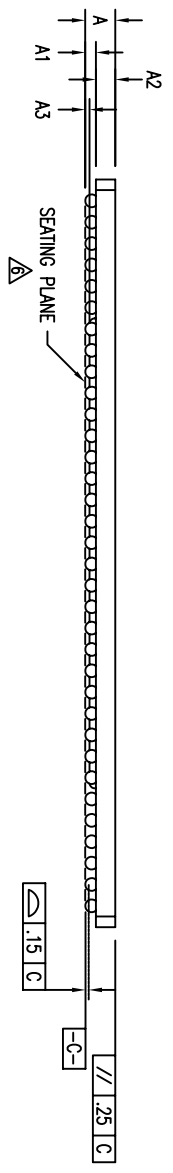
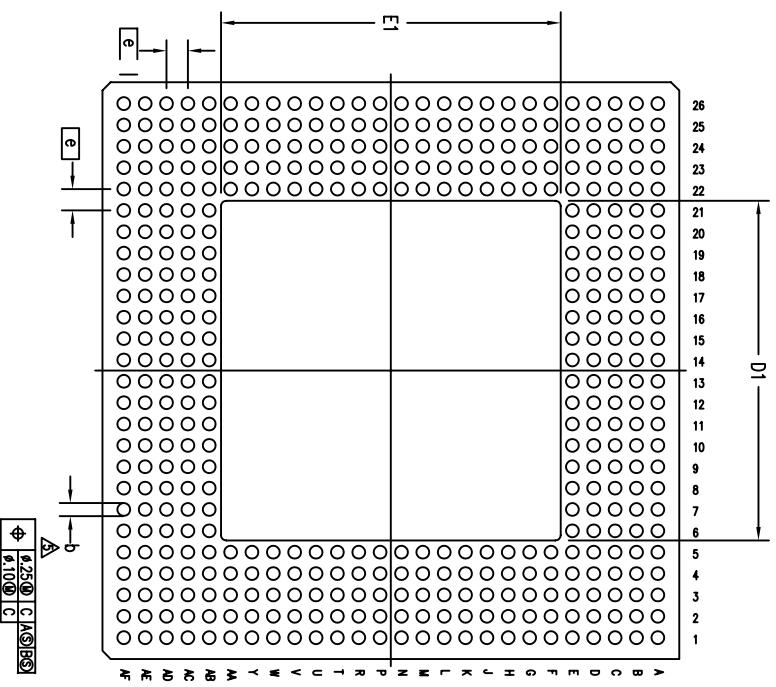
