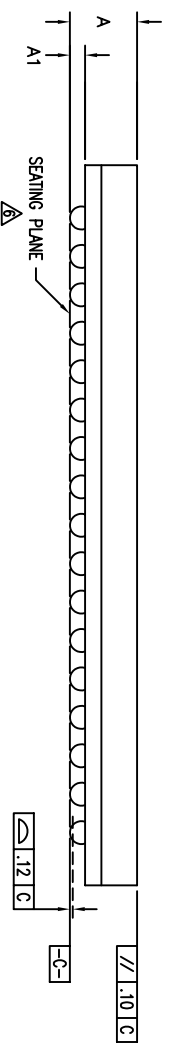
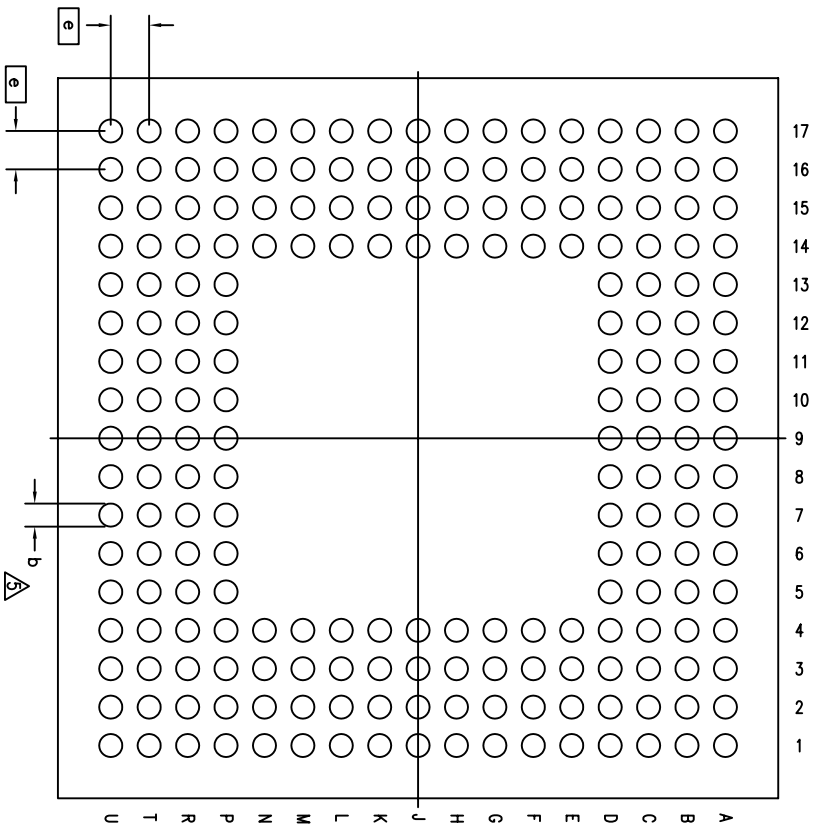
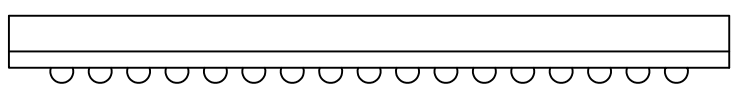
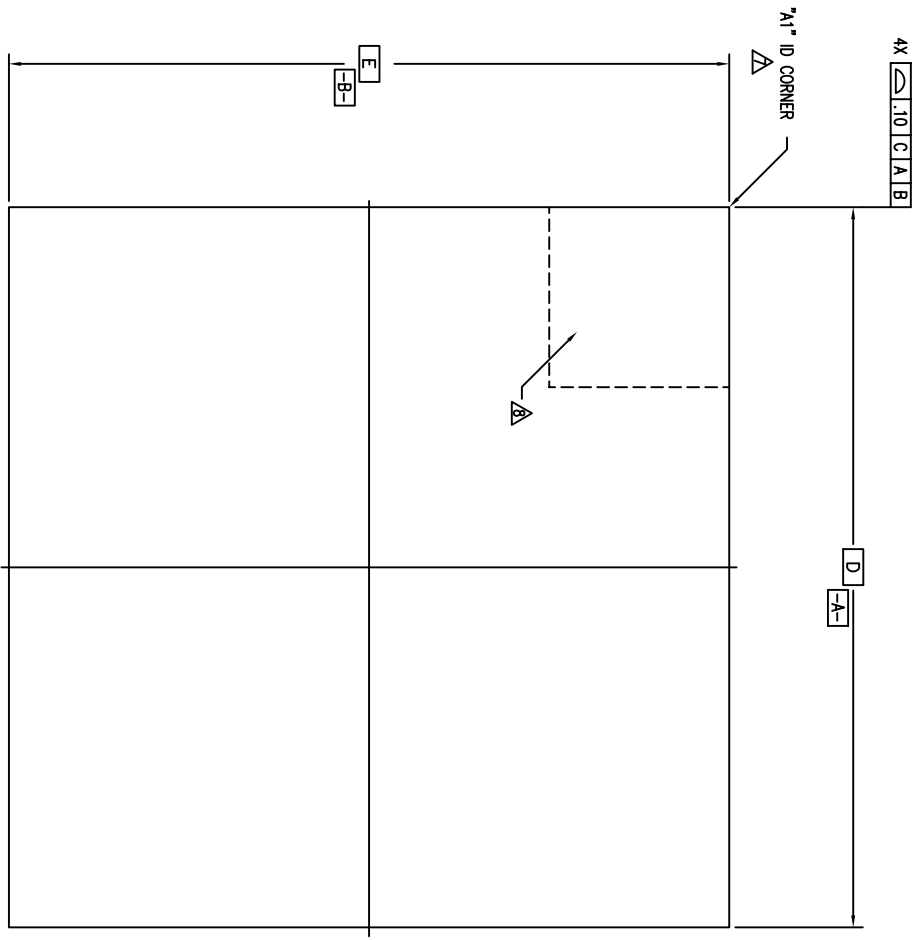


