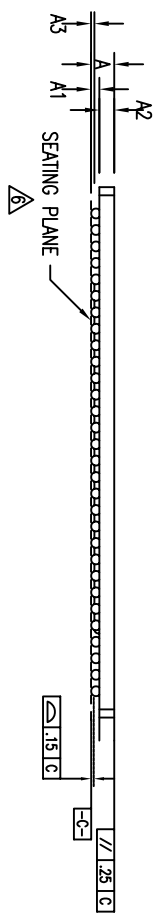
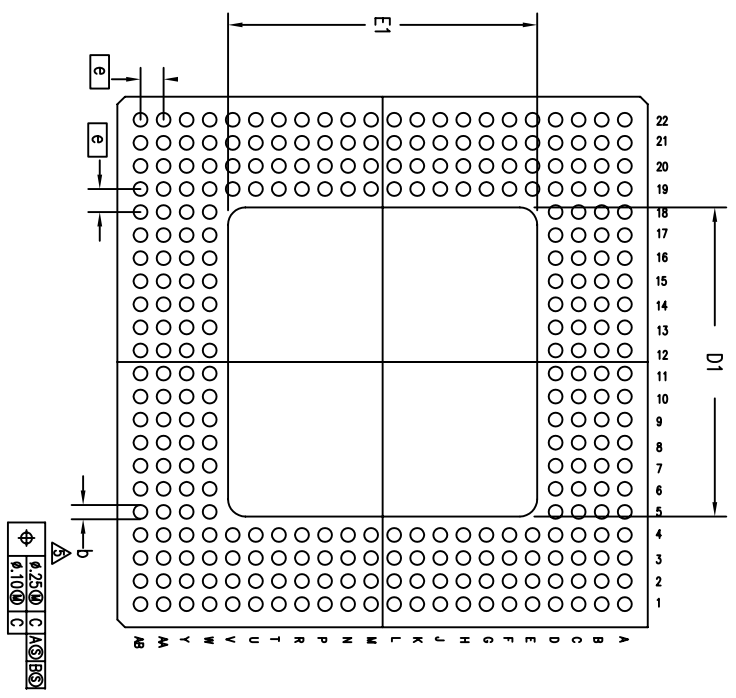
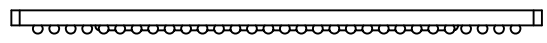
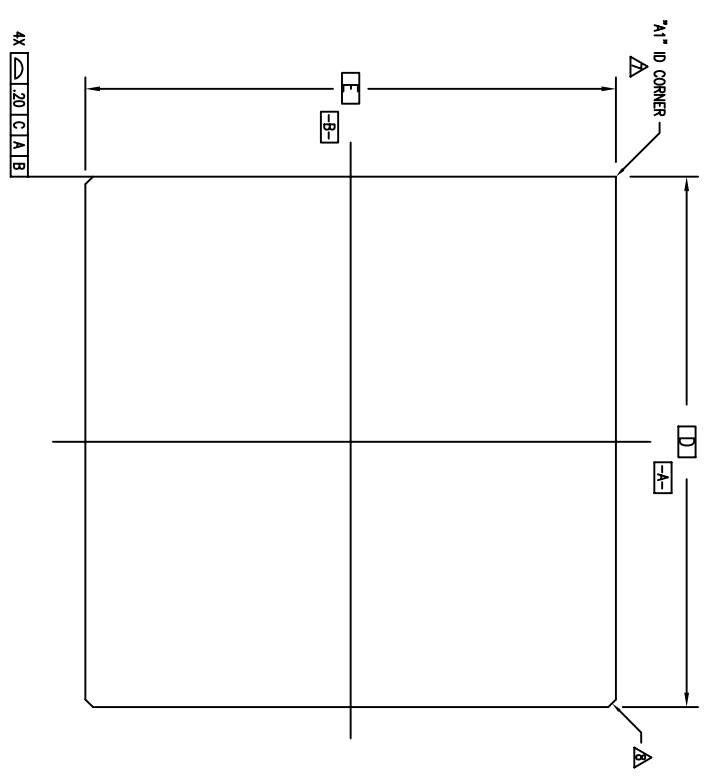



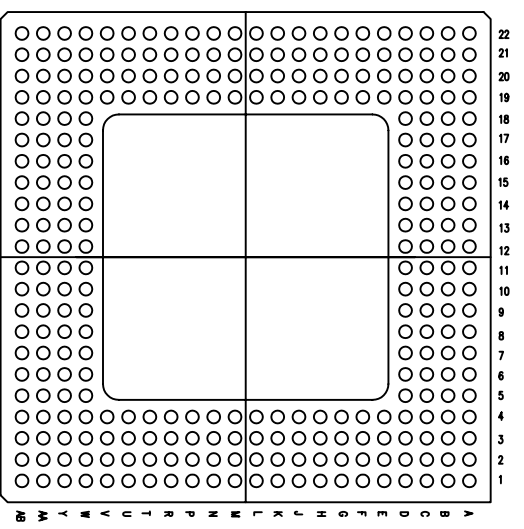
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	02/27/07	DP
01	UPDATE COPLANARITY	10/04/07	DP
02	COMBINE POD & LAND PATTERN	06/10/13	KS



TOLERANCES UNLESS SPECIFIED	
DECIMAL	±
ANGULAR	±
APPROVALS	DATE
DRAWN	02/26/07
CHECKED	
TITLE	
BX/BXG/RX 288 PACKAGE OUTLINE	
23.0 X 23.0 mm BODY	
1.0 mm BALL PITCH SRGA	
SIZE	DRAWING NO.
C	PSC-4209
DO NOT SCALE DRAWING	SHEET 1 OF 3

