

**Assembly Transfer of Select BGA Products
to ASECL Taiwan**

**Qualification Plan Summary for
23x23 BGA at ASECL Taiwan**

TEST	SPECIFICATION	SAMPLE SIZE	EXPECTED COMPLETION DATE
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	3 x 32	Nov 2020
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	3 x 11	Nov 2020
Temperature Humidity Bias (THB)*	JEDEC <i>JESD22-A101</i>	3 x 32	Nov 2020
High Temperature Storage (HTS)	JEDEC <i>JESD22-A103</i>	1 x 32	Nov 2020
Unbiased Highly Accelerated Stress Test (UHAST)*	JEDEC <i>JESD22-A102</i>	3 x 32	Nov 2020

* Preconditioned per JEDEC/IPC J-STD-020.

**Assembly Transfer of Select BGA Products
to ASECL Taiwan**

**Qualification Plan Summary for
27x27 BGA at ASECL Taiwan**

TEST	SPECIFICATION	SAMPLE SIZE	EXPECTED COMPLETION DATE
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	3 x 32	Nov 2020
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	3 x 11	Nov 2020
Temperature Humidity Bias (THB)*	JEDEC <i>JESD22-A101</i>	3 x 32	Nov 2020
High Temperature Storage (HTS)	JEDEC <i>JESD22-A103</i>	1 x 32	Nov 2020
Unbiased Highly Accelerated Stress Test (UHAST)*	JEDEC <i>JESD22-A118</i>	3 x 32	Nov 2020

* Preconditioned per JEDEC/IPC J-STD-020.

BOM Change Summary

▶ ADSP-21060L, ADSP-21061L and ADSP-21160M

Assembly Site	STATS Singapore - STA (From)	ASE Taiwan – AET (To)
Wire	Au / 1.2 mil	Au / 1.2 mil
Die Attach	Ablestik 2000 conductive	AB-2100 Conductive
Mold Compound	Sumitomo G770	Hitachi CEL-9750
Ball Size	0.75	0.75
Ball Composition	96.5Sn_3.0Ag_0.5Cu	96.5Sn_3.0Ag_0.5Cu

BOM Change Summary

▶ ADSP-21160N

Assembly Site	STATS Singapore - STA (From)	ASE Taiwan – AET (To)
Wire	Au / 1.0 mil	Au / 1.0 mil
Die Attach	Ablestik 2000 conductive	AB-2100 Conductive
Mold Compound	Sumitomo G770	Hitachi CEL-9750
Ball Size	0.75	0.75
Ball Composition	96.5Sn_3.0Ag_0.5Cu	96.5Sn_3.0Ag_0.5Cu

BOM Change Summary

▶ ADSP-BF561

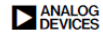
Assembly Site	STATS Singapore - STA (From)	ASE Taiwan – AET (To)
Wire	Au / 1.0 mil	Au / 1.0 mil
Die Attach	Ablestik 2000 conductive	AB-2100 Conductive
Mold Compound	Sumitomo G770	Hitachi CEL-9750
Ball Size	0.6	0.6
Ball Composition	96.5Sn_3.0Ag_0.5Cu	96.5Sn_3.0Ag_0.5Cu

