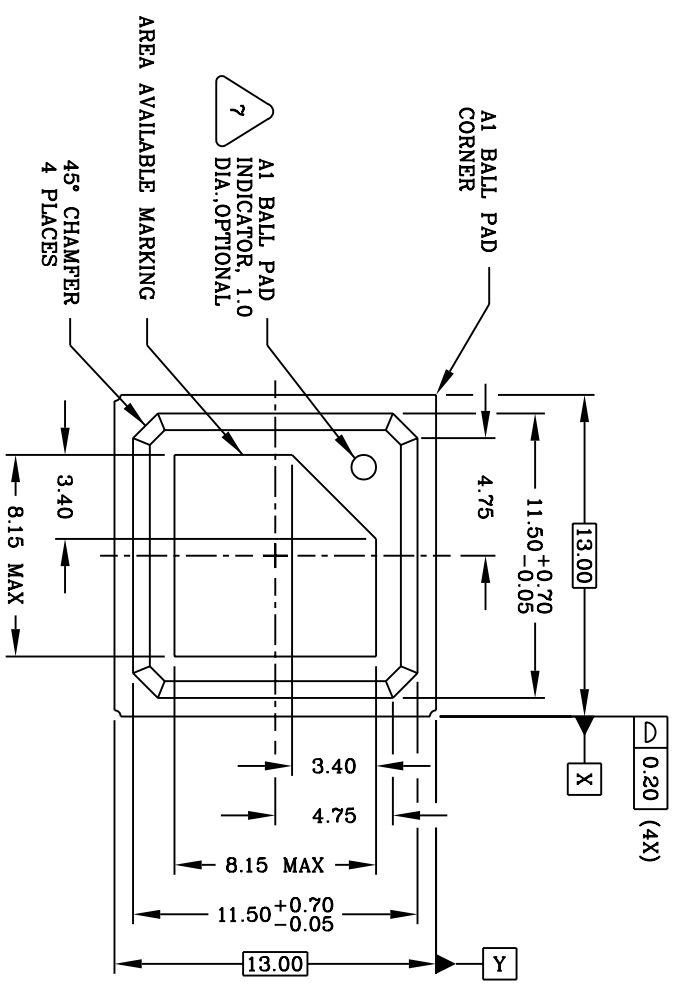
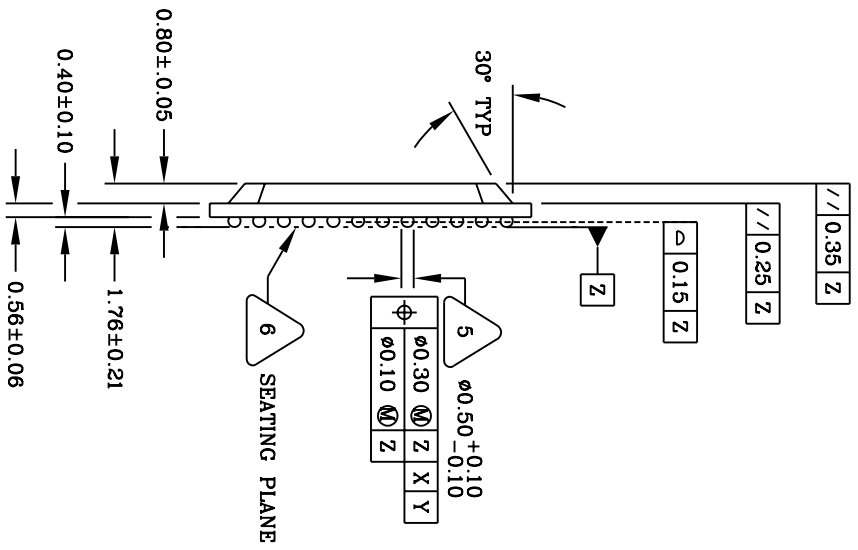


| REVISIONS | | | | |
|-----------|------------------------------|-------------|-------|----------|
| DCN | REV | DESCRIPTION | DATE | APPROVED |
| 01 | ADD "GREEN" BBG NOMENCLATURE | 10/19/04 | TU YU | |



