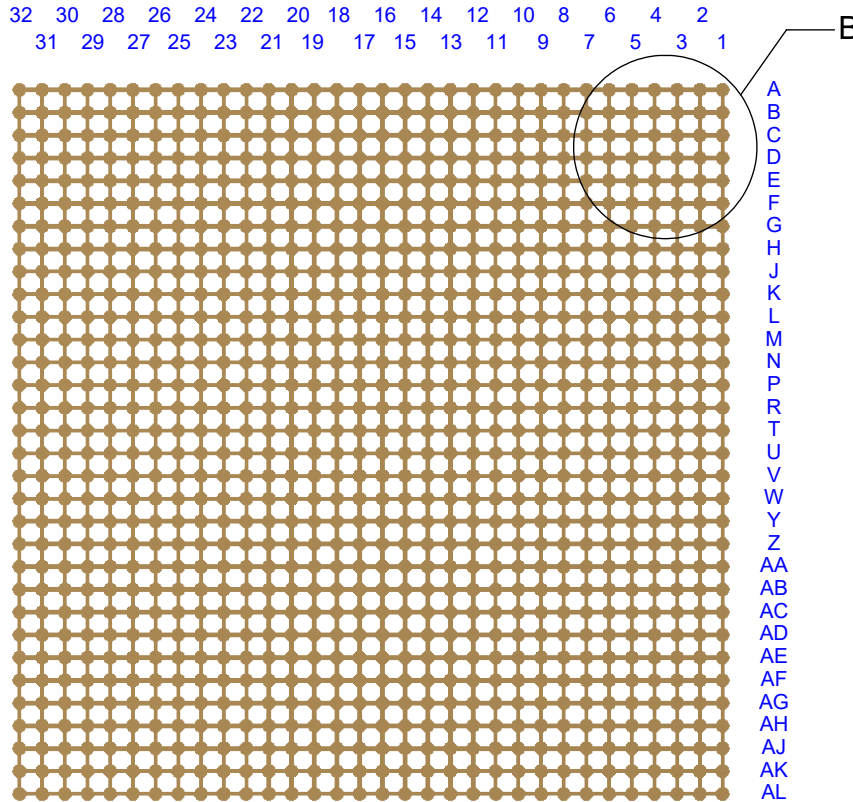


- Notes: (Unless Otherwise Specified).
- 1) ALL DIMENSIONS ARE IN MM.
  - 2) SOLDER BALL ALLOY: SEE PART NUMBER TABLE.
  - 3) BALL DIAMETER (BEFORE REFLOW): 0.635mm [25 MIL].
  - 4) SOLDER MASK DEFINED PAD OPENING: 0.508mm [20 MIL].
  - 5) PAD Cu DIAMETER: 0.685mm [27 MIL].
  - 6) SUBSTRATE MATERIAL: FR4 (ALTERNATE BT).
  - 7) DUMMY DIE IS OPTIONAL.
  - 8) DAISY CHAIN PATTERN (SEE PAGE 2).
  - 9) MSL-3 RECOMMEND BAKING 24 HOURS @ 125°C TO REMOVE MOISTURE PRIOR TO SOLDERING TO PC BOARD.

PART NUMBER TABLE				
PART NUMBER	BALL ALLOY	Pb-FREE	RoHS	Si DIE
LBGA1024T1.0C-BUS	Sn96.5/Ag3.0/Cu0.5	YES	YES	NO
LBGA1024T1.0C-BUS-D	Sn96.5/Ag3.0/Cu0.5	YES	YES	YES
LBGA1024T1.0-BUS	Sn63/Pb37	NO	NO	NO
LBGA1024T1.0-BUS-D	Sn63/Pb37	NO	NO	YES

APPROVALS		DATE	<b>TopLine</b> <sup>®</sup>			
DRAWN	T. Au	6/24/2021				
ENG	M. Hart	6/24/2021	TITLE		LBGA1024T1.0-BUS ALL PADS SHORTED	
MFG			SCALE		SIZE	DRAWING NO.
QA			3:1		A	513209
CUST						REV
REVISED						B
DO NOT SCALE DRAWING					SHEET 1 OF 4	

