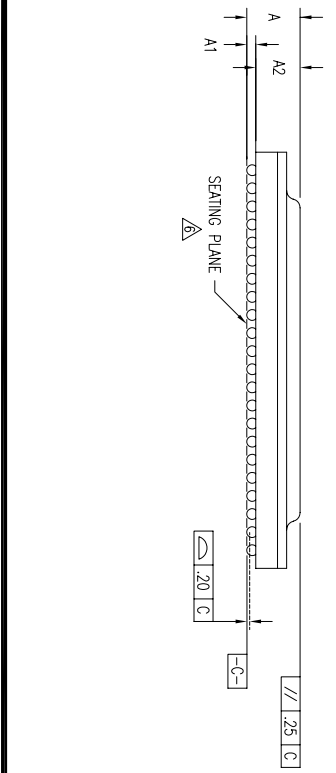
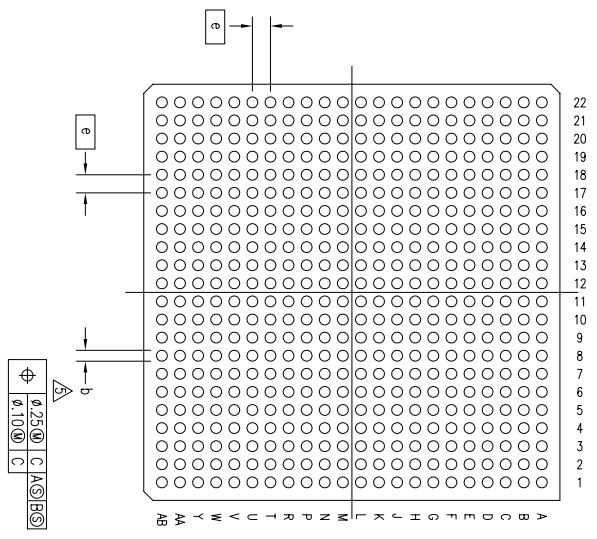
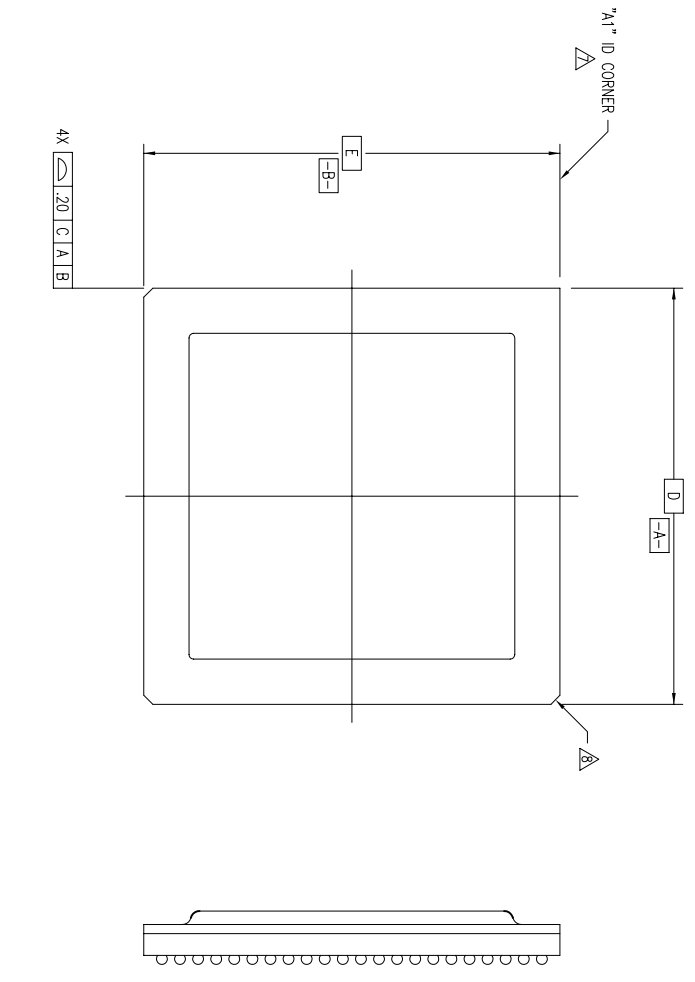



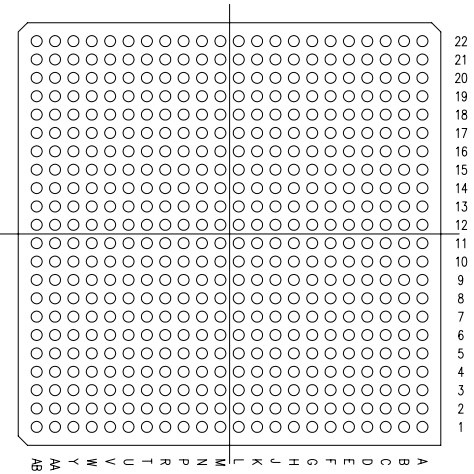
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	09/15/06	PKP
01	COMBINE POD & LAND PATTERN	5/31/13	KS



TOLERANCES UNLESS SPECIFIED	
DECIMAL	ANGULAR
XX#.XX	F1
XXXX.XXX	
APPROVALS	DATE
DRAWN <i>PKP</i>	09/15/06
CHECKED	
SIZE	DRAWING No.
C	PSC-4202
DO NOT SCALE DRAWING	SHEET 1 OF 3


