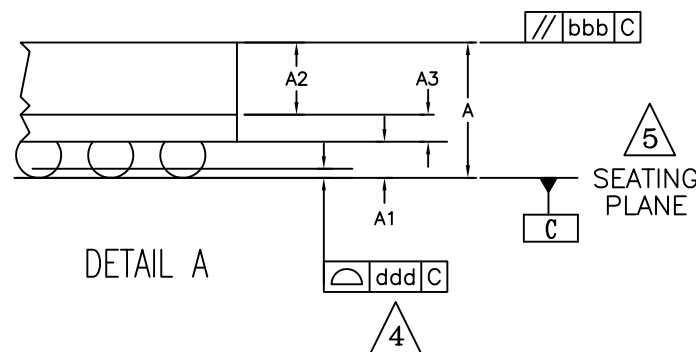
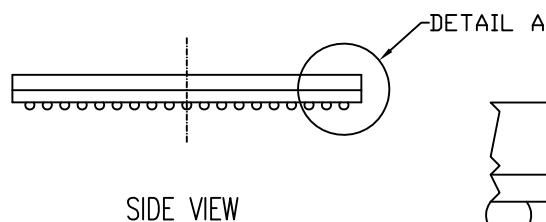
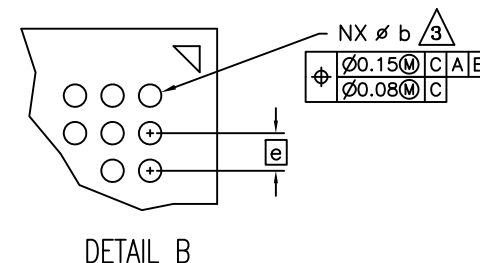
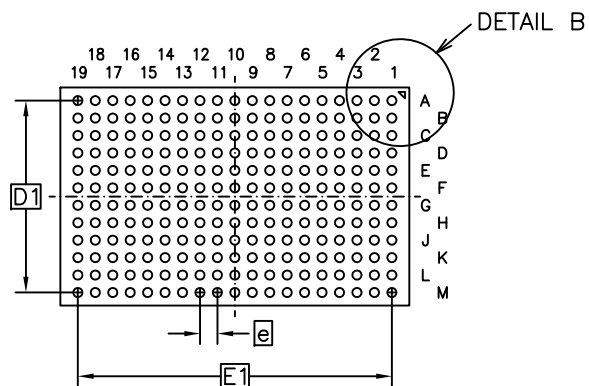
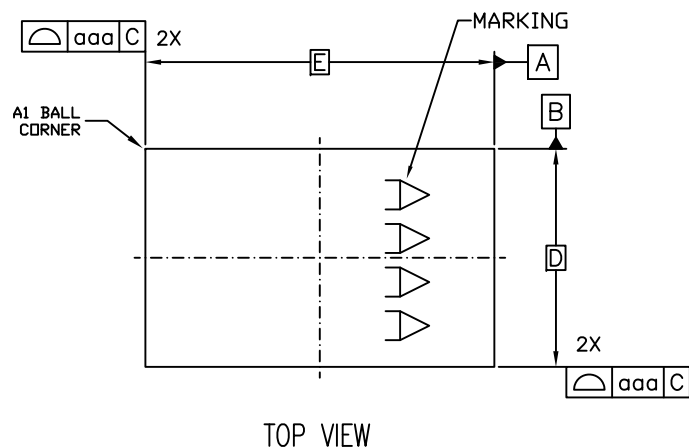




DIMENSIONAL REFERENCES			
REF.	MIN.	NOM.	MAX.
A	1.30	1.40	1.50
A1	0.28	0.33	0.38
A2	0.70 REF.		
A3	0.36 REF.		
b	0.37	0.42	0.47
D	10.00 BSC		
D1	8.80 BSC		
E	16.00 BSC		
E1	14.40 BSC		
e	0.80 BSC		
aaa	0.15		
bbb	0.20		
ddd	0.12		
N	228		

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS.
- DIMENSIONING AND TOLERANCING PER ASME Y14.5M 2009.
- 'b' IS MEASURABLE AT THE MAXIMUM SOLDER BALL DIAMETER AFTER REFLOW PARALLEL TO PRIMARY DATUM C.
- DIMENSION 'ddd' IS MEASURED PARALLEL TO PRIMARY DATUM C.
- PRIMARY DATUM C AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
- PACKAGE SURFACE SHALL BE MATTE FINISH CHARMILLES 24 TO 27.
- SUBSTRATE MATERIAL BASE IS BT RESIN.
- THE OVERALL PACKAGE THICKNESS 'A' ALREADY CONSIDERS COLLAPSE BALLS.
- MATERIAL MUST BE COMPLIANT WITH MAXIM SPECIFICATION 10-0131 FOR SUBSTANCE CONTENT, MUST BE EU ROHS COMPLIANT WITHOUT EXEMPTION AND PB-FREE.
- PACKAGE CODE: X22860+3
- ALL DIMENSIONS APPLY TO PbFREE (+) PKG. CODE ONLY.

—DRAWING NOT TO SCALE—



TITLE:
PACKAGE OUTLINE, 228 BALLS CSBGA,
16x10x1.40 MM, 0.80 MM PITCH

APPROVAL	DOCUMENT CONTROL NO. 21-1047	REV. B	1/1
----------	---------------------------------	-----------	-----