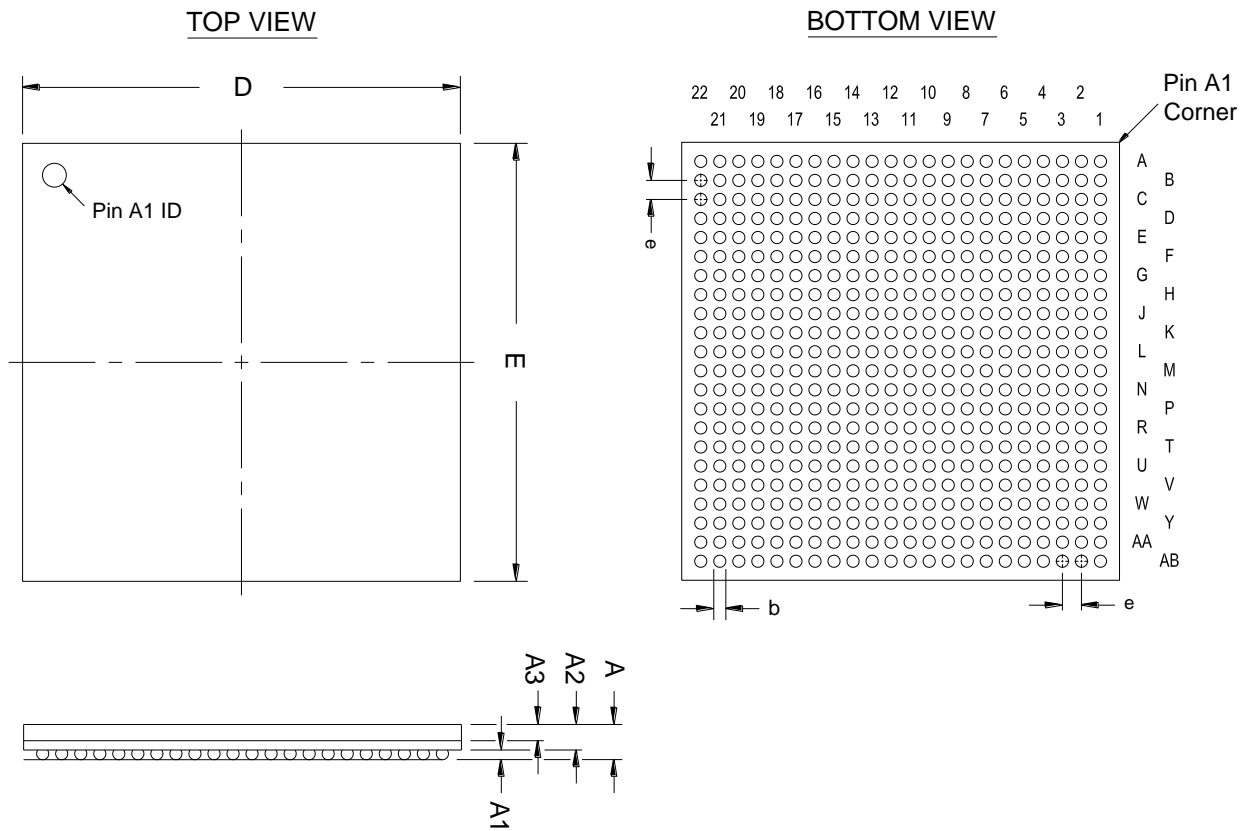


484-Pin Ultra FineLine Ball-Grid Array (UBGA) - Wire Bond - A:2.05

- 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	U
Package Acronym	UBGA
Substrate Material	BT
Solder ball composition	Regular: 63Sn:37Pb (Typ.) Pb-free: Sn:3Ag:0.5Cu (Typ.)
JEDEC Outline Reference	MO-275 Variation: PPAA-2
Lead Coplanarity	0.005 inch (0.12 mm)
Weight	1.5 g (Typ.)
Moisture Sensitivity Level	Printed on moisture barrier bag

Package Outline Dimension Table			
Symbol	Millimeters		
	Min.	Nom.	Max.
A	1.75	1.90	2.05
A1	0.30	0.40	0.50
A2	1.25	1.50	1.75
A3	0.90	0.95	1.00
D	19.00 BSC		
E	19.00 BSC		
b	0.45	0.50	0.55
e	0.80 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
December 2011	2.0	1. Change dimension "b" from 0.40/0.50/0.60 to 0.45/0.50/0.55. 2. Change the JEDEC Outline Reference from MO-216 Variation: BAP-1 to MO-275 Variation: PPAA-2



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