

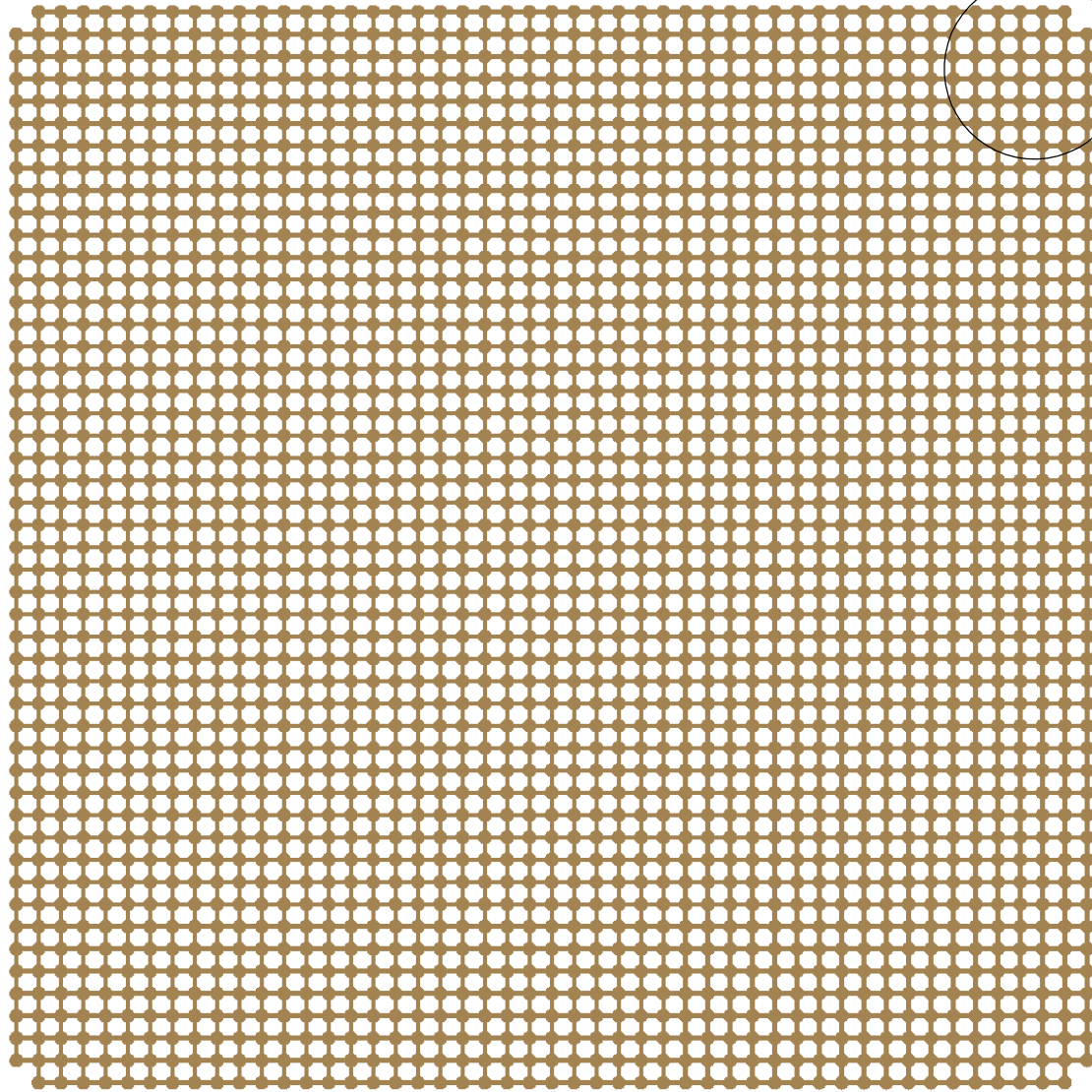
- Notes: (Unless Otherwise Specified).
- 1) ALL DIMENSIONS ARE IN MM.
 - 2) SOLDER BALL ALLOY: SEE PART NUMBER TABLE.
 - 3) BALL DIAMETER (BEFORE REFLOW): 0.635mm [25 MIL].
 - 4) SOLDER MASK DEFINED PAD OPENING: 0.508mm [20 MIL].
 - 5) PAD Cu DIAMETER: 0.685mm [27 MIL].
 - 6) SUBSTRATE MATERIAL: FR4 (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.

