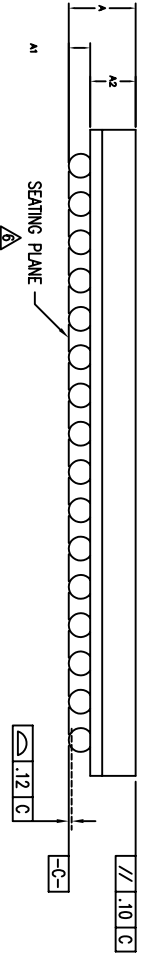
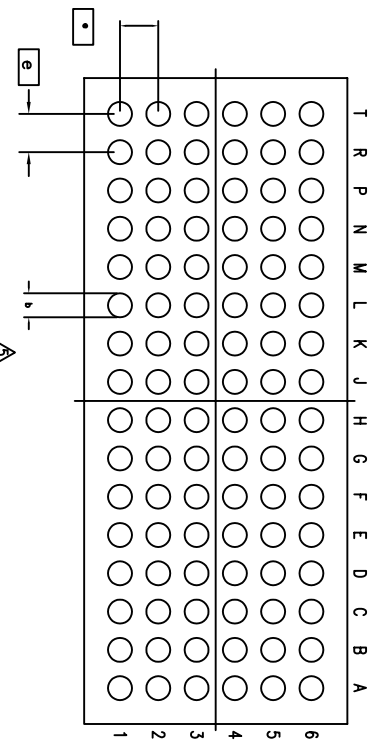
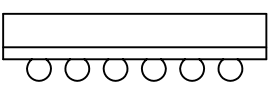
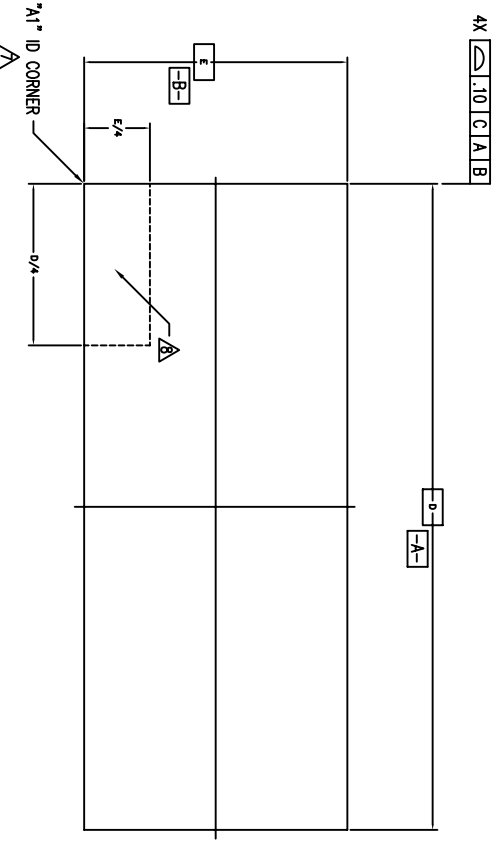
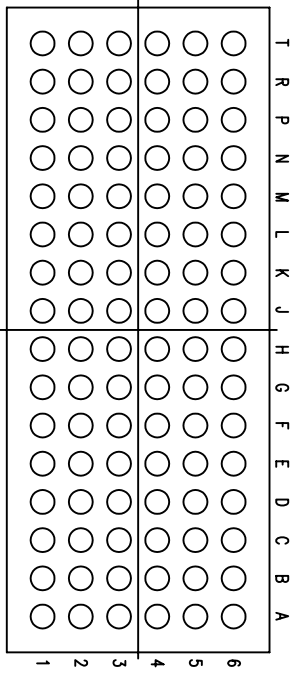


