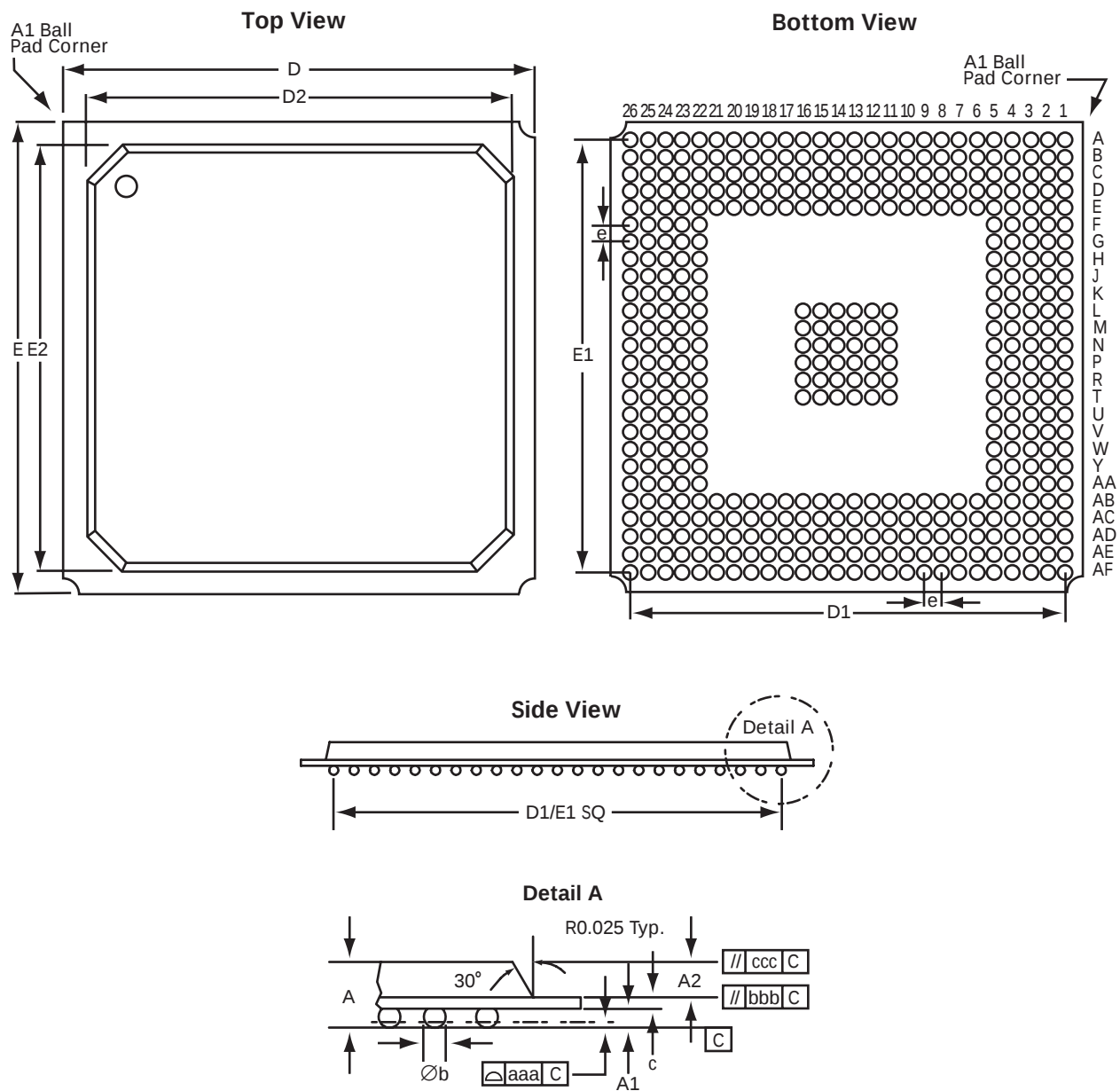


Plastic Ball Grid Array

456-Pin PBGA



Note: Dimensions are in millimeters. Please see the "Plastic Ball Grid Array Dimensions" on page 36 for the dimensions.

Supported Devices		
A500K130	APA150	APA600
A500K180	APA300	APA750
A500K270	APA450	APA1000

Plastic Ball Grid Array Dimensions

JEDEC Equivalent	PBGA272 MS-034 VAR BAL-2			PBGA313 MS-034			PBGA329 MS-034 VAR BAN-2			PBGA456 MS-034 VAR BAR-2		
Dimension	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.
A	2.18	2.33	2.50	2.12	2.33	2.52	2.17	2.33	2.70	2.12	2.33	2.54
A1	0.50	0.60	0.70	0.50	0.60	0.70	0.50	0.60	0.70	0.50	0.60	0.70
A2	1.15	1.17	1.19	1.12	1.17	1.22	1.10	1.20	1.30	1.12	1.17	1.19
aaa	0.20			0.20			0.20			0.20		
b	0.60	0.75	0.90	0.60	0.76	0.90	0.60	0.76	0.90	0.60	0.76	0.90
bbb	0.25			0.25			0.25			0.25		
c	0.53	0.56	0.61	0.53	0.56	0.61	0.53	0.60	0.70	0.51	0.56	0.61
ccc	0.35			0.35			0.35			0.35		
D	26.80	27.00	27.20	34.80	35.00	35.20	30.80	31.00	31.20	34.80	35.00	35.20
D1	24.13 BSC			30.48 BSC			27.94 BSC			31.75 BSC		
D2	23.90	24.00	24.10	29.50	30.00	30.70	27.90	28.00	28.10	29.80	30.00	30.20
E	26.80	27.00	27.20	34.80	35.00	35.20	30.80	31.00	31.20	34.80	35.00	35.20
E1	24.13 BSC			30.48 BSC			27.94 BSC			31.75 BSC		
E2	23.90	24.00	24.10	29.50	30.00	30.70	27.90	28.00	28.10	29.80	30.00	30.20
e	1.27 typ.			1.27 typ.			1.27 typ.			1.27 typ.		

JEDEC Equivalent	PBGA729 MS-034 VAR BAR-1		
Dimensions	Min.	Nom.	Max.
A	2.12	2.33	2.54
A1	0.50	0.60	0.70
A2	1.12	1.17	1.19
aaa	0.20		
b	0.60	0.76	0.90
bbb	0.25		
c	0.50	0.56	0.62
ccc	0.35		
D	34.80	35.00	35.20
D1	33.02 BSC		
D2	29.95	30.00	30.70
E	34.80	35.00	35.20
E1	33.02 BSC		
E2	29.95	30.00	30.70
e	1.27 typ.		