

484-Pin FineLine Ball-Grid Array (FBGA) - Wire Bond - A:2.40

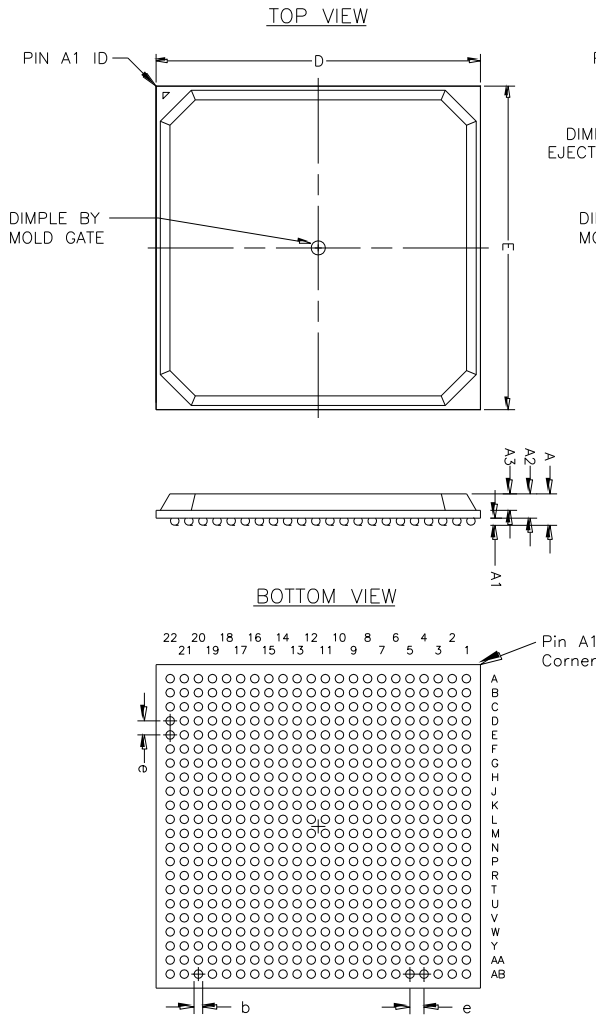
- All dimensions and tolerances conform to ASME Y14.5M – 1994.
- Controlling dimension is in millimeters.
- Pin A1 may be indicated by an ID dot, or a special feature, in its proximity on package surface.

Package Information	
Description	Specification
Ordering Code Reference	F
Package Acronym	FBGA
Substrate Material	BT
Solder ball composition	Regular: 63Sn:37Pb (Typ.) Pb-free: Sn:3Ag:0.5Cu (Typ.)
JEDEC Outline Reference	MS-034 Variation: AAJ-1
Lead Coplanarity	0.008 inch (0.20 mm)
Weight	2.3 g (Typ.)
Moisture Sensitivity Level	Printed on moisture barrier bag

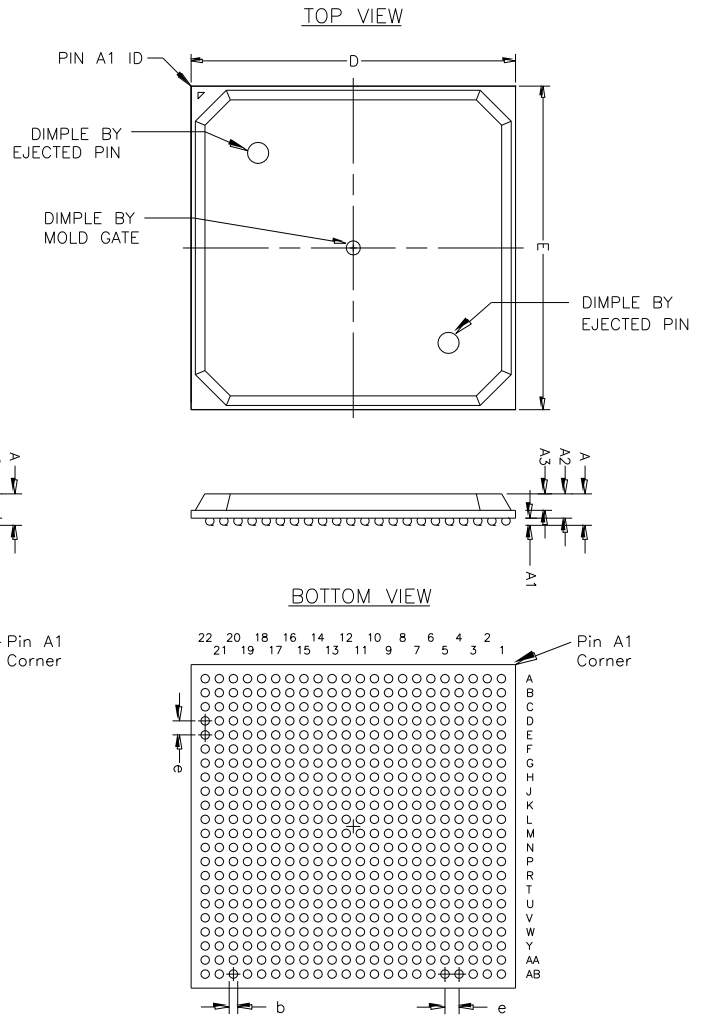
Package Outline Dimension Table			
Symbol	Millimeters		
	Min.	Nom.	Max.
A	2.10	2.25	2.40
A1	0.40	0.50	0.60
A2	1.50	1.75	2.00
A3	1.12	1.17	1.22
D	23.00 BSC		
E	23.00 BSC		
b	0.50	0.60	0.70
e	1.00 BSC		

Package Outline

OPTION 1



OPTION 2



Document Revision History

Table 1 shows the revision history for this document.

Table 1. Document Revision History

Date	Version	Changes
June 2011	1.0	Initial release
September 2011	1.1	Added ball A1 on the bottom view diagram. Added "Dimple by Mold Gate" indicator in the diagram
December 2012	2.0	Add option 2 package outline in page.2.



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