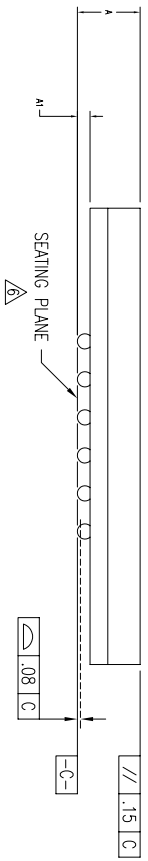
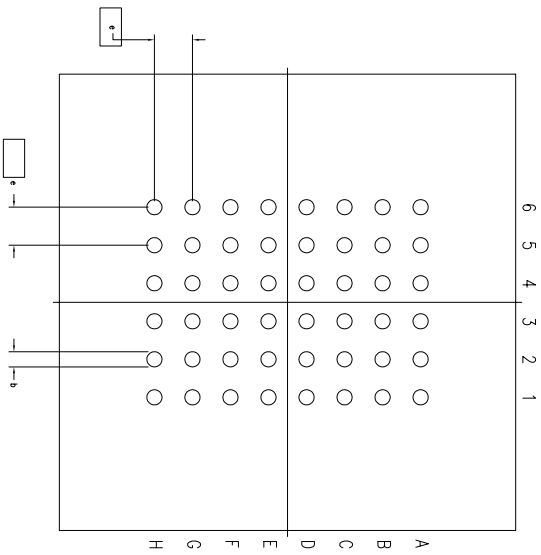
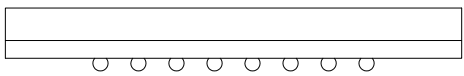
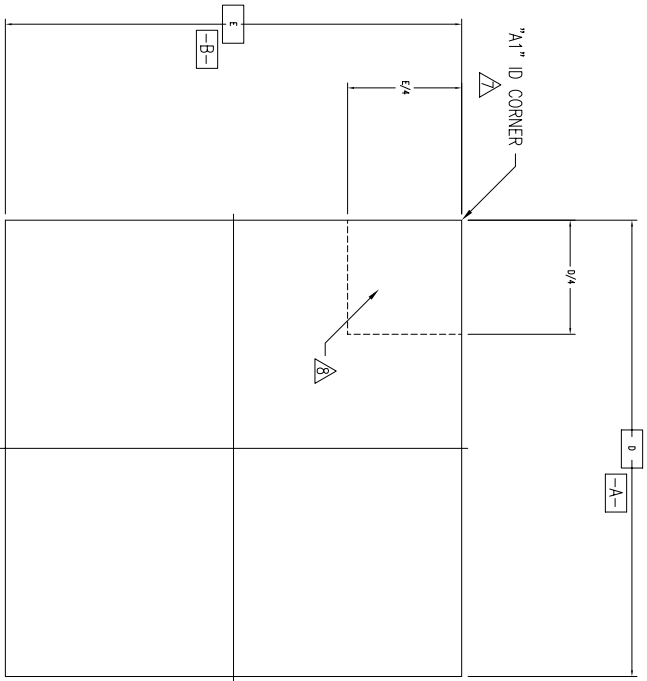


REVISIONS

REV	DESCRIPTION	DATE	APPROVED
01	CHANGE "b" DIM	04/25/02	AN
02	CHANGE "A1" DIM	09/07/04	ML
03	ADD "GREEN" BEG NOMENCLATURE	10/27/04	STL
04	COMBINE POD & LAND PATTERN	05/24/13	JC



TOLERANCES UNLESS SPECIFIED
 DECIMAL ANGULAR ±
 XXX±
 XXXXX±

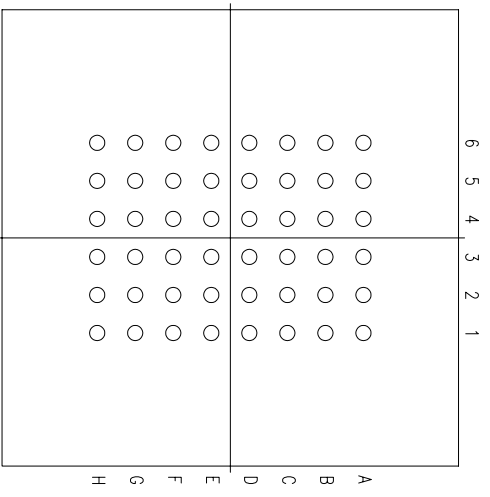
IDT™ 6024 SILVER CREEK VALLEY ROAD
 SAN JOSE, CA 95138
 PHONE: (408) 284-8200
 FAX: (408) 284-8591

www.IDT.com

APPROVALS DATE TITLE
 DRAWN: STJ 07/05/00 BE/BEG PACKAGE OUTLINE
 CHECKED: FPBGA

SIZE: C DRAWING NO.: PSC-4090
 DO NOT SCALE DRAWING

SHEET 1 OF 3



(48 BALL)