 6024 Silver Creek Valley Road
 SAN JOSE CA 95138
 PHONE: (408) 284-8200
 FAX: (408) 284-8591
www.idt.com


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	02/27/07	DP
01	UPDATE COMPLIABILITY	10/04/07	DP
02	COMBINE PDD & LAND PATTERN	06/10/13	KS



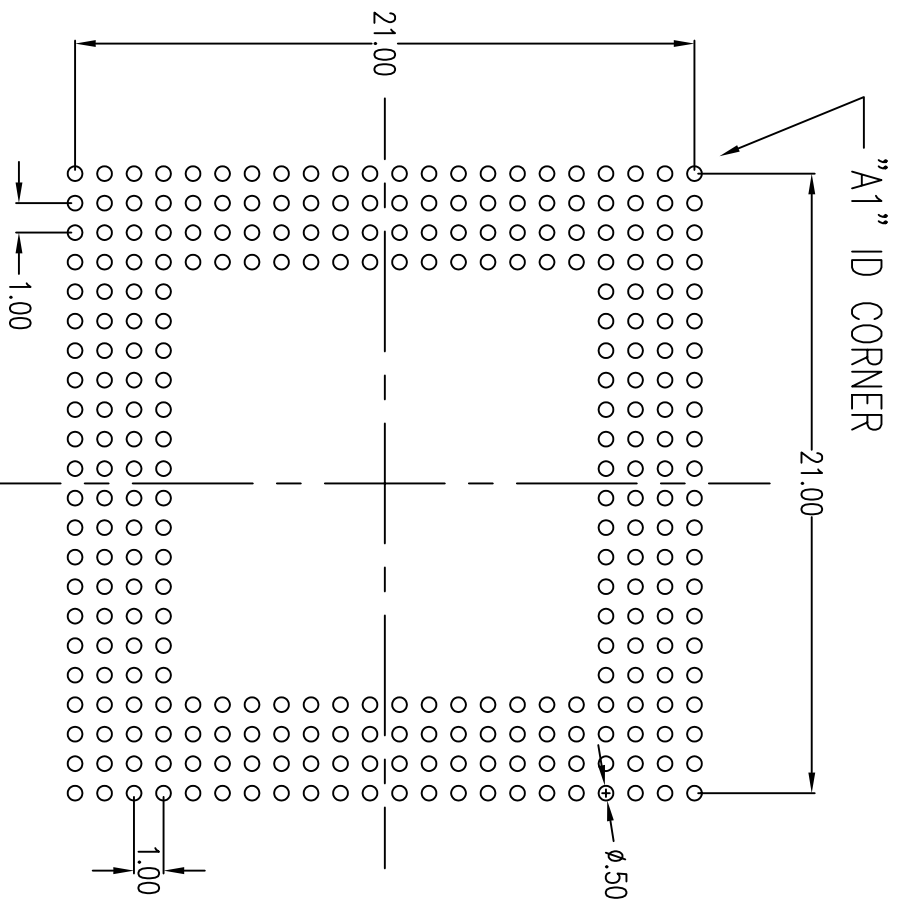
NOTES:

- 1 ALL DIMENSIONING AND TOLERANCING CONFORM TO ANSI Y14.5M-1982
- 2 "e" REPRESENTS THE BASIC SOLDER BALL GRID PITCH
- 3 "N" 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 $\boxed{-C-}$
- 6 SEATING PLANE AND PRIMARY DATUM $\boxed{-C-}$ 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

SYMBL	JEDEC VARIATION			NOTE
	MIN	NOM	MAX	
A	-	-	1.70	
A1	.30	-	-	
A2	.25	-	1.10	
A3	.15	-	-	
D	-	23.00 BSC	-	
D1	-	-	13.4	
E	-	23.00 BSC	-	
E1	-	-	13.4	
M	-	24 (DEPOPULATED)	-	3
N	-	288	-	4
e	-	1.00 BSC	-	
b	.50	.60	.70	5
CENTER BALL MATRIX	N/A			

TOLERANCES UNLESS SPECIFIED		6024 Silver Creek Valley Road	
DECIMAL	ANGULAR	SAN JOSE CA, 95138	
XXX±	±	PHONE: (408) 294-8200	
XXXX±		FAX: (408) 294-8591	
APPROVALS			
DRAWN	DATE	TITLE	
DP	02/28/07	BX/BXG/RX 288 PACKAGE OUTLINE	
CHECKED		23.0 X 23.0 mm BODY	
		1.0 mm BALL PITCH SBGA	
SIZE	DRAWING No.	REV	
C	PSC-4209	02	
DO NOT SCALE DRAWING		SHEET 2 OF 3	


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	02/27/07	DP
01	UPDATE COPLANARITY	10/04/07	DP
02	COMBINE POD & LAND PATTERN	06/10/13	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		 6024 Silver Creek Valley Road SAN JOSE CA. 95138 PHONE: (408) 284-8200 FAX: (408) 284-8591 www.idt.com	
DECIMAL	±	ANGULAR	
XXXX±			
APPROVALS	DATE	TITLE	
DRAWN JP CHECKED	02/26/07	BX/BXG/RX 288 PACKAGE OUTLINE 23.0 X 23.0 mm BODY 1.0 mm BALL PITCH SRGA	
SIZE	DRAWING NO.	REV	
C	PSC-4209	02	
DO NOT SCALE DRAWING		SHEET	3 OF 3