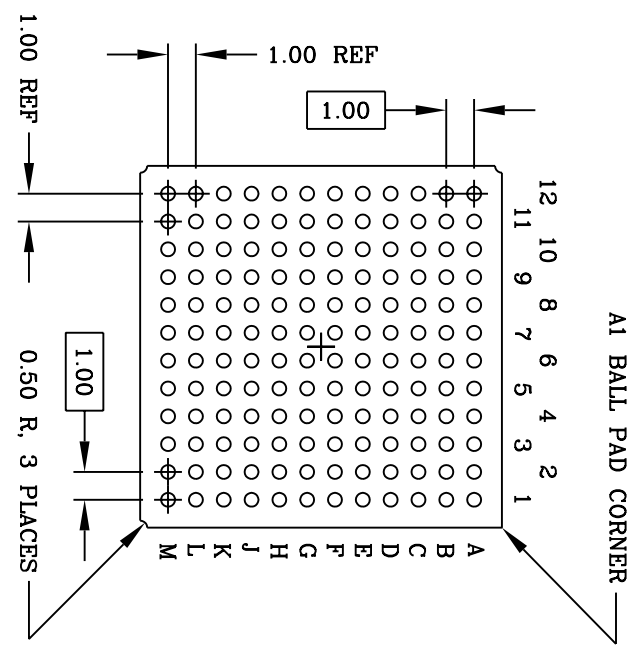
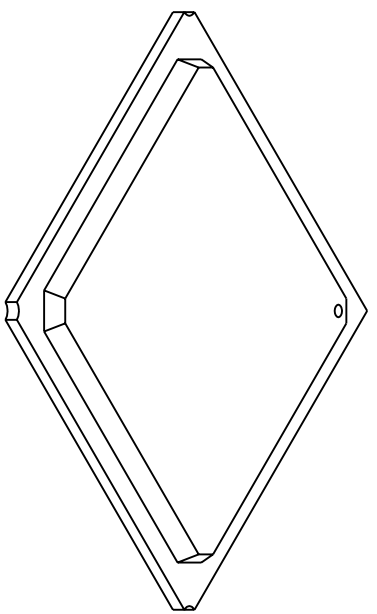
TOP VIEW



SIDE VIEW

| | | | | | |
|---|----------|--|----------------------------|---|-----|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS X.XX ±0.10 X.XXX ±0.05 X.XXX ±0.03 | | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS ANGULAR ET | | www.IDT.com IDT Integrated Device Technology, Inc. 2975 Slender Way, Santa Clara, CA 95054 (408) 727-6116 FAX (408) 492-8074 | |
| APPROVALS | DATE | TITLE: | BB/BBG 144 PACKAGE OUTLINE | | |
| DRAWN p3cp | 07/13/00 | 13.0 X 13.0 mm BODY PBGA | | | |
| CHECKED | | DRAWING No. | PSC-4094 | SIZE | C |
| | | | | SCALE | N/A |
| | | | | REV | 01 |
| DO NOT SCALE DRAWING | | | | | |
| SHEET 1 OF 3 | | | | | |

| REVISIONS | | | | |
|-----------|-----|------------------------------|----------|----------|
| DCN | REV | DESCRIPTION | DATE | APPROVED |
| 01 | 01 | ADD "GREEN" BBG NOMENCLATURE | 10/19/04 | TU VU |



BOTTOM VIEW
(144 SOLDER BALLS)

