



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.880	0.930	0.980	.035	.037	.039
A1	0.250	0.280	0.310	.010	.011	.012
A2	0.630	0.650	0.670	.025	.026	.027
b	0.340	0.370	0.400	.013	.015	.016
D	2.550	2.600	2.650	.100	.102	.104
D1	2.000 BSC			.079 BSC		
E	2.490	2.540	2.590	.098	.100	.102
E1	1.800 BSC			.071 BSC		
e	0.500 BSC			.020 BSC		
MD	5 BALLS			5 BALLS		
ME	4 BALLS			4 BALLS		
N	20 BALLS			20 BALLS		

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS.
- MD IS THE BALL MATRIX SIZE IN THE "D" DIRECTION, ME IS THE BALL MATRIX SIZE IN THE "E" DIRECTION, AND N IS THE TOTAL NUMBER OF BALLS FOR THE MATRIX SIZE MD X ME AND DOES NOT INCLUDE BALLS FROM ANY DEPOPULATED LOCATIONS. DIMENSIONING AND TOLERANCING CONFORM TO ASME Y14.5M-1994.
- PRIMARY DATUM C (SEATING PLANE) IS DEFINED BY THE CROWNS OF THE SOLDER BALLS.
- DIMENSION b IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER IN A PLANE PARALLEL TO DATUM C.
- THERE SHALL BE A MINIMUM CLEARANCE OF 0.10MM BETWEEN THE EDGE OF THE BUMP AND THE BODY EDGE.
- MARKING SHOWN IS FOR PKG. ORIENTATION PURPOSE ONLY.
- MATERIAL MUST COMPLY WITH BANNED AND RESTRICTED SUBSTANCES SPEC #10-0131.
- ALL DIMENSIONS APPLY TO PbFREE (+) PKG. CODES ONLY.

-DRAWING NOT TO SCALE-



TITLE:
PACKAGE OUTLINE, 20 BALLS
WLCSP, 0.50mm PITCH, C202A2+1

APPROVAL

DOCUMENT CONTROL NO.

21-0916

REV.

A

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