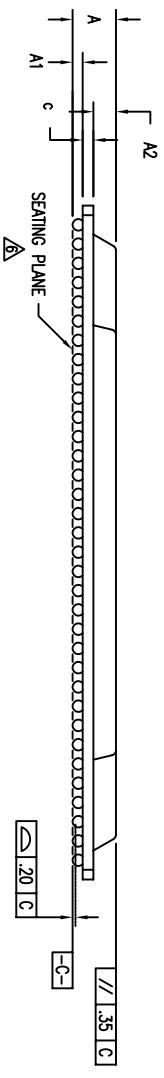
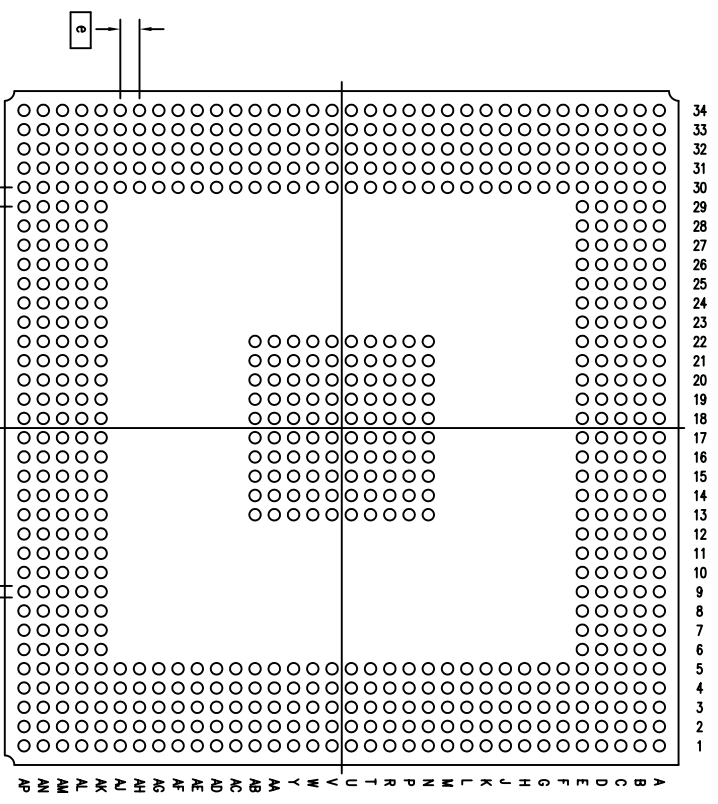
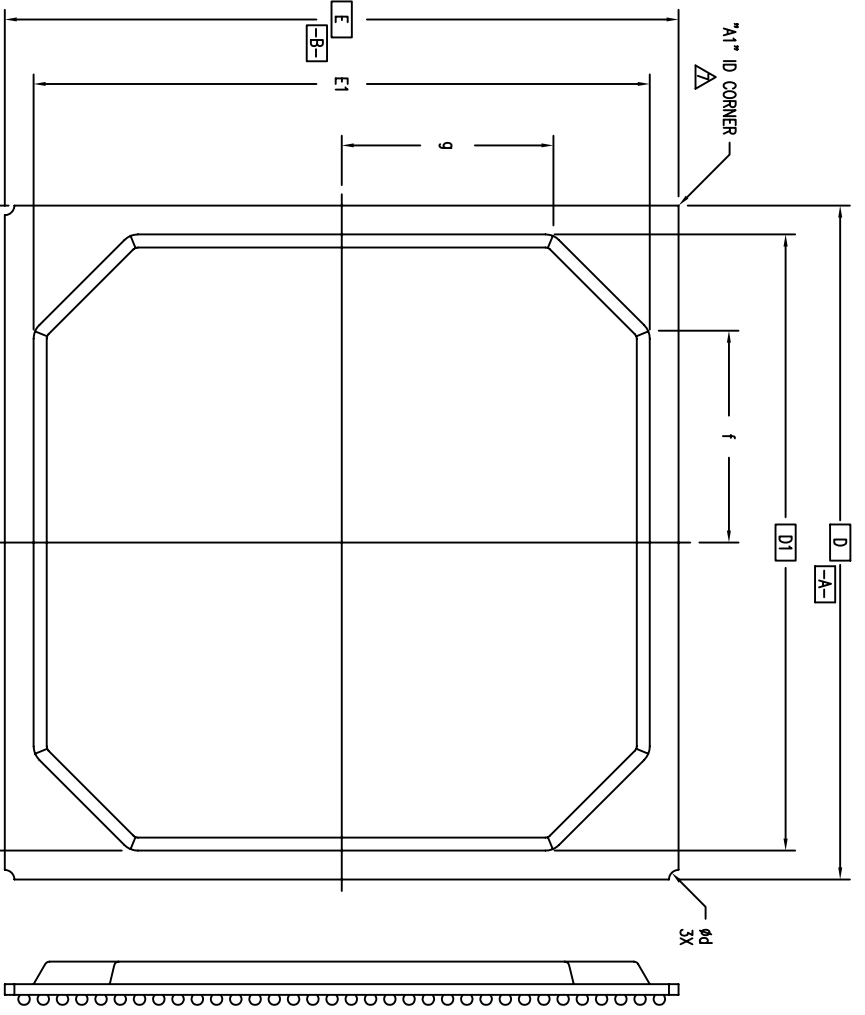


