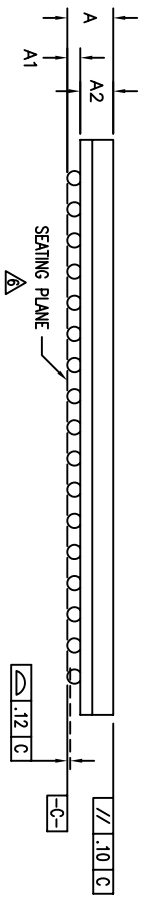
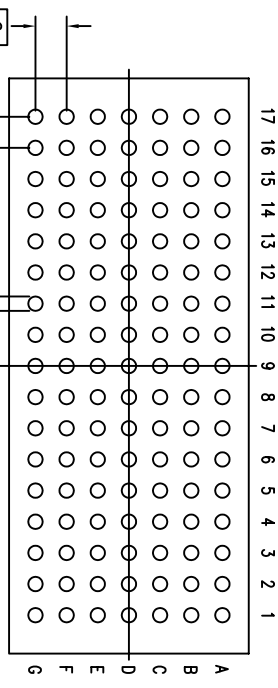
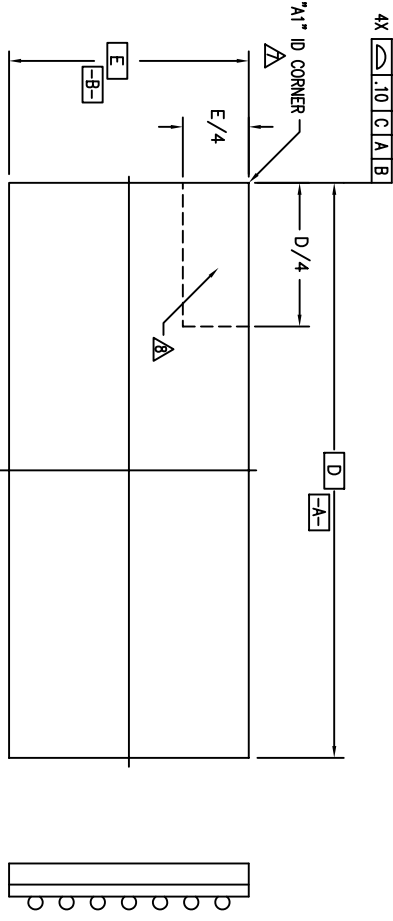
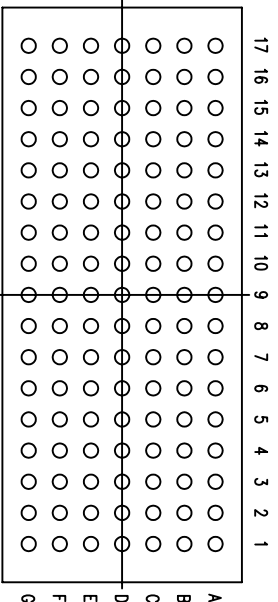


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	06/30/08	TV
01	COMBINE POD & LAND PATTERN	05/23/13	KS



TOLERANCES UNLESS SPECIFIED		6024 SILVER CREEK VALLEY ROAD	
DECIMAL	ANGULAR	SAN JOSE CA 95138	
XXX±	F	PHONE: (408) 284-8200	
XXXX±		FAX: (408) 284-8591	
XXXX±		WWW.IDT.COM	
APPROVALS	DATE	TITLE	
DRAWN 379	06/30/08	BY/BVG PACKAGE OUTLINE	
CHECKED		5 x 12 mm BODY SIZE	
		0.65 mm BALL PITCH FPBGA	
		SIZE	DRAWING No.
		C	PSC-4231
		DO NOT SCALE DRAWING	SHEET 1 OF 3
			REV 01


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	06/30/08	TV
01	COMBINE POD & LAND PATTERN	05/23/13	KS



SYMBOL	JEDEC VARIATION			NOTE
	NOT YET REGISTERED	MIN	NOM	
A				1.00
A1	.15			
A2	.60	.70		.80
D		12.00	BSC	
E		5.00	BSC	
M		7 X	17	3
N		119		4
e		.65	BSC	
b	.25	.30	.35	5
CENTER BALL MATRIX	N/A			

