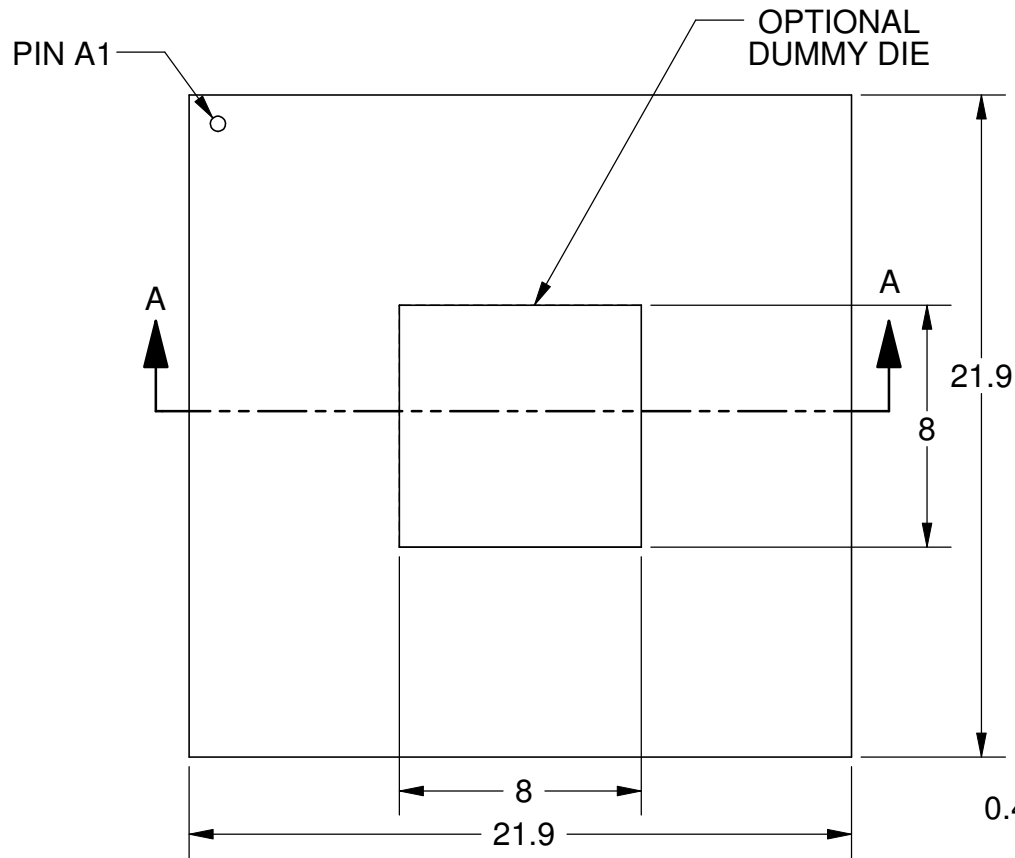
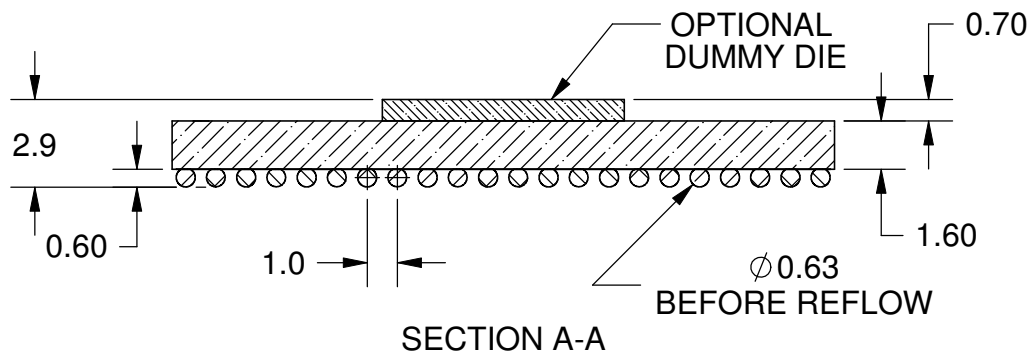
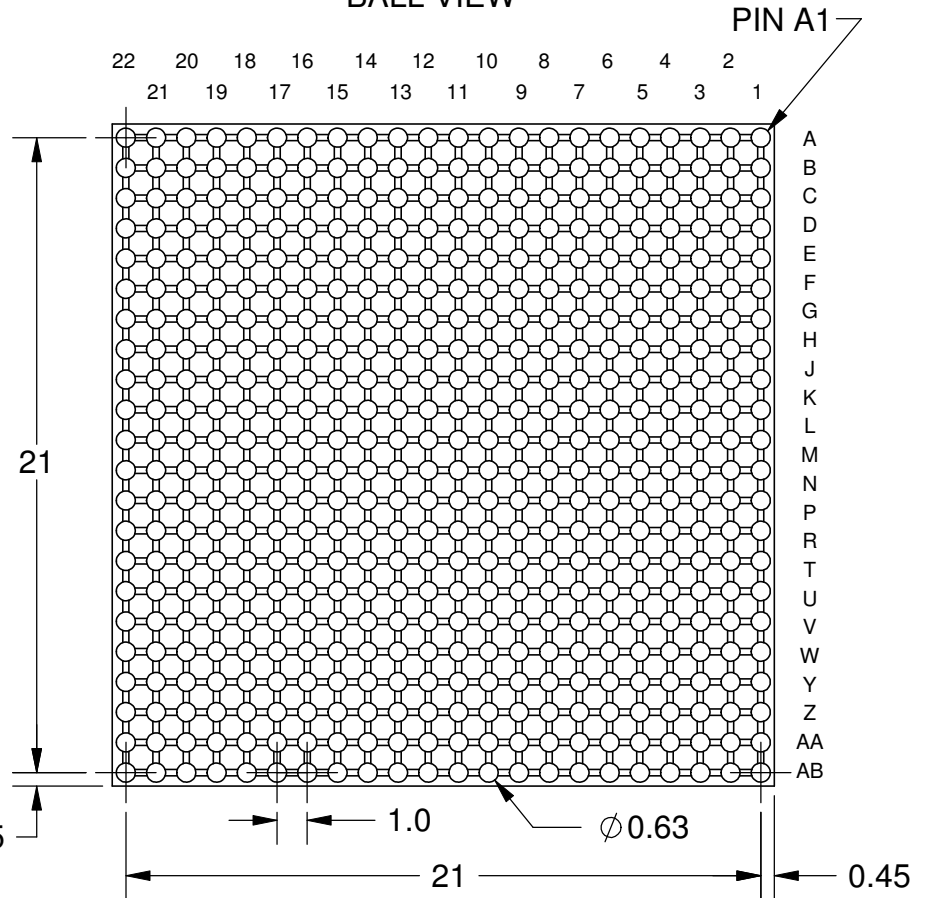


