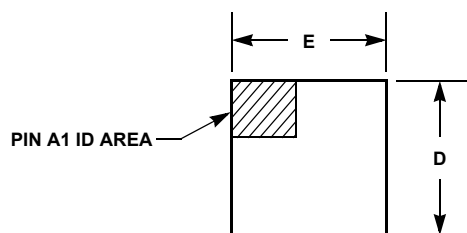
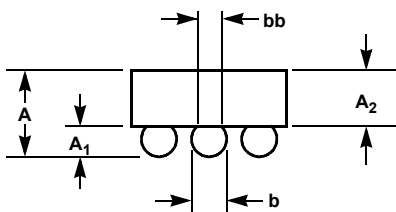


Plastic Packages for Integrated Circuits

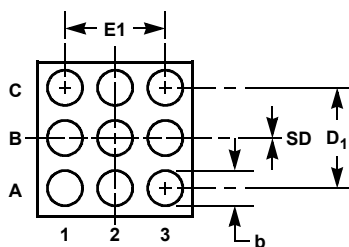
Wafer Level Chip Scale Package (WLCSP)



TOP VIEW



SIDE VIEW



BOTTOM VIEW

W3x3.9B

3x3 ARRAY 9 BALL WAFER LEVEL CHIP SCALE PACKAGE
(Renesas Standard)

SYMBOL	MILLIMETERS	NOTES
A	0.54 Min, 0.65 Max	-
A ₁	0.24 ±0.03	-
A ₂	0.355 ±0.03	-
b	0.32 ±0.03	-
bb	∅ 0.30 REF.	-
D	1.45 ±0.05	-
D ₁	1.00 BASIC	-
E	1.45 ±0.05	-
E ₁	1.00 BASIC	-
e	0.50 BASIC	-
SD	0.00 BASIC	-
N	9	3

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NOTES:

1. Dimensions are in Millimeters.
2. Dimensioning and tolerancing conform to ASME 14.5M-1994.
3. Symbol "N" is the actual number of solder balls.
4. Reference JEDEC MO-211-C, variation DD.