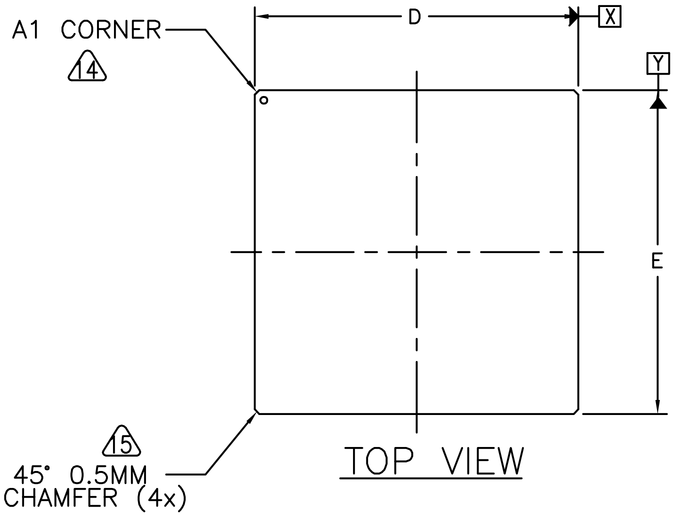
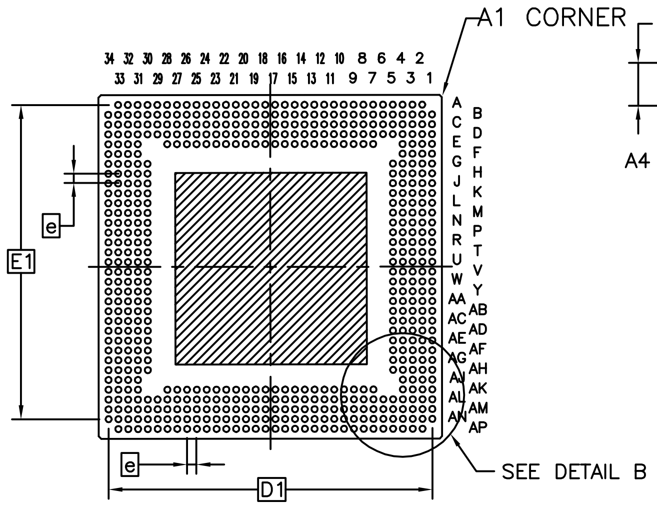
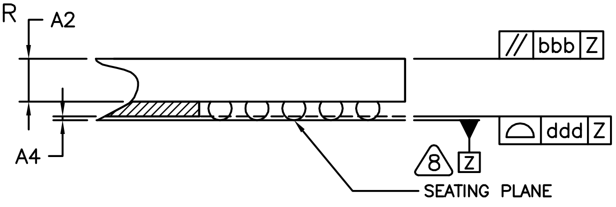


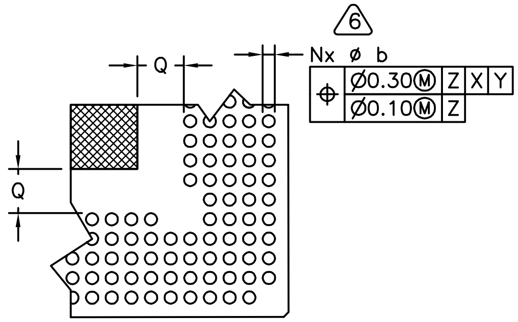
TOP VIEW



BOTTOM VIEW



DETAIL A



DETAIL B

SIDE VIEW

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. MATERIAL MUST COMPLY WITH BANNED AND RESTRICTED SUBSTANCES SPEC # 10–0131.
3. DIMENSIONING AND TOLERANCING PER ASME Y14.5M 1994
4. "e" REPRESENT THE BASIC SOLDER BALL GRID PITCH.
5. "M" REPRESENT THE BASIC SOLDER BALL MATRIX SIZE, & SYMBOL "N" IS THE MAXIMUM ALLOWABLE NUMBER OF BALLS AFTER DEPOPULATING.
6. "b" IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER AFTER REFLOW PARALLEL TO PRIMARY DATUM Z
7. DIMENSION "ddd" IS MEASURED PARALLEL TO PRIMARY DATUM Z
8. PRIMARY DATUM Z AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
9. PACKAGE SURFACE SHALL BE BLACK INK.
10. CAVITY DEPTH VARIES WITH DIE THICKNESS.
11. SUBSTRATE MATERIAL BASE IS COPPER.
12. ENCAPSULANT SIZE MAY VARY WITH DIE SIZE.
13. CONFORMS TO JEDEC MO–149F, EXCEPT "b" DIMENSION.
14. 45 DEG. 0.45 MM CHAMFER CORNER AND WHITE SPOT FOR PIN 1 IDENTIFICATION.
15. ALL DIMENSIONS APPLY TO LEADED (–), LEAD FREE (+) PKG. CODES.
16. PACKAGE CODE: V564–1,
    V564T–1

DIMENSIONAL REFERENCES

REF.	MIN.	NOM.	MAX.	NOTES
A	1.20	---	1.60	
A1	0.40	0.50	0.60	
A2	0.80	0.90	1.00	
A4	0.10			
D	34.80	35.00	35.20	
D1	33.00 BSC.			
E	34.80	35.00	35.20	
E1	33.00 BSC.			
b	0.50	0.60	0.70	13
M	34			
N	564			
bbb			0.25	
ddd	0.20			
e	1.00 BSC.			
Q	0.25			

–DRAWING NOT TO SCALE–

maxim integrated™

TITLE:
PACKAGE OUTLINE, 564 BALLS SBGA,
35.0x35.0x1.60mm, 1.00mm PITCH,4 LAYER

APPROVAL	DOCUMENT CONTROL NO.	REV.	
10-03-13 Jerold Lee	21–0371	C	1/1