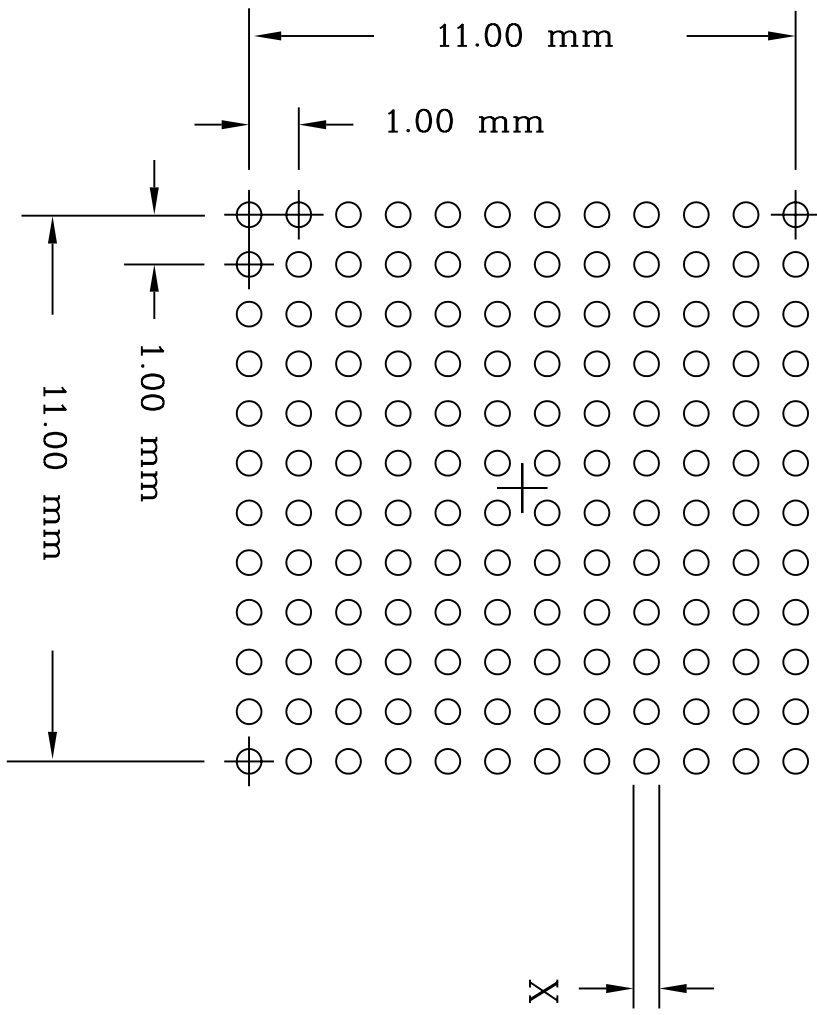
8. REFERENCE SPECIFICATIONS:
 A. AAWW SPEC #001-0531-2234: PACKING OPERATION PROCEDURE.
 B. AAWW SPEC #001-0519-2062: MARKING.
 C. THIS DRAWING CONFORMS TO THE JEDEC REGISTERED OUTLINE MO-151/B, VARIATION AAE-1 FOR 1.00mm PITCH AND VARIATION BAE-1 FOR 1.27mm PITCH.
7. A1 BALL PAD CORNER I.D. FOR PLATE MOLD: TO BE MARKED BY INK. AUTO MOLD: DIMPLE TO BE FORMED BY MOLD CAP.
6. PRIMARY DATUM Z AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
5. DIMENSION IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM Z.
4. THE MAXIMUM ALLOWABLE NUMBER OF SOLDER BALLS IS 144.
3. THE MAXIMUM SOLDER BALL MATRIX SIZE IS 12 X 12.
2. THE BASIC SOLDER BALL GRID PITCH IS 1.00mm.
1. ALL DIMENSIONS AND TOLERANCES CONFORM TO ASME Y14.5M-1994.

NOTES: UNLESS OTHERWISE SPECIFIED

| | | | | | |
|---|--------|-----------|------|----------|-------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS | | APPROVALS | | DATE | |
| XXX.XX | XXX.XX | DRAWN | DATE | 07/13/00 | |
| XXX.XX | XXX.XX | CHECKED | | | |
| IDT Integrated Device Technology, Inc. www.IDT.com 2975 Slender Way, Santa Clara, CA 95054 (408) 727-6116 FAX (408) 492-8074 | | | | | |
| TITLE: BB/BBG 144 PACKAGE OUTLINE | | | | | |
| 13.0 X 13.0 mm BODY PBGA | | | | | |
| DRAWING No. PSC-4094 | | | | SIZE | SCALE |
| | | | | C | N/A |
| | | | | REV | 01 |
| DO NOT SCALE DRAWING | | | | | |
| SHEET 2 OF 3 | | | | | |

| REVISIONS | | | | |
|-----------|-----|------------------------------|----------|----------|
| DCN | REV | DESCRIPTION | DATE | APPROVED |
| | 01 | ADD "GREEN" BPG NOMENCLATURE | 10/19/04 | TU VU |

LAND PATTERN DIMENSIONS



| SYMBOL | MIN | NOM | MAX |
|--------|-----|-----|-----|
| X | .35 | .40 | .45 |

| | | | |
|---|----------|---|-------|
| <small>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS X.XX ±0.08 X.XXX ±0.03</small> | | <small>ANGULAR ±1°</small> | |
| APPROVALS | DATE | Integrated Device Technology, Inc. <small>www.IDT.com</small> (408) 727-6116 FAX (408) 492-8074 | |
| DRAWN <i>gkp</i> | 07/13/00 | DATE BB/BBG 144 PACKAGE OUTLINE 13.0 X 13.0 mm BODY PBGA | |
| CHECKED | | DRAWING No. PSC-4094 | |
| | | SIZE | SCALE |
| | | C | N/A |
| | | REV | 01 |
| DO NOT SCALE DRAWING | | | |
| SHEET 3 OF 3 | | | |