# BALL VIEW



DETAIL B  
SCALE 6 : 1

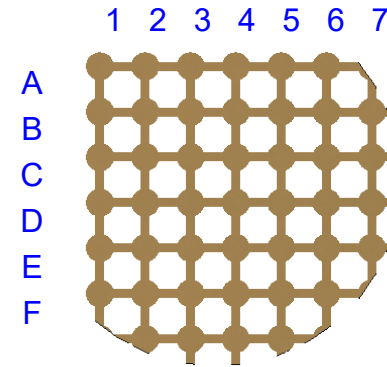
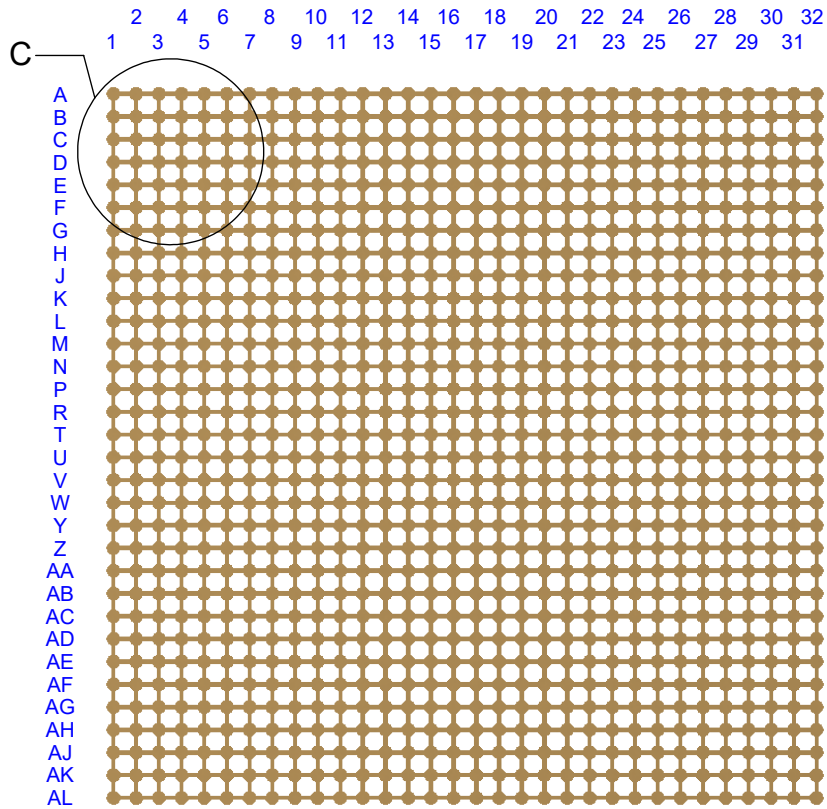
ALL PADS  
CONNECTED

**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 0.685mm [27 MIL].
- 3) PCB DAISY CHAIN TRACING LINE WIDTH 0.204mm [8 MIL].
- 4) SMD (SOLDER MASK DEFINED) PAD OPENING 0.508mm [20 MIL].

<b>TopLine</b> ®			
TITLE <b>LBGA1024T1.0-BUS</b> <b>ALL PADS SHORTED</b>			
SCALE 3:1	SIZE A	DRAWING NO. 513209	REV B
DO NOT SCALE DRAWING		SHEET 2   OF 4	

BOTTOM SIDE (TOP X-RAY VIEW)