TOP VIEW



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: 0.685mm [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 @ 125C TO REMOVE MOISTURE PRIOR TO SOLDERING TO PC BOARD.

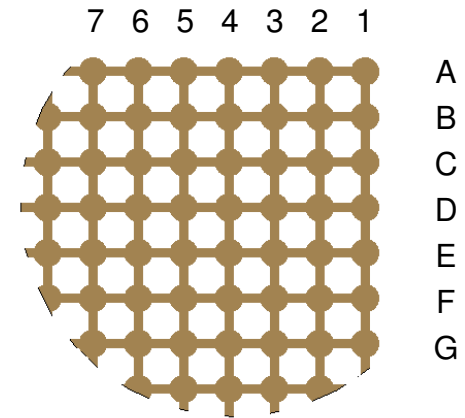
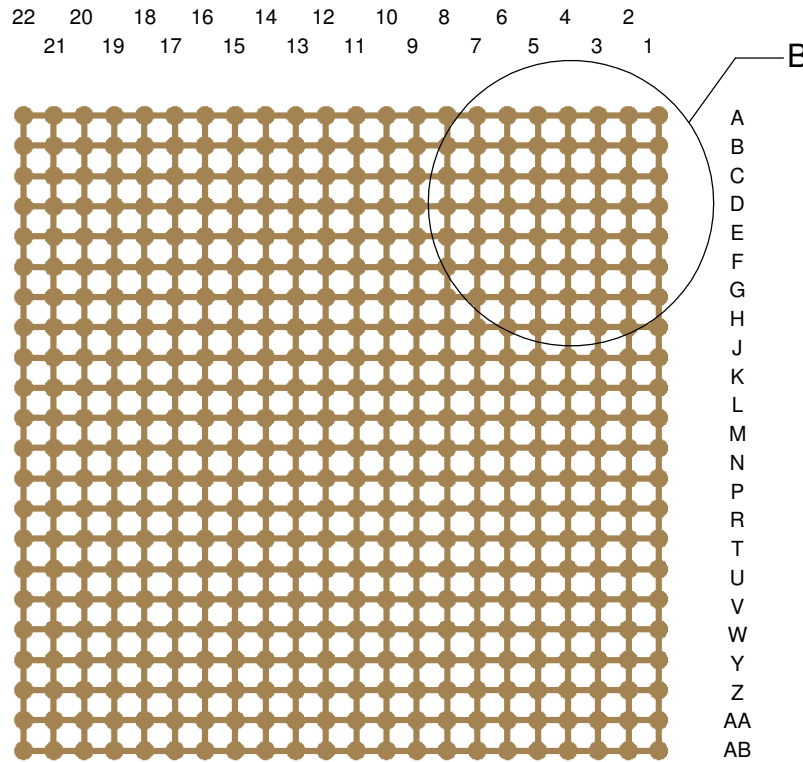
SECTION A-A