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	06/20/02	TU VU
01	ADDED GREEN BBG	06/22/09	P.Pdk
02	COMBINE POD & LAND PATTERN	06/07/13	KS

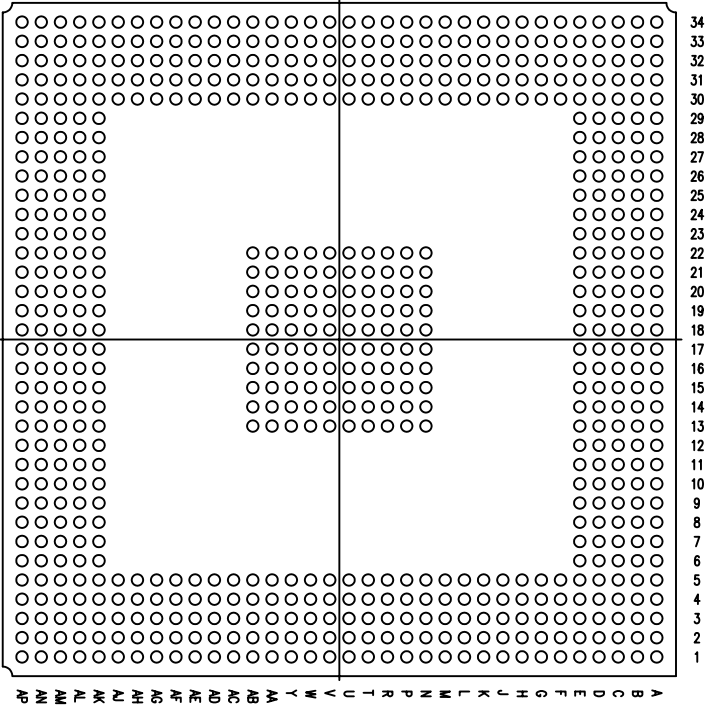


TOLERANCES UNLESS SPECIFIED	
DECIMAL	ANGULAR
±	±
IDT TM Integrated Device Technology, Inc. 6024 Silver Creek Valley Road San Jose, CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-8591 TWC: 910-336-2070	
DATE	TITLE
05/05/02	BB/BBG 680 PACKAGE OUTLINE
APPROVALS	35.0 X 35.0 mm BODY PBGA
DRAWN 379	1.00 mm BALL PITCH
CHECKED	
SIZE C	DRAWING No. PSC-4114
DO NOT SCALE DRAWING	REV 02
SHEET 1 OF 3	


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	06/20/02	TU WJ
01	ADDED GREEN BBG	06/22/09	P.Park
02	COMBINE POD & LAND PATTERN	06/07/13	KS

NOTES:

