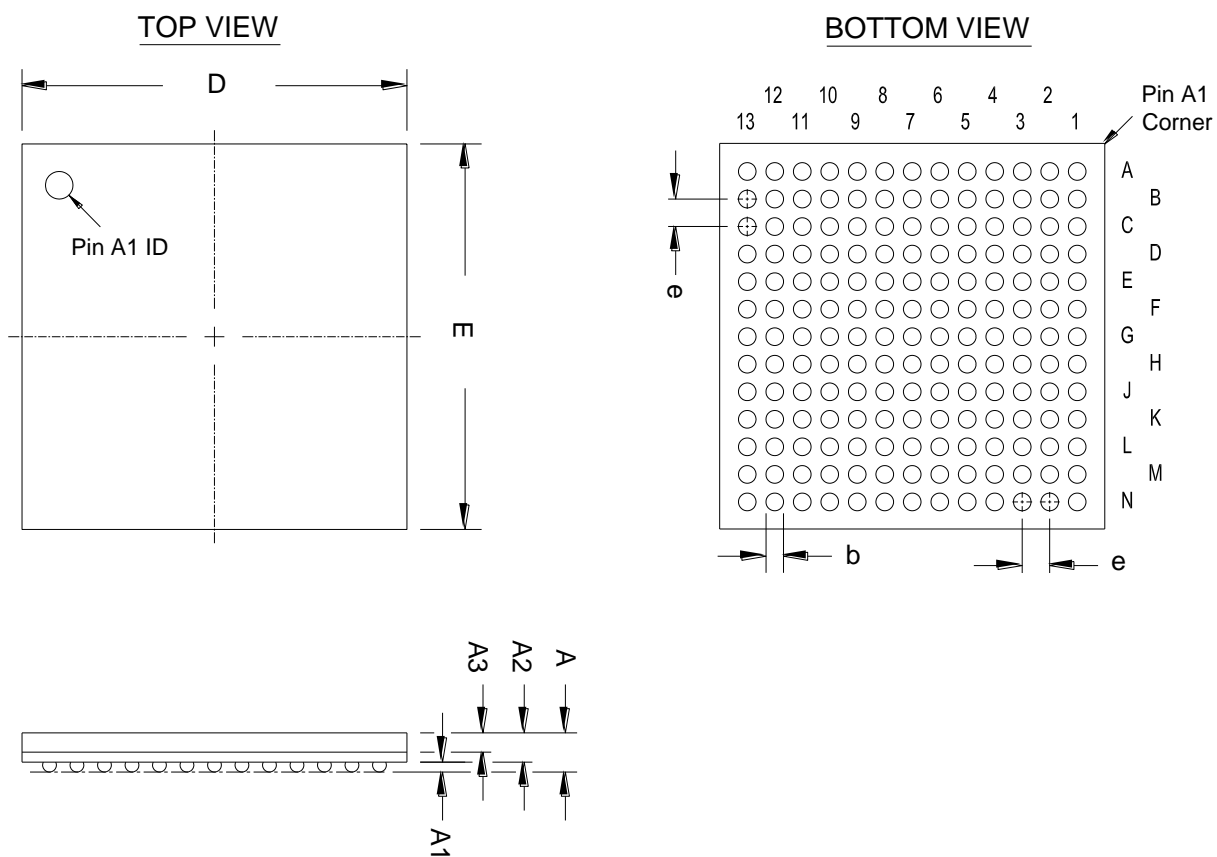


## 169-Pin FineLine Ball-Grid Array (FBGA) - Wire Bond - A:1.55

- 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	MO-192 Variation: DBE-1
Lead Coplanarity	0.005 inch (0.12 mm)
Weight	0.66 g (Typ.)
Moisture Sensitivity Level	Printed on moisture barrier bag

Package Outline Dimension Table			
Symbol	Millimeters		
	Min.	Nom.	Max.
A	1.25	1.40	1.55
A1	0.30	0.40	0.50
A2	0.75	1.00	1.25
A3	0.65	0.70	0.75
D	14.00 BSC		
E	14.00 BSC		
b	0.45	0.50	0.55
e	1.00 BSC		

**Package Outline**

## 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



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