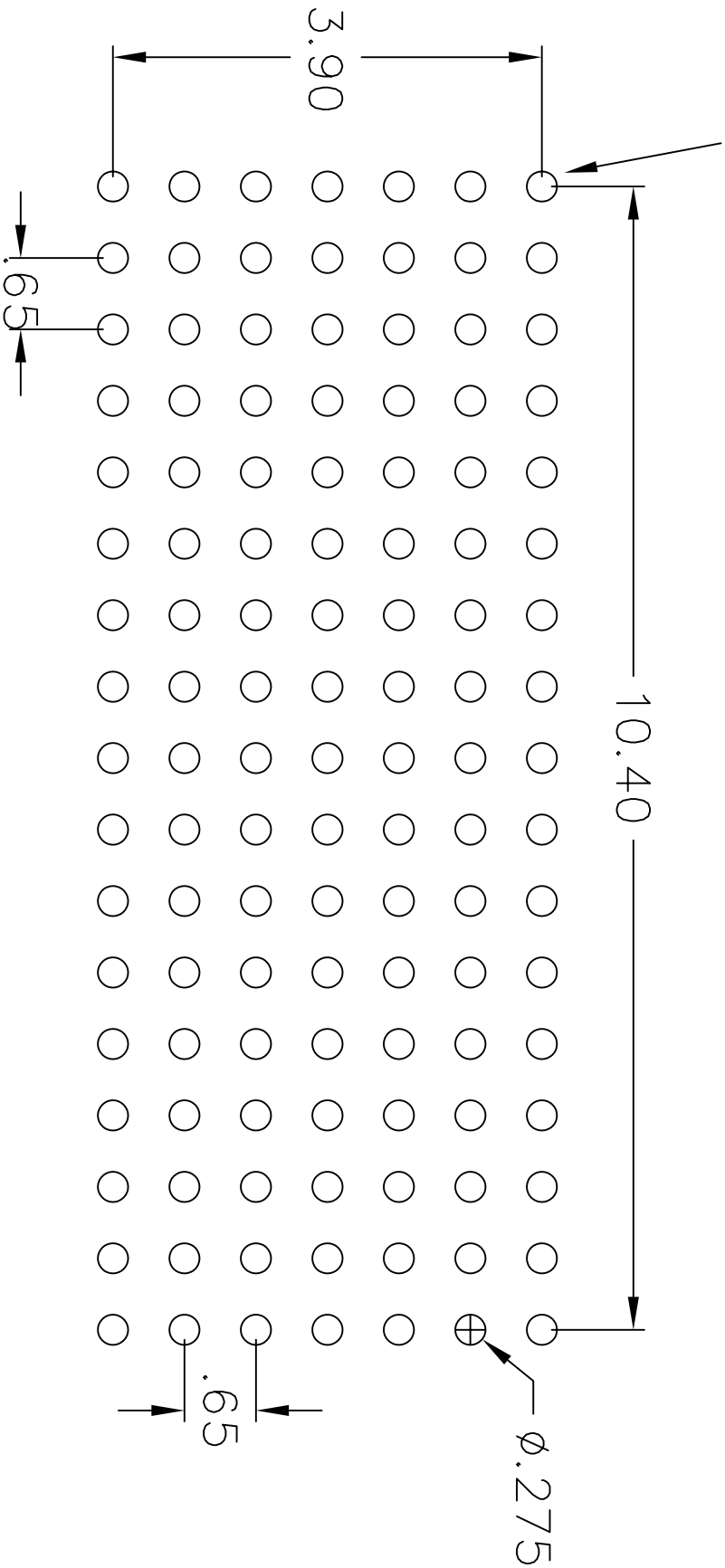
NOTES:

- 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 $\boxed{-C-}$
- 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 TOP SURFACE OF PACKAGE
- 8 IF "A1" ID CORNER IS ON PACKAGE BODY, IT MUST BE LOCATED WITHIN THE ZONE INDICATED
- 9 ALL DIMENSIONS ARE IN MILLIMETERS
- 10 BV USES STANDARD MATERIAL SET. BVG USES "GREEN" MATERIAL SET.


TOLERANCES UNLESS SPECIFIED		 6024 SILVER CREEK VALLEY ROAD SAN JOSE CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-8591	
DECIMAL	ANGULAR	www.IDT.com	
XXX±	±	TITLE BV/BVG PACKAGE OUTLINE	
XXXX±		DRAWN 579	
APPROVALS	DATE	DATE 06/20/08	
CHECKED		SIZE C	
		DRAWING No. PSC-4231	
		REV 01	
DO NOT SCALE DRAWING		SHEET 2 OF 3	

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	06/30/08	TV
01	COMBINE POD & LAND PATTERN	05/23/13	KS

"A1" ID CORNER



RECOMMENDED LAND PATTERN DIMENSION

TOLERANCES UNLESS SPECIFIED		 IDT 8024 SILVER CREEK VALLEY RD SAN JOSE, CA 95138 PHONE: (408) 284-6200 FAX: (408) 284-8591 www.idt.com
DECIMAL	ANGULAR	
XXX	±	
XXXX		
APPROVALS	DATE	TITLE
DRAWN 572	06/30/08	BY/BVG PACKAGE OUTLINE
CHECKED		5 x 12 mm BODY SIZE
		0.65 mm BALL PITCH FRPGA
SIZE	DRAWING No.	REV
C	PSC-4231	01
DO NOT SCALE DRAWING		SHEET 3 OF 3