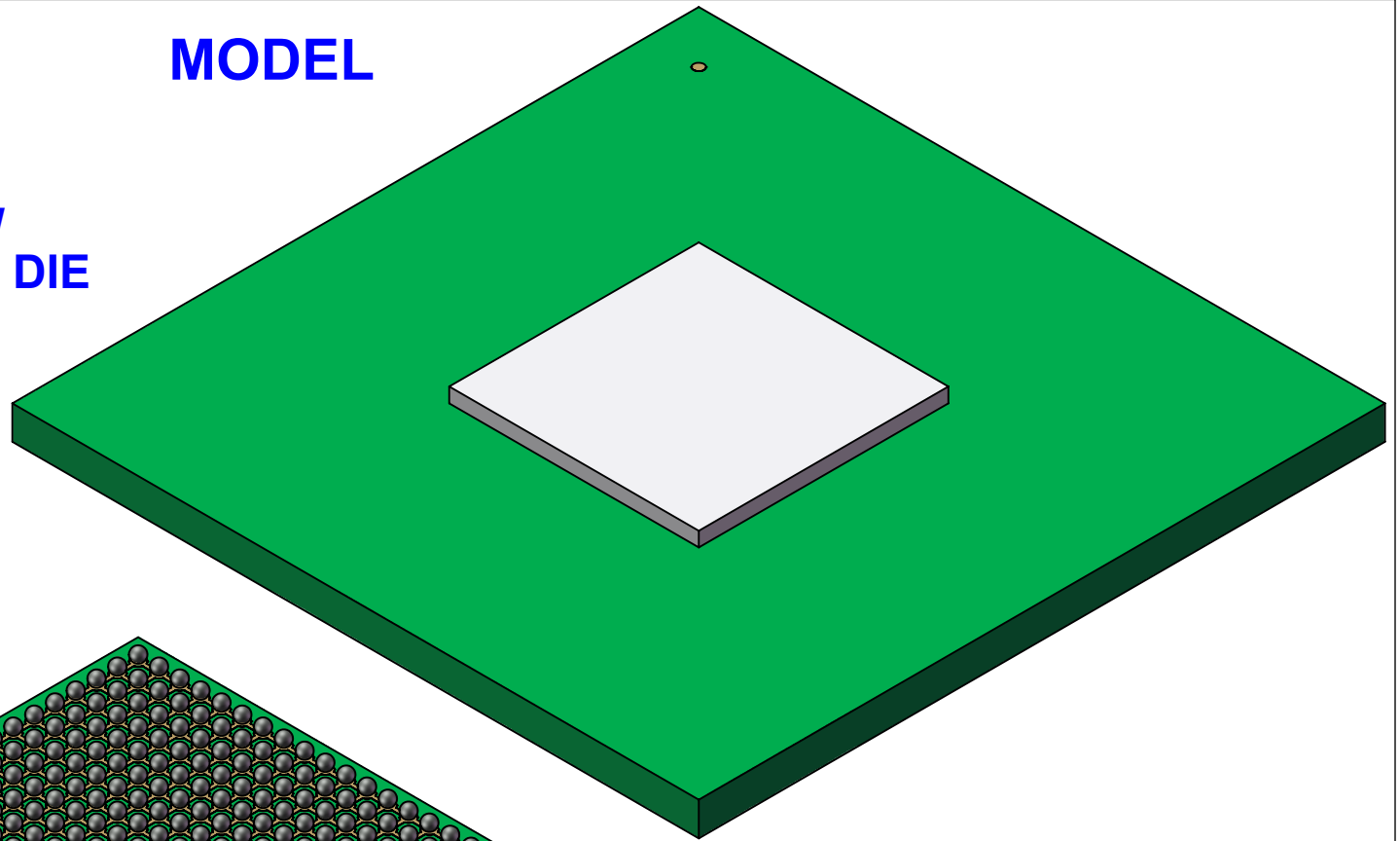
DETAIL C  
SCALE 6 : 1

ALL PADS  
CONNECTED

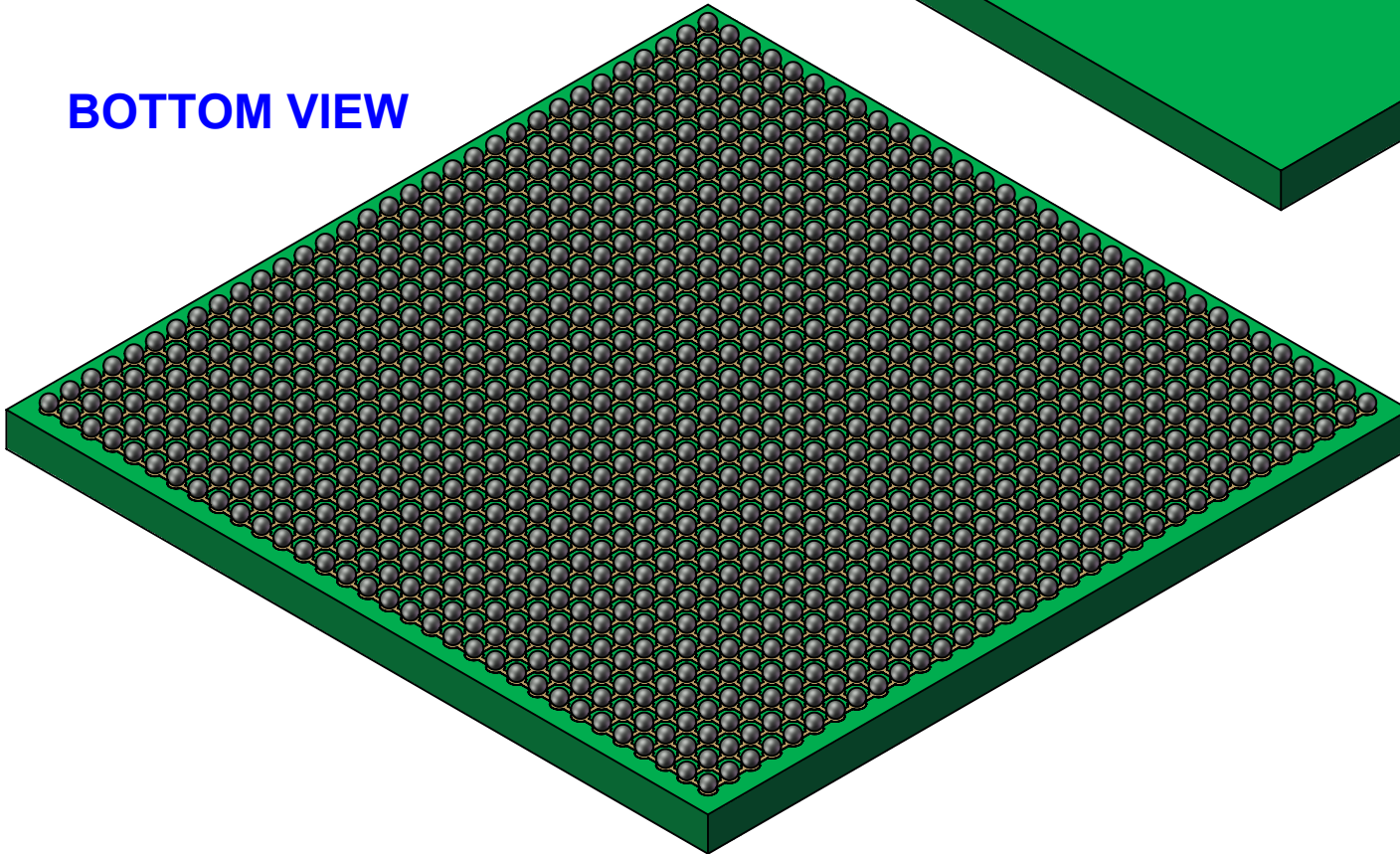
<b>TopLine</b> ®			
TITLE LBGA1024T1.0-BUS ALL PADS SHORTED			
SCALE 3:1	SIZE A	DRAWING NO. 513209	REV B
DO NOT SCALE DRAWING		SHEET 3 OF 4	

# MODEL

## TOP VIEW WITH DUMMY DIE



## BOTTOM VIEW



<b>TopLine</b> ®			
TITLE		LBGA1024T1.0-BUS ALL PADS SHORTED	
SCALE	SIZE	DRAWING NO.	REV
2:1	A	513209	B
DO NOT SCALE DRAWING			SHEET 4 OF 4