BOM Change Summary

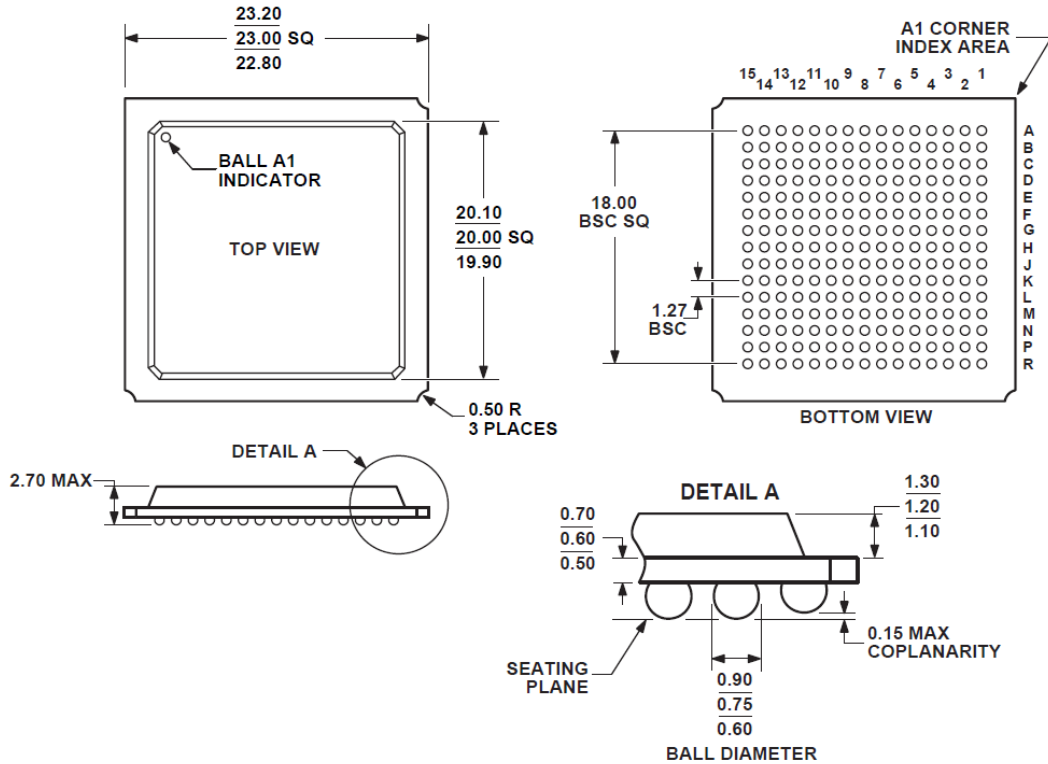
▶ ADSP-TS101S

Assembly Site	STATS Singapore - STA (From)	ASE Taiwan – AET (To)
Wire	Au / 1.2 mil	Au / 1.2 mil
Die Attach	Ablestik 2000 conductive	AB-2100 Conductive
Mold Compound	Sumitomo G770	Hitachi CEL-9750
Ball Size	0.6	0.6
Ball Composition	96.5Sn_3.0Ag_0.5Cu	96.5Sn_3.0Ag_0.5Cu

Package Outline Drawing Summary B-225



225-Ball Plastic Ball Grid Array [PBGA]
(B-225-2)
Dimensions shown in millimeters