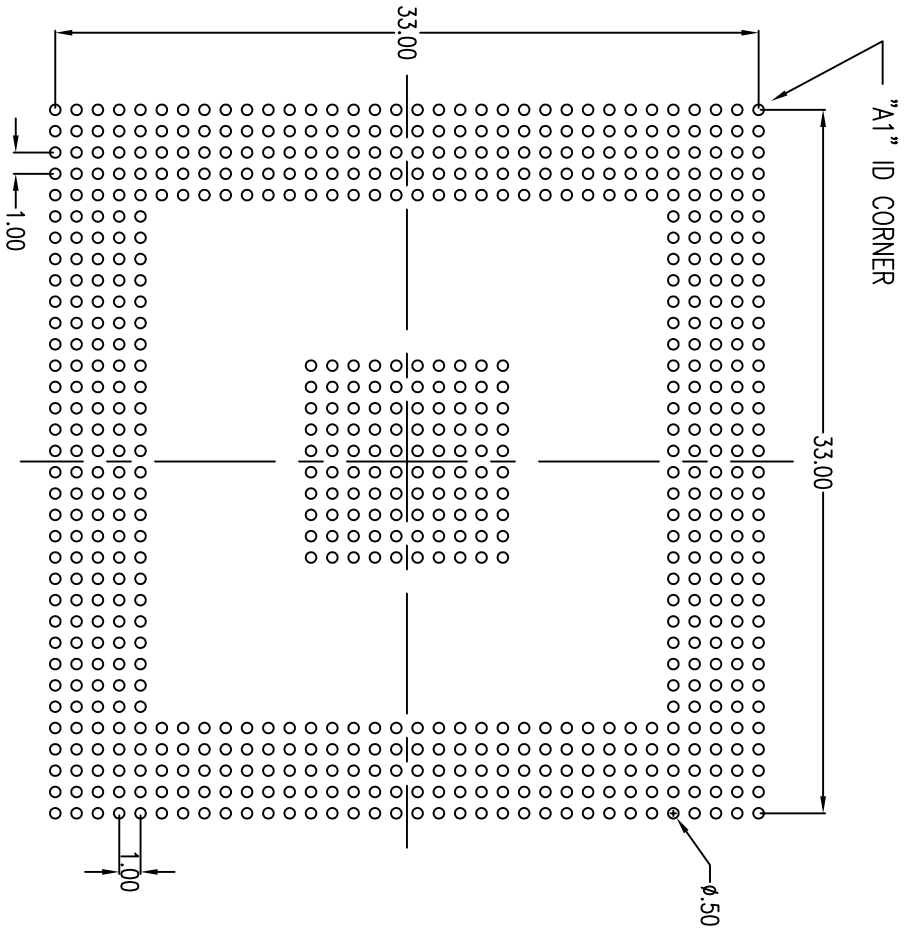
- 1 ALL DIMENSIONING AND TOLERANCING CONFORM TO ASME Y14.5M-1994
- 2 "e" REPRESENTS THE BASIC SOLDER BALL GRID PITCH
- 3 "M" REPRESENTS THE MAXIMUM SOLDER BALL MATRIX SIZE
- 4 "N" REPRESENTS THE BALLCOUNT NUMBER
- 5 DIMENSION "b" IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM ---C---
- 6 SEATING PLANE AND PRIMARY DATUM ---C--- ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS
- 7 "A1" ID CORNER MUST BE IDENTIFIED BY CHAMFER, INK MARK, METALLIZED MARKING, INDENTATION OR OTHER FEATURE ON TOP SURFACE OF PACKAGE
- 8 ALL DIMENSIONS ARE IN MILLIMETERS
- 9 THIS DRAWING CONFORMS TO JEDEC PUBLICATION 95 REGISTRATION MS-043, VARIATION AAR-1



SYMBOL	JEDEC VARIATION			NOTE
	MIN	NOM	MAX	
A	-	-	2.50	
A1	.40	.50	.60	
A2	1.12	1.17	1.22	
D		35.00 BSC		
D1		30.00 BSC		
E		35.00 BSC		
E1		30.00 BSC		
M		34 (DEPOPULATED)		3
N		680		4
e		1.00 BSC		
b	.50	.63	.70	5
c		.56 REF		
d		1.00 REF		
f		11.00 REF		
g		11.00 REF		
CENTER BALL MATRIX		10 X 10		

TOLERANCES UNLESS SPECIFIED		DECIMAL ANGULAR	
±		±	
 IDT Integrated Device Technology, Inc. 6024 Silver Creek Valley Road San Jose, CA 95138 WWW.IDT.COM TEL: (408) 284-8200 FAX: (408) 284-6591 TRN: 910-336-2070			
APPROVALS	DATE	TITLE	SIZE
DRAWN <i>gty</i>	05/05/02	BB/BBG 680 PACKAGE OUTLINE	C
CHECKED		35.0 X 35.0 mm BODY PBGA	
		1.00 mm BALL PITCH	
		DRAWING No. PSC-4114	REV 02
DO NOT SCALE DRAWING			SHEET 2 OF 3


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	06/20/02	TJ WJ
01	ADDED GREEN BRG	06/22/09	P.Park
02	COMBINE POD & LAND PATTERN	06/07/13	KS



RECOMMENDED LAND PATTERN DIMENSION

NOTE:

- 1) ALL dimensions are in mm, Angles in degrees.
- 2) Top down view, as view on PCB.
- 3) NSMD Land Pattern Assumed
- 4) Land Pattern Recommendation as per IPC-7351B generic requirement for surface mount design and Land Pattern.

TOLERANCES UNLESS SPECIFIED		 IDT <small>Integrated Device Technology, Inc.</small> 6024 Silver Creek Valley Road Fremont, CA 94538-5800 Phone: (408) 294-8200 Fax: (408) 294-8581 WWW: www.idt.com	
DECIMAL	ANGULAR		
±	±		
APPROVALS	DATE	TITLE	REV
DRAWN gty	05/09/02	BB/BBG 680 PACKAGE OUTLINE	
CHECKED		35.0 X 35.0 mm BODY PBGA	
		1.00 mm BALL PITCH	
		SIZE DRAWING No. PSC-4114	02
		DO NOT SCALE DRAWING	SHEET 3 OF 3