| PART NUMBER TABLE | | | | |
|---------------------|--------------------|---------|------|--------|
| PART NUMBER | BALL ALLOY | Pb-FREE | RoHS | Si DIE |
| LBGA2397T1.0C-BUS | Sn96.5/Ag3.0/Cu0.5 | YES | YES | NO |
| LBGA2397T1.0C-BUS-D | Sn96.5/Ag3.0/Cu0.5 | YES | YES | YES |
| LBGA2397T1.0-BUS | Sn63/Pb37 | NO | NO | NO |
| LBGA2397T1.0-BUS-D | Sn63/Pb37 | NO | NO | YES |

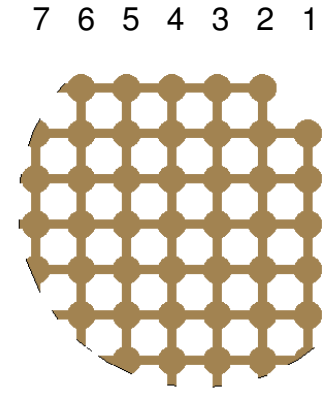
| | | | | | | | | |
|---|------------|------------------------|--|-----------|------------------------|--------|--------------------|-------|
| TOLERANCE UNLESS NOTED | | APPROVALS | | DATE | | | | |
| X.XX | +/- 0.01 | DRAWN J. Hines | | 8/15/2014 | | | | |
| X.XXX | +/- 0.005 | ENG M. Hart | | 8/15/2014 | TITLE LBGA2397T1.0-BUS | | | |
| X.XXXX | +/- 0.0005 | MFG | | | ALL PADS SHORTED | | | |
| ANGLES +/- 0.5° | | THIRD ANGLE PROJECTION | | | SCALE 2:1 | SIZE A | DRAWING NO. 514911 | REV A |
| ALL DIMENSIONS IN INCHES <input type="checkbox"/> MILLIMETERS <input checked="" type="checkbox"/> | | REVISED | | | DO NOT SCALE DRAWING | | SHEET 1 OF 3 | |

BALL VIEW

48 46 44 42 40 38 36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2
 49 47 45 43 41 39 37 35 33 31 29 27 25 23 21 19 17 15 13 11 9 7 5 3 1



B
 A
 B
 C
 D
 E
 F
 G
 H
 J
 K
 L
 M
 N
 P
 R
 T
 U
 V
 W
 Y
 Z
 AA
 AB
 AC
 AD
 AE
 AF
 AG
 AH
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 BF