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
01	CHANGE FROM FLEX TO CHP ARROW PACKAGE	09/25/99	S. SUIE
02	MODIFY BALL DIAMETER IN THE TABLE	07/13/01	D. XUE
03	UPDATE OVERBALL THICKNESS A	02/24/03	D. XUE
04	REMOVE THICKNESS A2	05/25/03	D. XUE
05	UPDATE A1	07/25/03	D. XUE
06	ADD "GREEN" BRG NOMENCLATURE	10/15/04	TU VU
07	COMBINE FOD & LAND PATTERN	5/23/13	KS



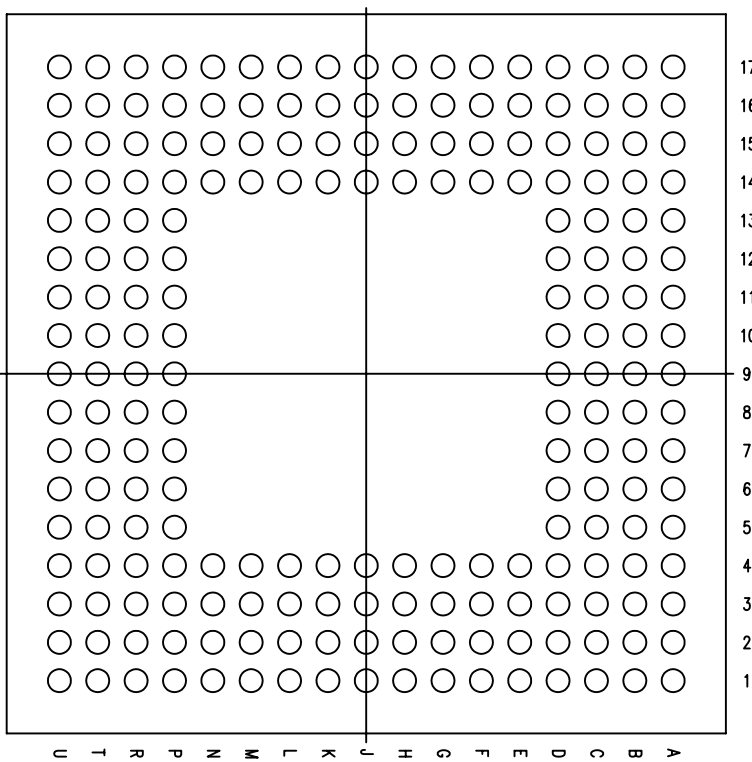
(208 BALL SHOWN)