PART NUMBER TABLE

PART NUMBER	BALL ALLOY	Pb-FREE	RoHS	Si DIE
LBGA484T1.0C-BUS	Sn96.5/Ag3.0/Cu0.5	YES	YES	NO
LBGA484T1.0C-BUS-D	Sn96.5/Ag3.0/Cu0.5	YES	YES	YES
LBGA484T1.0-BUS	Sn63/Pb37	NO	NO	NO
LBGA484T1.0-BUS-D	Sn63/Pb37	NO	NO	YES

TOLERANCE UNLESS NOTED		APPROVALS		DATE				
X.XX	+/- 0.01	DRAWN J. Hines		9/18/2014				
X.XXX	+/- 0.005	ENG M. Hart		9/18/2014	TITLE			
X.XXXX	+/- 0.0005	MFG			LBGA484T1.0-BUS			
ANGLES	+/- 0.5°	THIRD ANGLE PROJECTION			ALL PADS SHORTED			
ALL DIMENSIONS IN		QA	SCALE	SIZE	DRAWING NO.		REV	
INCHES <input type="checkbox"/> MILLIMETERS <input checked="" type="checkbox"/>		CUST	4:1	A	512201		A	
		REVISED	DO NOT SCALE DRAWING		SHEET 1 OF 3			

### BALL VIEW



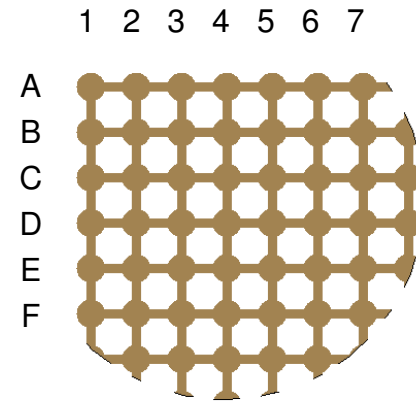
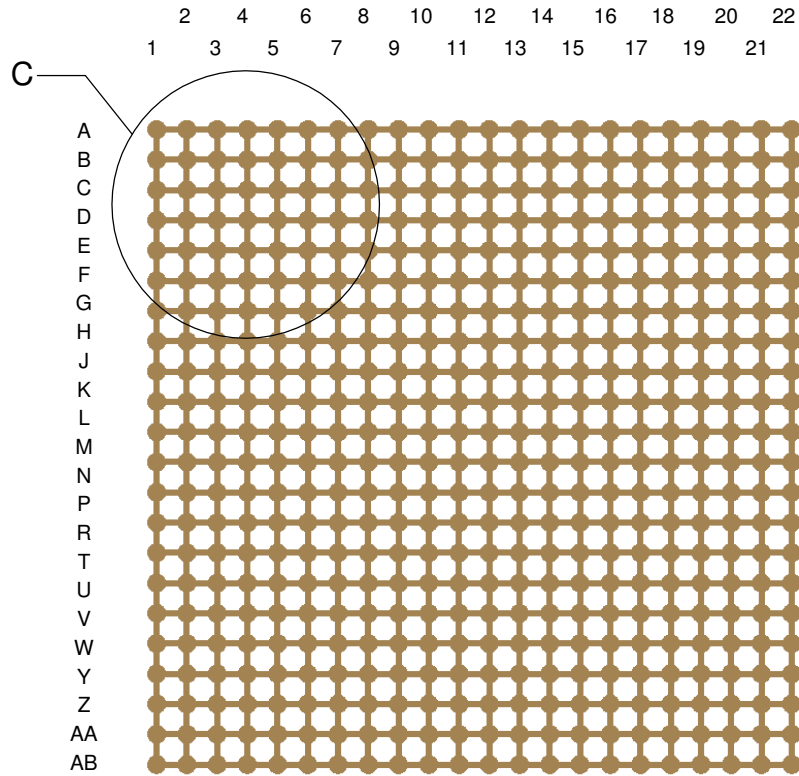
DETAIL B  
SCALE 6 : 1  
ALL PADS  
CONNECTED

**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		LPGA484T1.0-BUS ALL PADS SHORTED	
SCALE	SIZE	DRAWING NO.	REV
4:1	A	512201	A
DO NOT SCALE DRAWING			SHEET 2 OF 3

BOTTOM SIDE (TOP X-RAY VIEW)



DETAIL C  
SCALE 6 : 1  
ALL PADS  
CONNECTED

<b>TopLine</b> ®			
TITLE LPGA484T1.0-BUS ALL PADS SHORTED			
SCALE 4:1	SIZE A	DRAWING NO. 512201	REV A
DO NOT SCALE DRAWING		SHEET 3 OF 3	