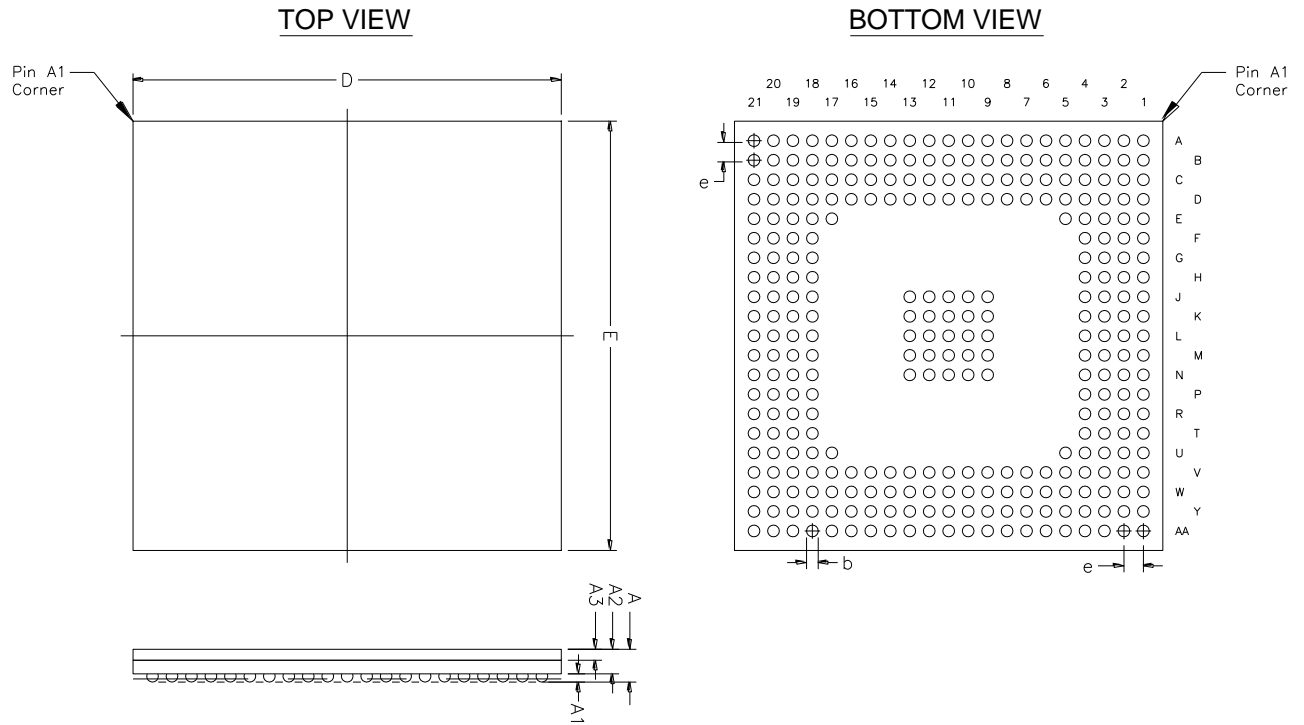


301-Pin Micro FineLine Ball-Grid Array (MBGA) - Copper Pillar - A:0.95

- 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	M
Package Acronym	MBGA
Substrate Material	BT
Solder ball composition	Pb-free: Sn:1.2Ag:0.5Cu:0.05Ni (Typ.)
JEDEC Outline Reference	MO-195 Variation: AH
Lead Coplanarity	0.003 inch (0.08 mm)
Weight	0.22 g (Typ.)
Moisture Sensitivity Level	Printed on moisture barrier bag

Package Outline Dimension Table			
Symbol	Millimeters		
	Min.	Nom.	Max.
A	0.75	0.85	0.95
A1	0.16	0.21	0.26
A2	0.49	0.64	0.79
A3	0.23	0.28	0.33
D	11.00 BSC		
E	11.00 BSC		
b	0.25	0.30	0.35
e	0.50 BSC		

Package Outline

Document Revision History

Table 1 shows the revision history for this document.

Table 1. Document Revision History

Date	Version	Changes
February 2013	1.0	Initial Release
April 2013	2.0	Solder ball composition has been changed from Sn:3Ag:0.5Cu to Sn:1.2Ag:0.5Cu:0.05Ni



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