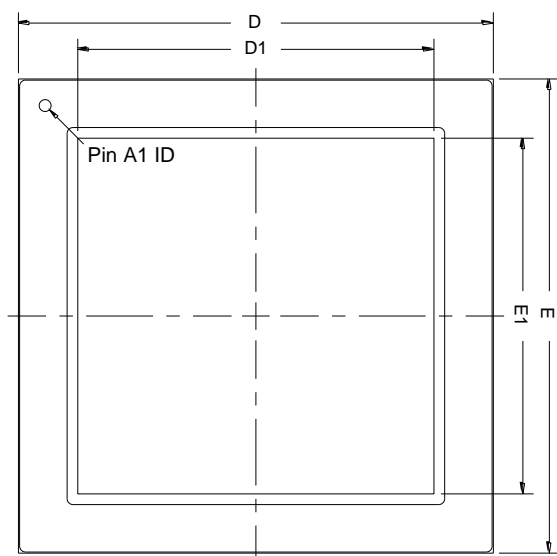
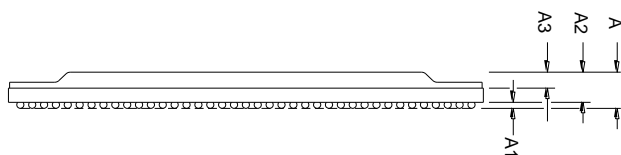
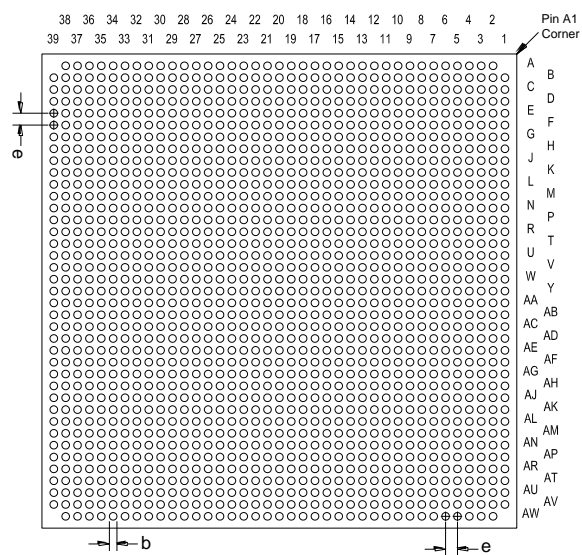


1517-Pin FineLine Ball-Grid Array (FBGA) - Flip Chip - Single-Piece Lid - A:3.40 - D1:34.1

- 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: AAU-1
Lead Coplanarity	0.010 inch (0.25 mm)
Weight	15.2 g (Typ.)
Moisture Sensitivity Level	Printed on moisture barrier bag

Package Outline Dimension Table			
Symbol	Millimeters		
	Min.	Nom.	Max.
A	3.00	3.20	3.40
A1	0.40	0.50	0.60
A2	2.40	2.70	3.00
A3	1.30	1.40	1.50
D	40.00 BSC		
D1	34.10 BSC		
E	40.00 BSC		
E1	33.00 BSC		
b	0.50	0.60	0.70
e	1.00 BSC		

Package Outline**TOP VIEW****BOTTOM VIEW**

Document Revision History

Table 1 shows the revision history for this document.

Table 1. Document Revision History

Date	Version	Changes
May 2011	1.0	Initial release
June 2013	2.0	Change the coplanarity tolerance from 0.008 inch to 0.010 inch per JEDEC Standard MS-034D.



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