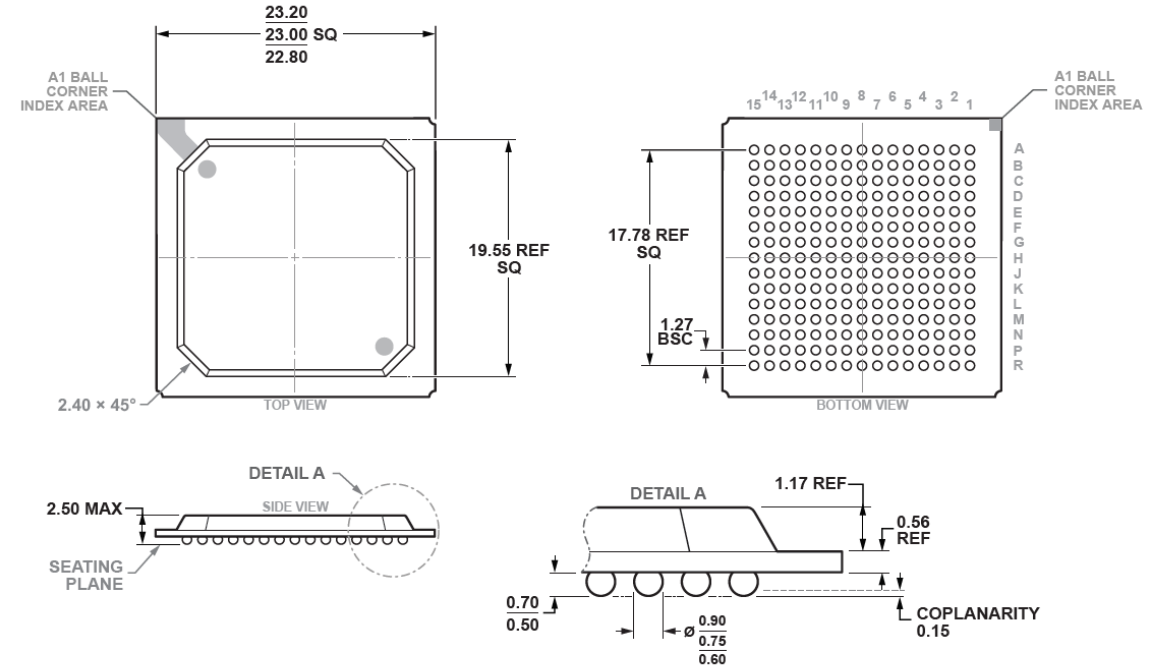
COMPLIANT TO JEDEC STANDARDS MS-034-AAJ-2

020207-A

PBGA – B-225-2 (STA)
2.70mm Max Height



225-Ball Plastic Ball Grid Array [PBGA]
(B-225-3)
Dimensions shown in millimeters



COMPLIANT TO JEDEC STANDARDS MO-034-BAJ-2 WITH EXCEPTION TO BALL COUNT.

