780-Pin Hybrid FineLine Ball-Grid Array (HBGA) - Flip Chip - Channel Lid - A:3.30

- 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.

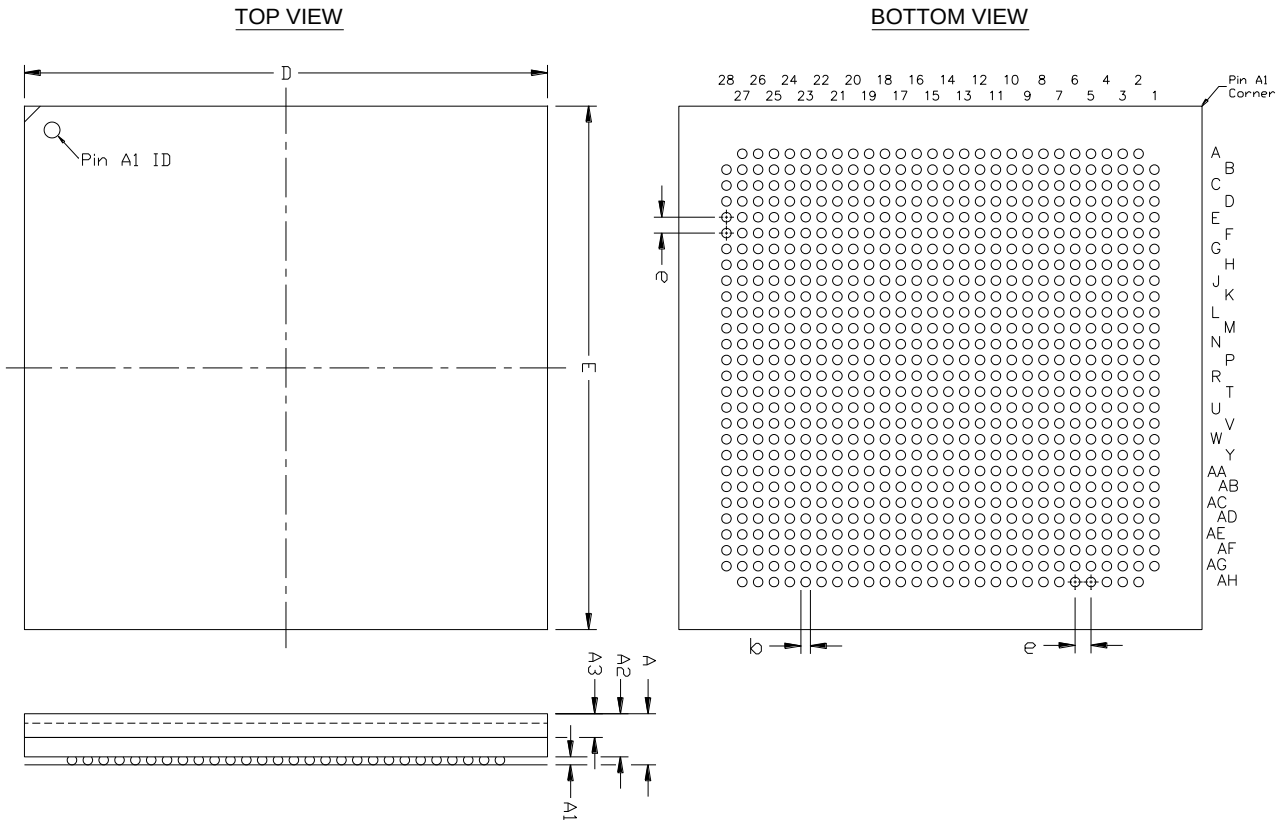
Package Information

Description	Specification
Ordering Code Reference	H
Package Acronym	HBGA
Substrate Material	BT
Solder ball composition	Regular: 63Sn:37Pb (Typ.) Pb-free: Sn:3Ag:0.5Cu (Typ.)
JEDEC Outline Reference	MS-034 Variation: AAP-1
Lead Coplanarity	0.008 inch (0.20 mm)
Weight	11.7 g (Typ.)
Moisture Sensitivity Level	Printed on moisture barrier bag

Package Outline Dimension Table

Symbol	Millimeters		
	Min.	Nom.	Max.
A	2.90	3.10	3.30
A1	0.37	0.47	0.57
A2	2.33	2.63	2.93
A3	1.45	1.55	1.65
D	33.00 BSC		
E	33.00 BSC		
b	0.50	0.60	0.70
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
February 2021	1.0	Initial release

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