TOLERANCES UNLESS SPECIFIED			
DECIMAL	ANGULAR	9024 SILVER CREEK VALLEY ROAD SAN JOSE CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-8591	
±	±	WWW.IDT.COM TITLE: BF/BFG PACKAGE OUTLINE 15.0 X 15.0 mm BODY FPBGA	
APPROVALS	DATE	SIZE	DRAWING No.
XXX±	03/10/99	C	PSC-4076
DRAWN	97Y	DO NOT SCALE DRAWING	REV 07
CHECKED			SHEET 1 OF 3

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
01	CHANGE FROM FLEX TO QHP ARRAY PACKAGE	09/25/99	S. SUE
02	MODIFY BALL DIAMETER IN THE TABLE	07/13/01	D. XUE
03	UPDATE OVERBALL THICKNESS A	2/24/03	D. XUE
04	REMOVE THICKNESS A2	5/25/03	D. XUE
05	UPDATE A1	07/25/03	D. XUE
06	ADD "GREEN" BRG NOMENCLATURE	10/15/04	TU VU
07	COMBINE PAD & LAND PATTERN	5/23/13	KS


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 \square -C-
- 6 SEATING PLANE AND PRIMARY DATUM \square -C- ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS
- 7 "A" 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

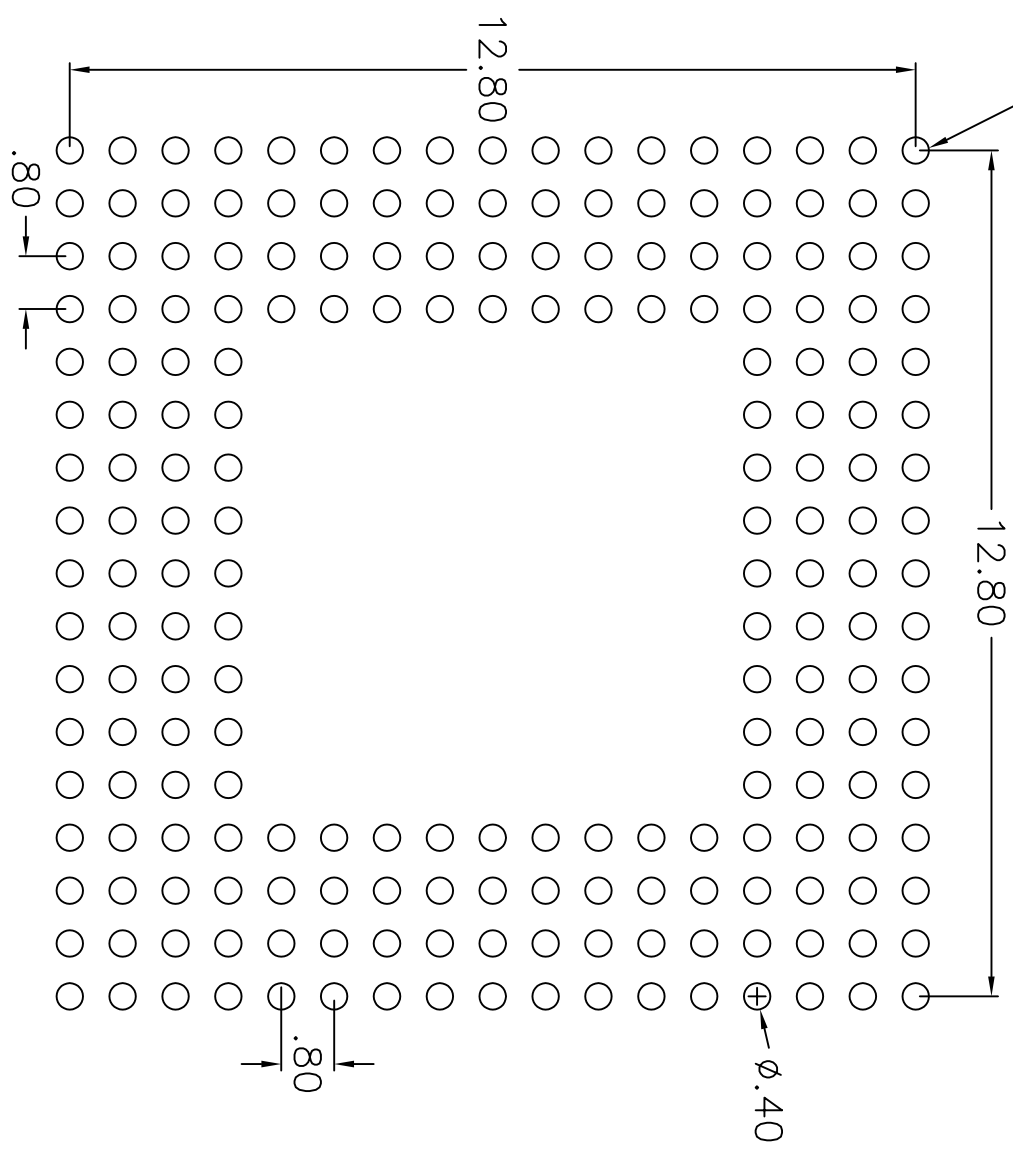


(208 BALL)

SYMBOL	JEDEC VARIATION MO-205e-AG			NOTE
	MIN	NOM	MAX	
A	1.30	1.40	1.70	
A1	.25	.40	.45	
D	15.00 BSC			
E	15.00 BSC			
M	17 X 17			3
N	208			4
e	.80 BSC			