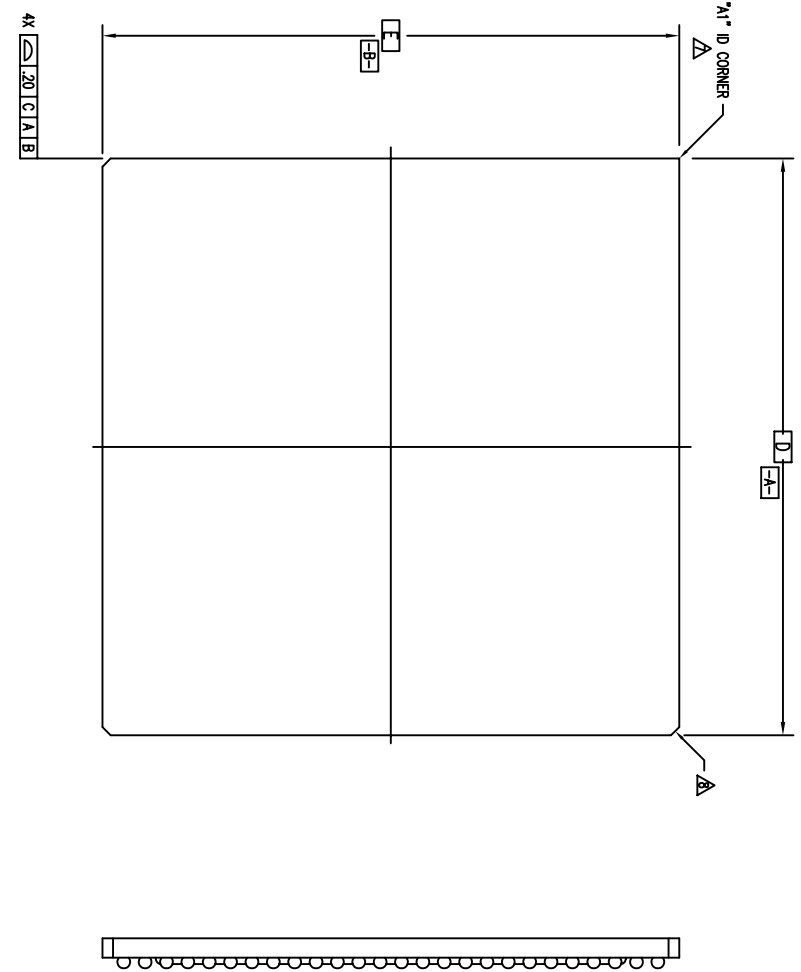
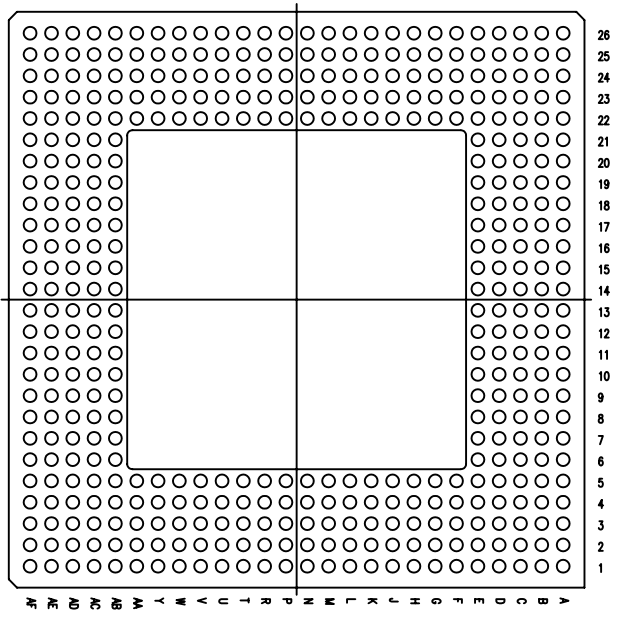