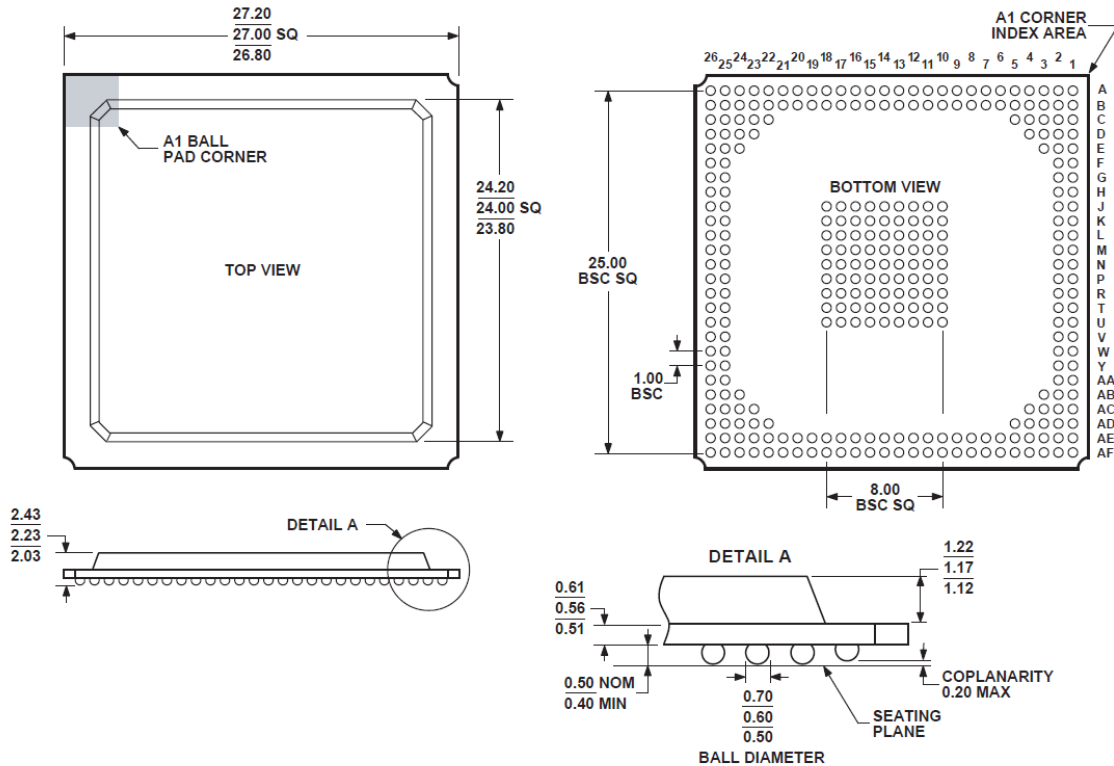
07-08-2020-A

PBGA – B-225-3 (AET)
2.50mm Max Height

Package Outline Drawing Summary B-297



297-Ball Plastic Ball Grid Array [PBGA] (B-297)
Dimensions shown in millimeters