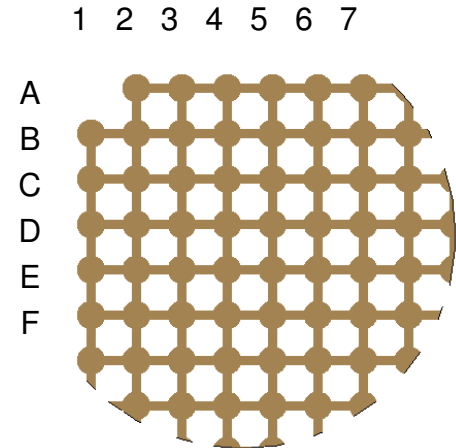
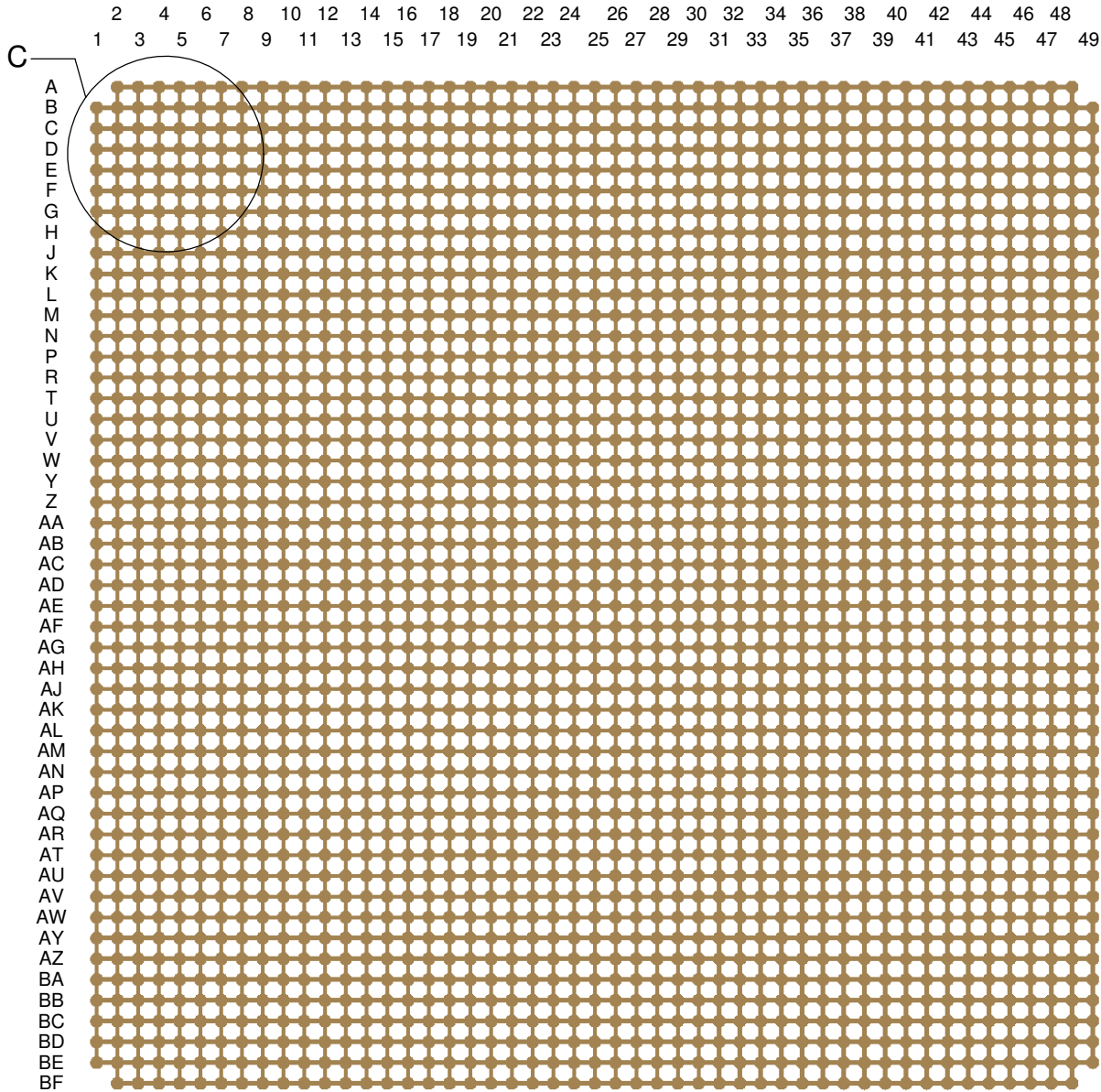
DETAIL B
 SCALE 6 : 1
 ALL PADS
 CONNECTED

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].

| | | | |
|----------------------|------|--------------------------------------|--------------|
| TopLine ® | | | |
| TITLE | | LBGA2397T1.0-BUS ALL PADS SHORTED | |
| SCALE | SIZE | DRAWING NO. | REV |
| 3:1 | A | 514911 | A |
| DO NOT SCALE DRAWING | | | SHEET 2 OF 3 |

BOTTOM SIDE (TOP X-RAY VIEW)



DETAIL C
 SCALE 6 : 1
 ALL PADS
 CONNECTED

| | | | |
|--|-----------|-----------------------|----------|
| TopLine ® | | | |
| TITLE LBGA2397T1.0-BUS ALL PADS SHORTED | | | |
| SCALE 3:1 | SIZE A | DRAWING NO. 514911 | REV A |
| DO NOT SCALE DRAWING | | SHEET 3 OF 3 | |