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	10/14/04	DP
01	Update Coplanarity	10/04/07	DP
02	COMBINE POD & LAND PATTERN	06/12/03	KS



TOLERANCES UNLESS SPECIFIED		6024 Silver Creek Valley Road	
DECIMAL	ANGULAR	San Jose, CA 95138	
XXX±	±	PHONE: (408) 284-8200	
XXXX±		WWW.IDT.COM FAX: (408) 284-8591	
APPROVALS	DATE	TITLE	
DRAWN <i>gpe</i>	10/14/04	BX/RX 420 PACKAGE OUTLINE	
CHECKED		27.0 X 27.0 mm BODY	
		1.0 mm BALLPITCH S8GA	
SIZE	DRAWING No.	REV	
C	PSC-4139	02	
DO NOT SCALE DRAWING		SHEET 1 OF 3	


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	10/14/04	DP
01	Update Coplanarity	10/04/07	DP
02	COMBINE POD & LAND PATTERN	08/12/03	KS



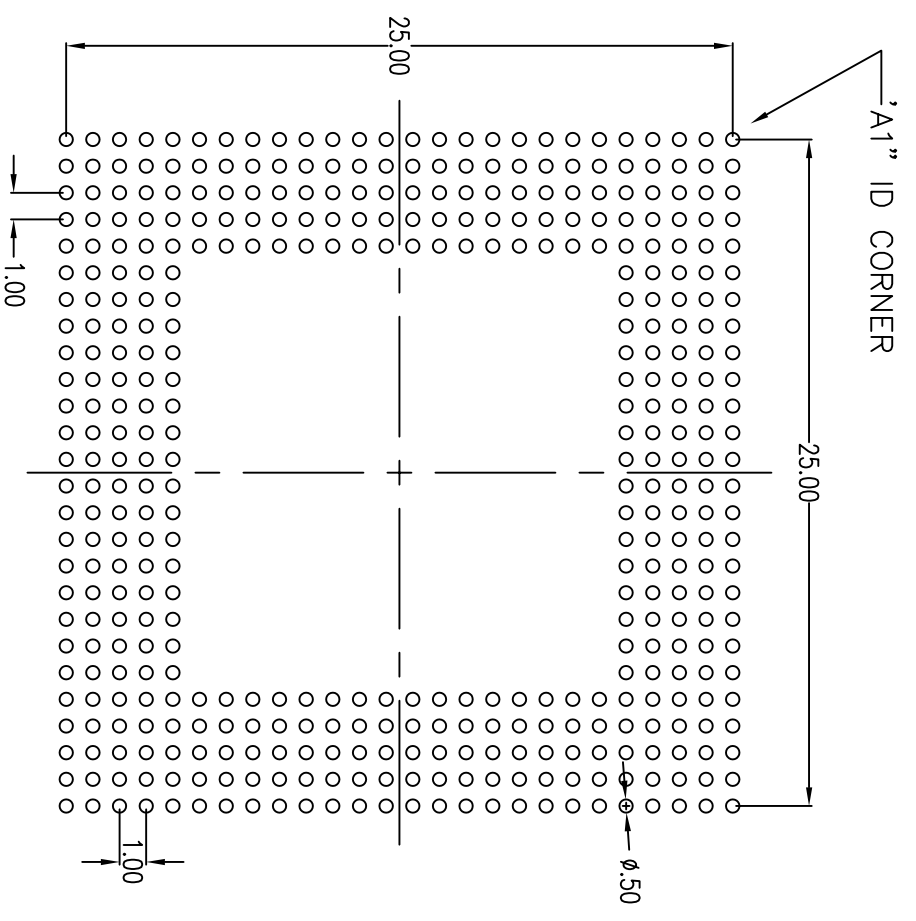
SYMBOL	JEDEC VARIATION			NOTE
	MIN	NOM	MAX	
A	—	—	1.70	
A1	.30	—	—	
A2	.25	—	1.10	
A3	.15	—	—	
D	27.00 BSC			
D1	—	—	15.9	
E	27.00 BSC			
E1	—	—	15.9	
M	26 (DEPOPULATED)			3
N	420			4
e	1.00 BSC			
b	.50	.60	.70	5
CENTER BALL MATRIX	N/A			

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
- △ DIMENSION "b" IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM $\boxed{-C-}$
- △ SEATING PLANE AND PRIMARY DATUM $\boxed{-C-}$ ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS
- △ "A1" ID CORNER MUST BE IDENTIFIED BY CHAMFER, INK MARK, METALLIZED MARKING, INDENTATION OR OTHER FEATURE ON PACKAGE BODY
- △ EXACT SHAPE OF EACH CORNER IS OPTIONAL
- 9 ALL DIMENSIONS ARE IN MILLIMETERS

TOLERANCES UNLESS SPECIFIED DECIMAL ANGULAR XXX± XXXX± XXXXX±		 6024 Silver Creek Valley Road San Jose, CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-8591	
APPROVALS	DATE	TITLE	SIZE
DP	10/14/04	BX/RX 420 PACKAGE OUTLINE 27.0 X 27.0 mm BODY 1.0 mm BALLPITCH SBCA	C
CHECKED		DRAWING NO.	REV
		PSC-4139	02
DO NOT SCALE DRAWING		SHEET 2 OF 3	

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	10/14/04	DP
01	Update Conformity	10/04/07	DP
02	COMBINE POD & LAND PATTERN	06/12/03	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	±	
XXX±	±		
XXXX±			
APPROVALS	DATE	TITLE	SIZE
DRAWN JP	10/14/04	BX/RX 420 PACKAGE OUTLINE	DRAWING No.
CHECKED		27.0 X 27.0 mm BODY	PSC-4139
		1.0 mm BALLPITCH SBGA	REV 02
DO NOT SCALE DRAWING		SHEET 3 OF 3	