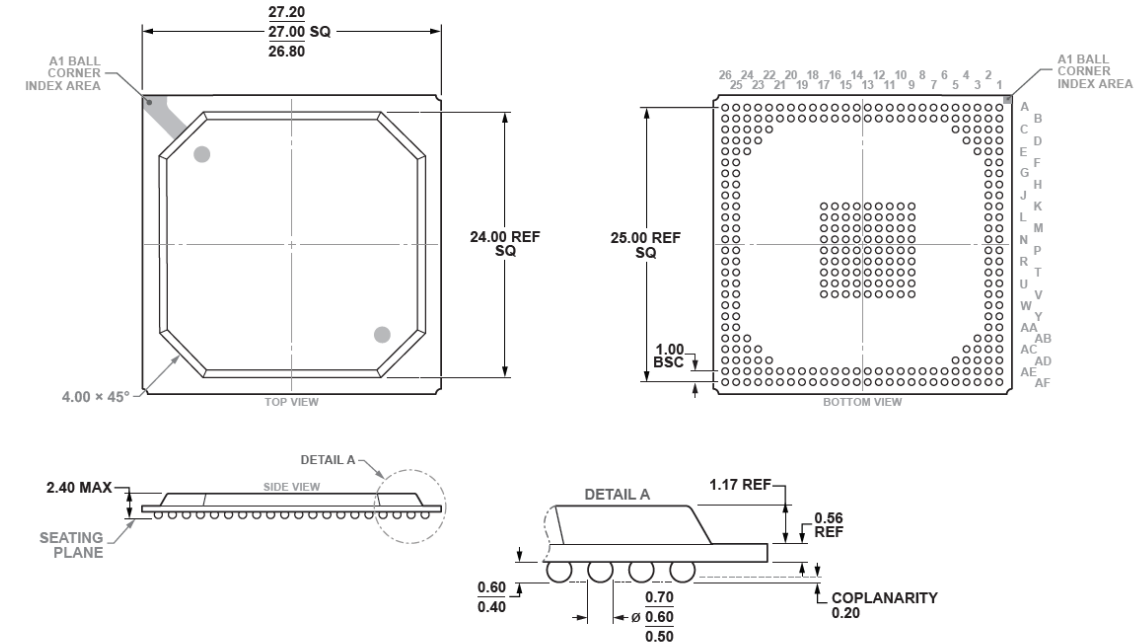


COMPLIANT TO JEDEC STANDARDS MS-034-AAL-1

PBGA – B-297 (STA)
2.43mm Max Height



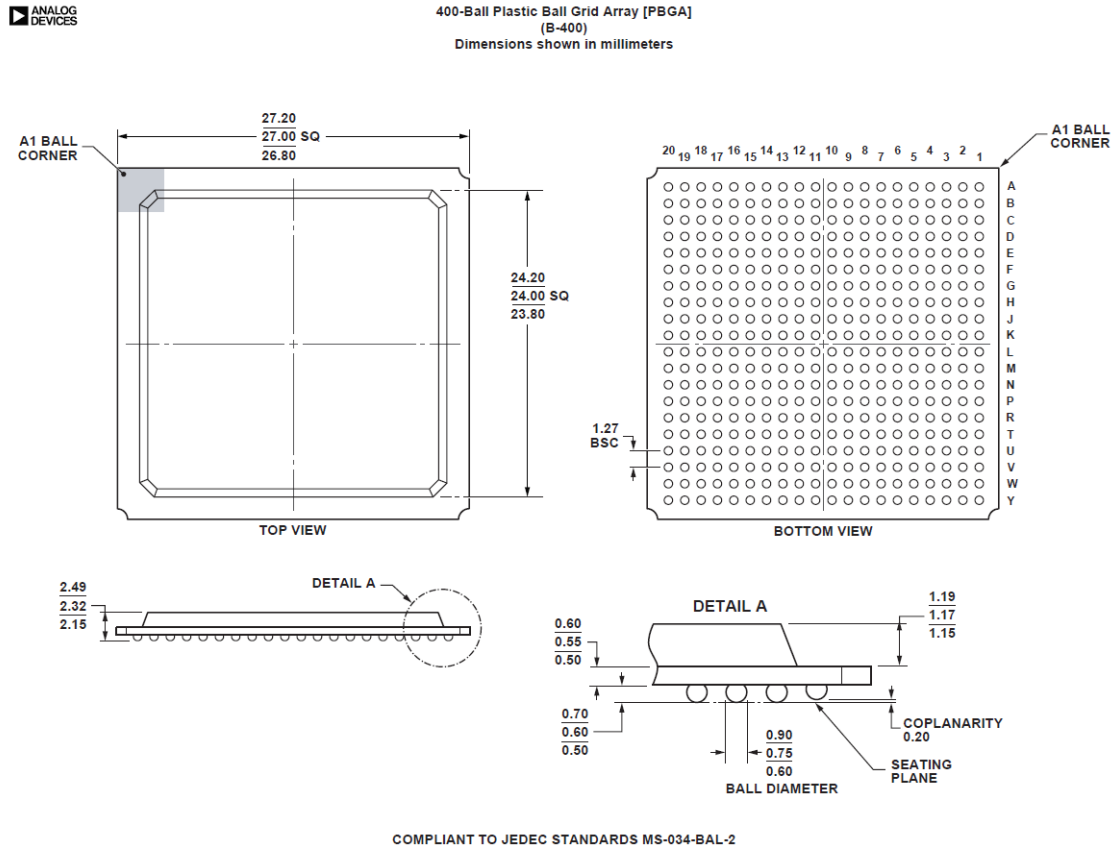
297-Ball Plastic Ball Grid Array [PBGA] (B-297-1)
Dimensions shown in millimeters