SYMBOL	JEDEC VARIATION			NOTE
	NOT YET REGISTERED	MIN	NOM	
A	-	-	-	1.20
A1	.20	.25		.35
D		9.00 BSC		
E		9.00 BSC		
M		6 X 8		3
N		48		4
e		.75 BSC		
b	.30	.35	.45	5
CENTER BALL MATRIX		N/A		

REVISIONS

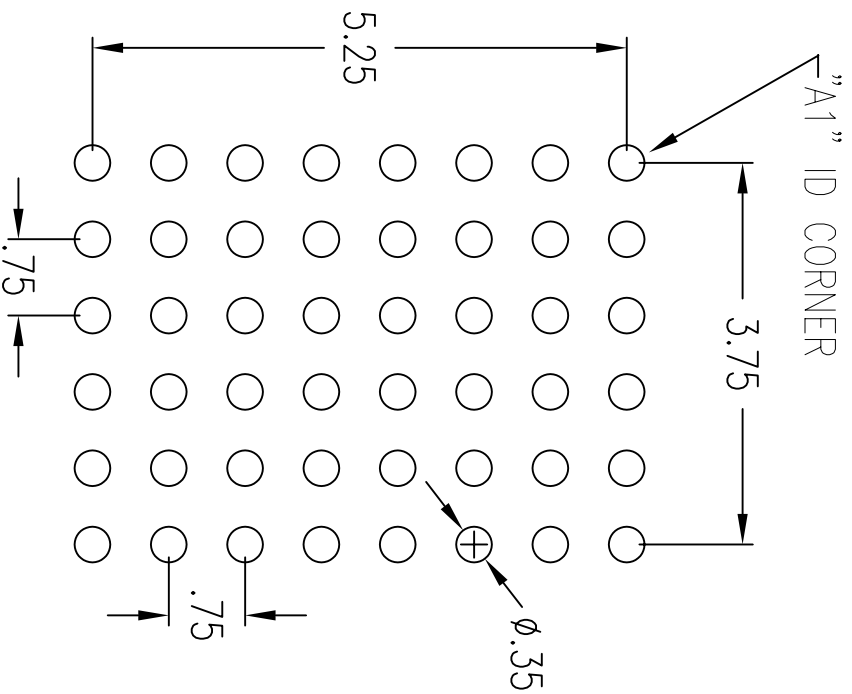
REV	DESCRIPTION	DATE	APPROVED
01	CHANGE "b" DIM	04/25/02	ADP
02	CHANGE "A1" DIM	09/07/04	MPJ/C
03	ADD "GREEN" BEG NOMENCLATURE	10/27/04	STL/STL
04	COMBINE POD & LAND PATTERN	05/24/13	J.C.B.

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 $\boxed{-C-}$
- 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 IF "A1" ID CORNER IS ON PACKAGE BODY, IT MUST BE LOCATED WITHIN THE ZONE INDICATED
- 9 ALL DIMENSIONS ARE IN MILLIMETERS

TOLERANCES UNLESS SPECIFIED DECIMAL ANGULAR XXX± F XXXX± XXXX±		 6024 SILVER CREEK VALLEY ROAD SAN JOSE, CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-8591	
APPROVALS	DATE	TITLE	DRAWING No.
DRAWN STJ	07/05/00	BE/BEG PACKAGE OUTLINE	FPBCA
CHECKED			
SIZE	DRAWING No.	REV	
C	PSC-4090	04	
DO NOT SCALE DRAWING		SHEET	2 OF 3


REV	DESCRIPTION	DATE	APPROVED
01	CHANGE "b" DIM	04/25/02	ASJL
02	CHANGE "A1" DIM	09/07/04	MLJES
03	ADD "GREEN" BEG NOMENCLATURE	10/27/04	STL JYL
04	COMBINE POB & LAND PATTERN	05/24/13	JC.S



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		ANGULAR		 8024 SILVER CREEK VALLEY ROAD SAN JOSE, CA 95138 PHONE: (408) 294-8200 FAX: (408) 294-8591
DECIMAL	±	ANGULAR	±	
XXX±		XXXX±		www.IDT.com www.IDT.com
XXXX±		XXXX±		
APPROVALS	DATE	TITLE	SIZE	REV
DRAWN: JYJ	07/05/00	BE/BEG PACKAGE OUTLINE	C	04
CHECKED		FPBGA	DRAWING No.	
		9.0 X 9.0 mm BODY	PSC-4090	
DO NOT SCALE DRAWING			SHEET	3 OF 3