81-Pin Very FineLine Ball-Grid Array (VBGA) – Wafer Level Chip Scale Package (WLCSP) - A:0.54

- All dimensions and tolerances conform to ASME Y14.5M – 1994.
- Controlling dimension is in millimeters.
- Pin A1 may be indicated by an ID dot, or a special feature, in its proximity on package surface.

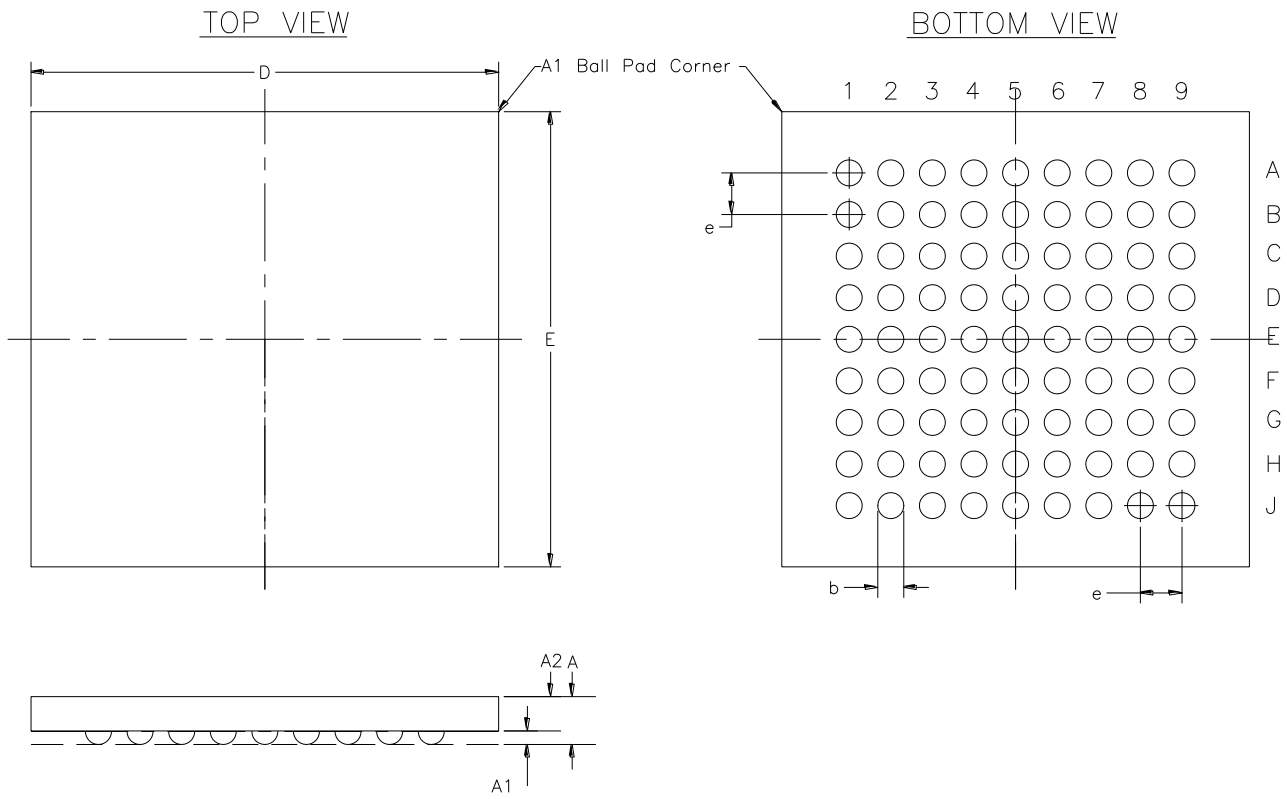
Package Information

Description	Specification
Ordering Code Reference	V
Package Acronym	VBGA
Substrate Material	NA
Solder ball composition	Pb-free: Sn:4Ag:0.5Cu (Typ.)
JEDEC Outline Reference	NA
Lead Coplanarity	0.0016 inch (0.04 mm)
Weight	0.02g (Typ.)
Moisture Sensitivity Level	Printed on moisture barrier bag

Package Outline Dimension Table

Symbol	Millimeters		
	Min.	Nom.	Max.
A	0.38	0.46	0.54
A1	0.09	0.13	0.17
A2	0.29	0.33	0.37
D	4.496 BSC		
E	4.377 BSC		
b	0.20	0.25	0.30
e	0.40 BSC		

Package Outline



Document Revision History

Table 1 shows the revision history for this document.

Table 1. Document Revision History

Date	Version	Changes
September 2014	1.0	Initial release
October 2014	2.0	Package outline drawing update in page 2

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