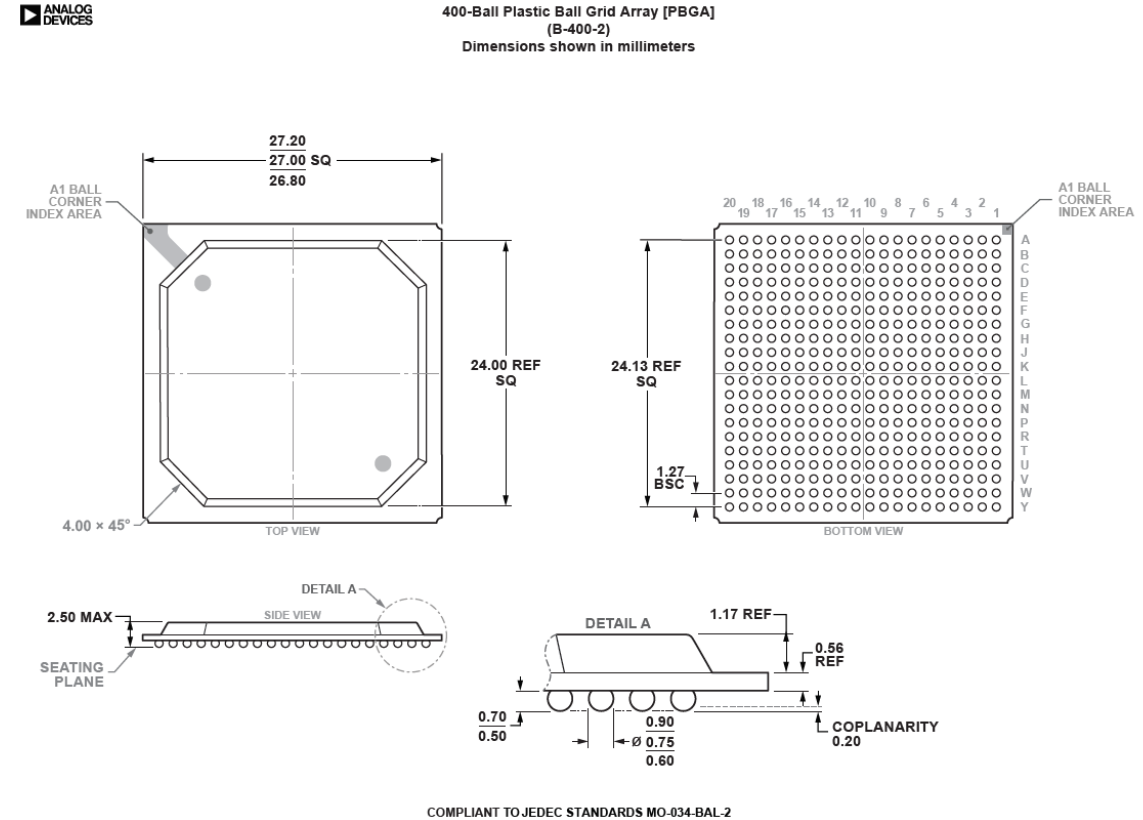
COMPLIANT TO JEDEC STANDARDS MO-034-AAL-2 WITH EXCEPTION TO BALL COUNT

PBGA – B-297-1 (AET)
2.40mm Max Height

Package Outline Drawing Summary B-400



PBGA – B-400 (STA)
2.49mm Max Height



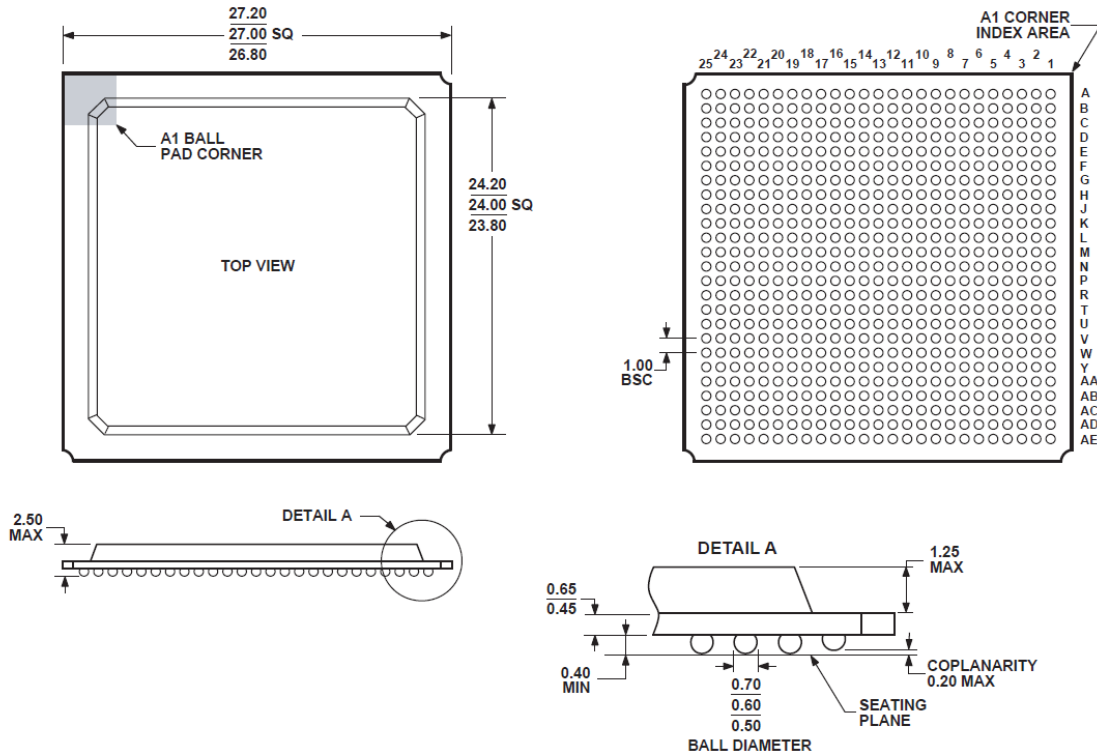
PBGA – B-400-2 (AET)
2.50mm Max Height



Package Outline Drawing Summary B-625



625-Ball Plastic Ball Grid Array [PBGA]
