

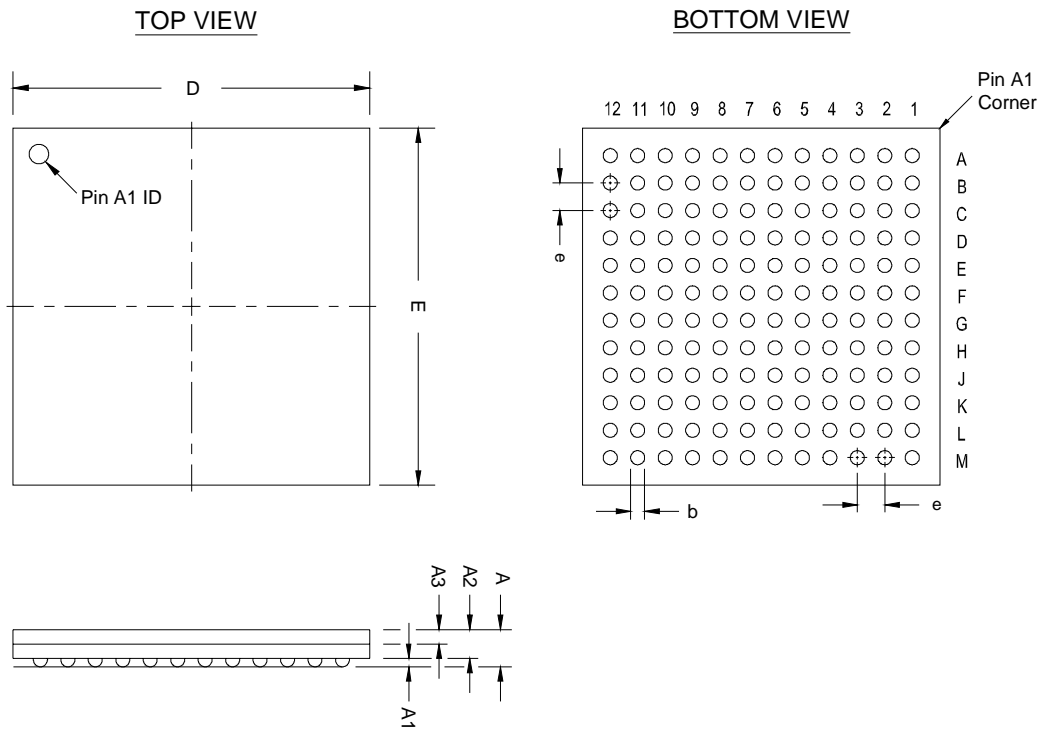
## 144-Pin FineLine Ball-Grid Array (FBGA) - Wire Bond

- 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.

<b>Package Information</b>	
<b>Description</b>	<b>Specification</b>
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: AAD-1
Maximum Lead Coplanarity	0.008 inches (0.20mm)
Weight	0.8 g
Moisture Sensitivity Level	Printed on moisture barrier bag

<b>Package Outline Dimension Table</b>			
<b>Symbol</b>	<b>Millimeters</b>		
	<b>Min.</b>	<b>Nom.</b>	<b>Max.</b>
A	–	–	1.70
A1	0.30	–	–
A2	0.25	–	1.10
A3	–	–	0.80
D	13.00 BSC		
E	13.00 BSC		
b	0.50	0.60	0.70
e	1.00 BSC		

**Package Outline**





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I.S. EN ISO 9001

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