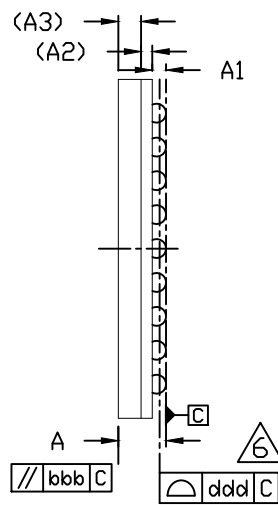
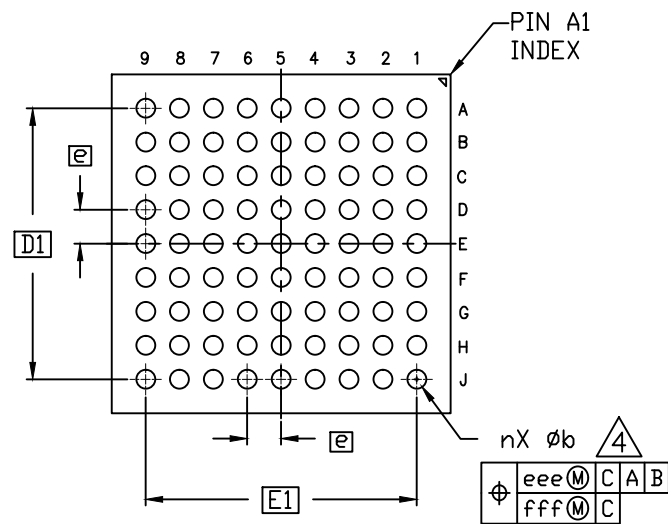


TOP VIEW



SIDE VIEW



BOTTOM VIEW

NOTES:

1. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED
2. MATERIAL MUST COMPLY WITH BANNED AND RESTRICTED SUBSTANCES SPEC # 10-0131
3. SYMBOL "n" IS THE NUMBER OF BALLS
4. DIMENSION "b" IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER PARALLEL TO PRIMARY DATUM C.
5. THE BASIC SOLDER BALL DIA IS 0.45 MM
6. PRIMARY DATUM C SEATING PLANE IS DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS
7. MARKING SHOWN IS FOR PKG. ORIENTATION ONLY
8. ALL DIMENSIONS APPLY TO PbFREE (+) PKG. CODE
9. PACKAGE CODE: X8188+1, X8188+3C, X8188+4C

SYMBOL	COMMON DIMENSIONS		
	MIN.	NOM.	MAX.
A	1.04	1.17	1.30
A1	0.32	-	0.42
A2	0.26 REF		
A3	0.54 REF		
D	8 BSC		
E	8 BSC		
b	0.4	-	0.5
e	0.8 BSC		
n	81		
D1	6.4 BSC		
E1	6.4 BSC		
aaa	0.1		
bbb	0.2		
ddd	0.15		
eee	0.15		
fff	0.08		

-DRAWING NOT TO SCALE-



TITLE:
PACKAGE OUTLINE, 81 BALLS CTBGA,
8x8x1.17mm, 0.8mm PITCH

APPROVAL DIVYA CHOUDHARY	DOCUMENT CONTROL NO. 21-0735	REV. C	1/1
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