(B-625)
Dimensions shown in millimeters

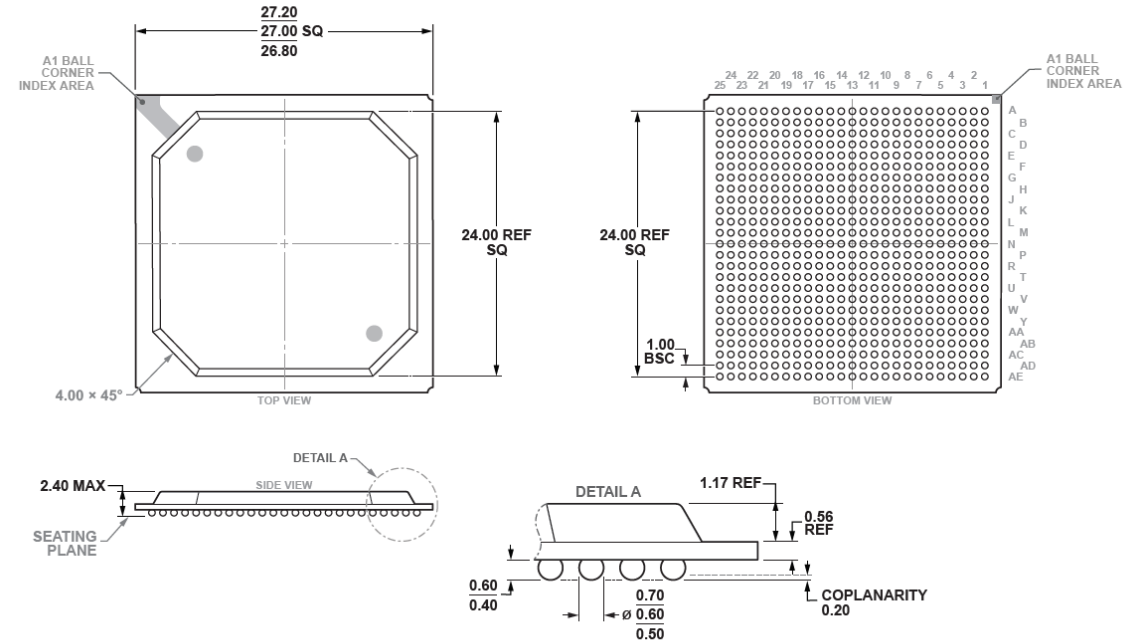


COMPLIANT TO JEDEC STANDARDS MS-034-AAL

PBGA – B-625 (STA)
2.50mm Max Height



625-Ball Plastic Ball Grid Array [PBGA]
(B-625-2)
Dimensions shown in millimeters



COMPLIANT TO JEDEC STANDARDS MO-034-AAL-2

PBGA – B-625-2 (AET)
2.40mm Max Height



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