IDT
 6024 Silver Creek Valley Rd
 San Jose, CA 95138
 PHONE: (408) 284-8200
 FAX: (408) 284-3572
 www.IDT.com

TITLE: BL/BR PACKAGE OUTLINE
 SIZE: 23.0 x 23.0 mm BODY
 1.00 mm PITCH FCBGA




484 BALLS

SYMBOL	JEDEC VARIATION			NOTES
	MIN	NOM	MAX	
A	-	-	3.32	
A1	-	.50	-	
A2	2.36	-	2.72	
D	23.00 BSC			
E	23.00 BSC			
M	22			3
N	484			4
e	1.00 BSC			
b	.50	.64	.70	5
CENTER BALL MATRIX	N/A			

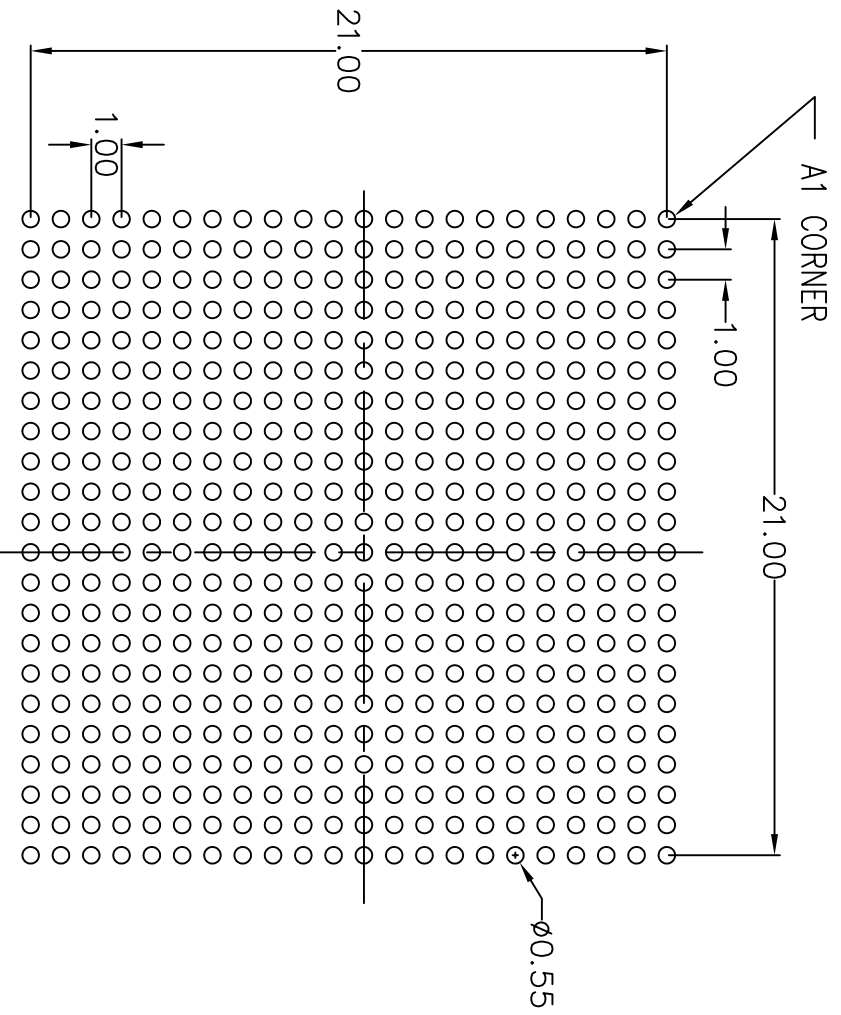
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	09/15/06	PKP
01	COMBINE POD & LAND PATTERN	5/31/13	KS

NOTES:

- 1 ALL DIMENSIONING AND TOLERANCING CONFORM TO ANSI Y14.5M-1982
- 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 PACKAGE BODY
- 8 EXACT SHAPE OF EACH CORNER IS OPTIONAL
- 9 ALL DIMENSIONS ARE IN MILLIMETERS

TOLERANCES UNLESS SPECIFIED DECIMAL ANGULAR XX.X .05 XXX.X .030		 IDT 6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-3572
APPROVALS DRAWN: 09/15/06 CHECKED:	DATE: 09/15/06 TITLE: BL/BR PACKAGE OUTLINE 23.0 x 23.0 mm BODY 1.00 mm PITCH FBGA	
SIZE: C DRAWING No.: PSC-4202	DO NOT SCALE DRAWING	REV: 01 SHEET 2 OF 3


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	09/15/06	PKP
01	COMBINE POD & LAND PATTERN	5/31/13	KS



RECOMMENDED LAND PATTERN

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		 6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 294-8200 FAX: (408) 284-3572
DECIMAL	ANGULAR	
XX± .1	±1°	
XXX± .05		
APPROVALS	DATE	TITLE
DRAWN: P32P	09/15/06	BL/BR PACKAGE OUTLINE
CHECKED		23.0 x 23.0 mm BODY
		1.00 mm PITCH FCBCA
SIZE	DRAWING No.	REV
C	PSC-4202	01
DO NOT SCALE DRAWING		SHEET 3 OF 3