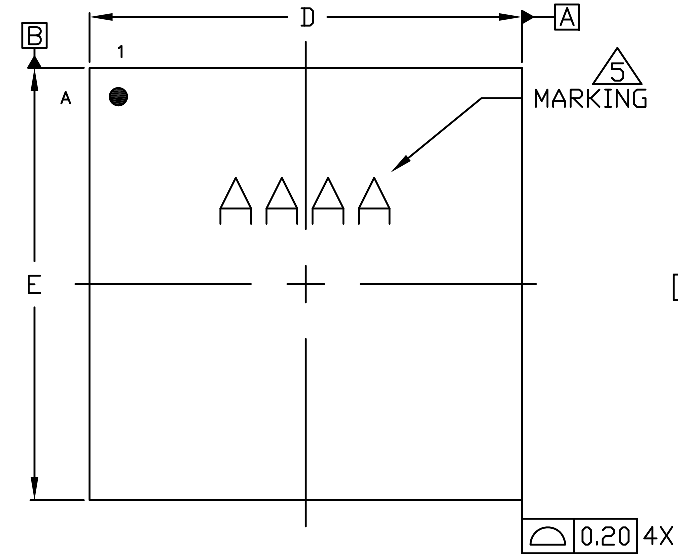
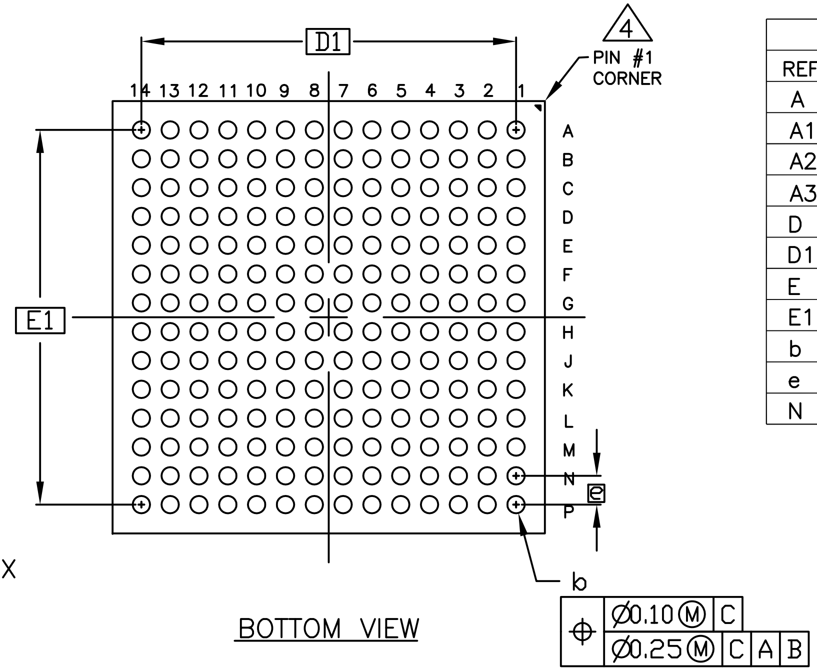
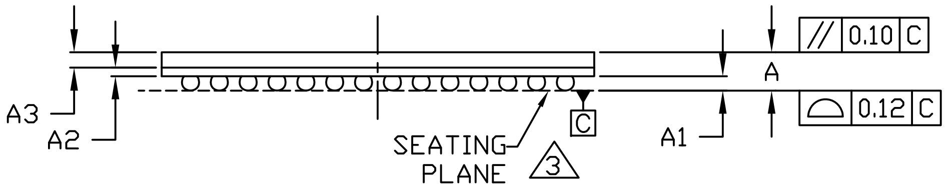


TOP VIEW



BOTTOM VIEW



SIDE VIEW

DIMENSIONS			
REF.	MIN.	NOM.	MAX.
A	1.22	1.33	1.44
A1	0.40	0.50	0.60
A2	0.30 REF		
A3	0.53 REF		
D	14.80	15.00	15.20
D1	13.00 BSC		
E	14.80	15.00	15.20
E1	13.00 BSC		
b	0.60		
e	1.00 BSC		
N	196		

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. THE BASIC SOLDER BALL GRID PITCH IS 1.00 MM AND BALL DIA. IS 0.60MM.
3. PRIMARY DATUM C AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
4. A1 BALL PAD CORNER I.D.
5. MARKING SHOWN IS FOR PKG. ORIENTATION ONLY
6. MATERIAL MUST BE COMPLIANT WITH MAXIM SPECIFICATION 10-0131 FOR SUBSTANCE CONTENT, MUST BE Eu ROHS COMPLIANT WITHOUT EXEMPTION AND PB-FREE.
7. THIS IS A CUSTOM PACKAGE
8. ALL DIMENSIONS APPLY TO LEADED (-), LEADFREE (+) AND ROHS EXEMPT (#) PKG. CODES.
9. PKG. CODES: X19655F-1, X19655FH#1, X19655FH#2, X19655F+1, X19655F+2.

-DRAWING NOT TO SCALE-

TITLE:
PACKAGE OUTLINE, 196 BALLS
FLIP CHIP CSP, 15x15x1.3mm

APPROVAL	DOCUMENT CONTROL NO.	REV.	
EDEN CHEN 11/10/12	21-0476	D	1/1