b	.40	.45	.50	5
CENTER BALL MATRIX	N/A			


TOLERANCES UNLESS SPECIFIED DECIMAL ± ANGULAR ±		 6024 SILVER CREEK VALLEY ROAD SAN JOSE CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-8591
APPROVALS DRAWN 97J CHECKED	DATE 03/10/99	
TITLE BF/BFG PACKAGE OUTLINE 15.0 X 15.0 mm BODY FPBGA		WWW.IDT.COM
SIZE C	DRAWING NO. PSC-4076	REV 07
DO NOT SCALE DRAWING		SHEET 2 OF 3

"A1" ID CORNER



RECOMMENDED LAND PATTERN DIMENSION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
01	CHANGE FROM FLEX TO CHIP ARRAY PACKAGE	09/25/99	S. SUE
02	MODIFY BALL DIAMETER IN THE TABLE	07/13/01	D. XUE
03	UPDATE OVERALL THICKNESS A	2/24/03	D. XUE
04	REMOVE THICKNESS A2	5/25/03	D. XUE
05	UPDATE A1	07/25/03	D. XUE
06	ADD "GREEN" BRG NOMENCLATURE	10/15/04	TU VU
07	COMBINE POD & LAND PATTERN	5/23/13	KS

TOLERANCES UNLESS SPECIFIED		 <p>6024 SILVER CREEK VALLEY ROAD SAN JOSE CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-8591</p>
DECIMAL	±	
ANGULAR	±	
XXX±	XXXX±	
APPROVALS	DATE	WWW.IDT.COM
DRAWN	DATE	TITLE
CHECKED	DATE	BF/BFG PACKAGE OUTLINE
		15.0 X 15.0 mm BODY
		FPCGA
SIZE	DRAWING NO.	REV
C	PSC-4076	07
DO NOT SCALE DRAWING		SHEET 3 OF 3