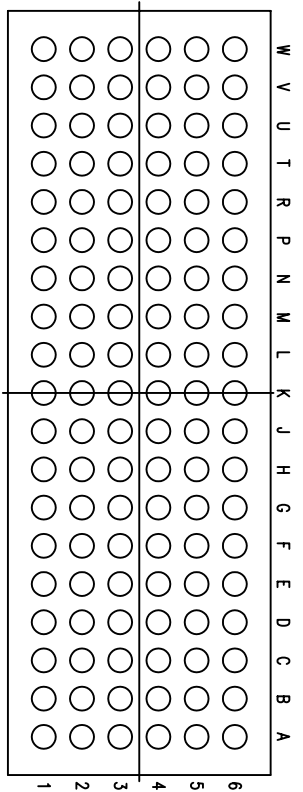
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	06/30/98	TV
01	ADDED "A" IN TITLE BLOCK	06/24/03	TV
02	ADD "GREEN" BFG NOMENCLATURE	10/15/04	TU VU
03	COMBINE POD & LAND PATTERN	05/24/13	KS



TOLERANCES UNLESS SPECIFIED		IDT™	
DECIMAL	F	6024 Silver Creek Valley Road	San Jose CA 95138
ANGULAR	±	PHONE: (408) 284-8000	San Jose CA 95138
XXXX		WWW.IDT.COM	PHONE: (408) 284-8000
XXXXX			PHONE: (408) 284-8000
APPROVALS	DATE	TITLE	DATE
DRAWN 777	06/30/98	BF/BFG PACKAGE OUTLINE	
CHECKED		5.50 mm BODY WIDTH	
		.80 mm BALL PITCH FPBCA	
SIZE	DRAWING NO.	REV	
C	PSC-4066	03	
DO NOT SCALE DRAWING		SHEET	1 OF 3



(96 BALL)




(114 BALL)

SYMBOL	JEDEC VARIATION			NOTE	JEDEC VARIATION			NOTE
	NOT YET REGISTERED	MIN	NOM		MAX	NOT YET REGISTERED	MIN	
A	1.30	1.40	1.50		1.30	1.40	1.50	
A1	.35	.40	.45		.35	.40	.45	
A2	.85	1.00	1.15		.85	1.00	1.15	
D	13.50 BSC				16.00 BSC			
E	5.50 BSC				5.50 BSC			
M	6 X 16			3	6 X 19			3
N	96			4	114			4
e	.80 BSC				.80 BSC			
b	.45	.50	.55	5	.45	.50	.55	5
CENTER BALL MATRIX	N/A				N/A			

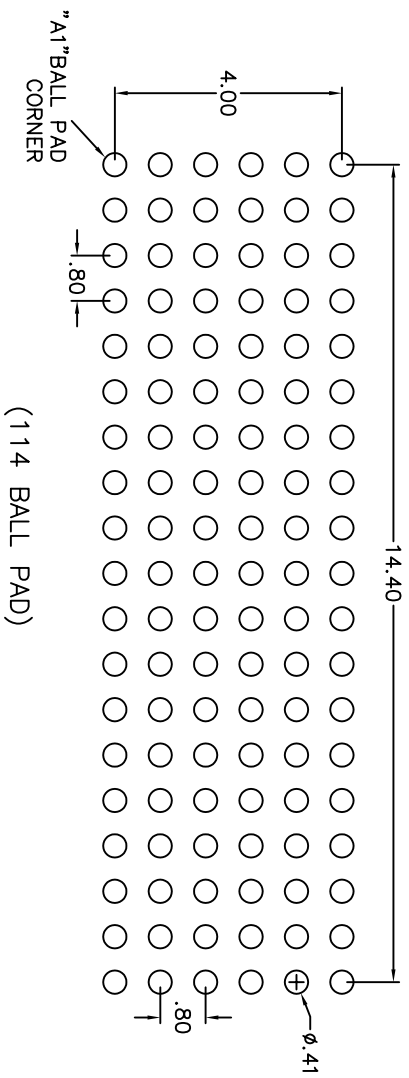
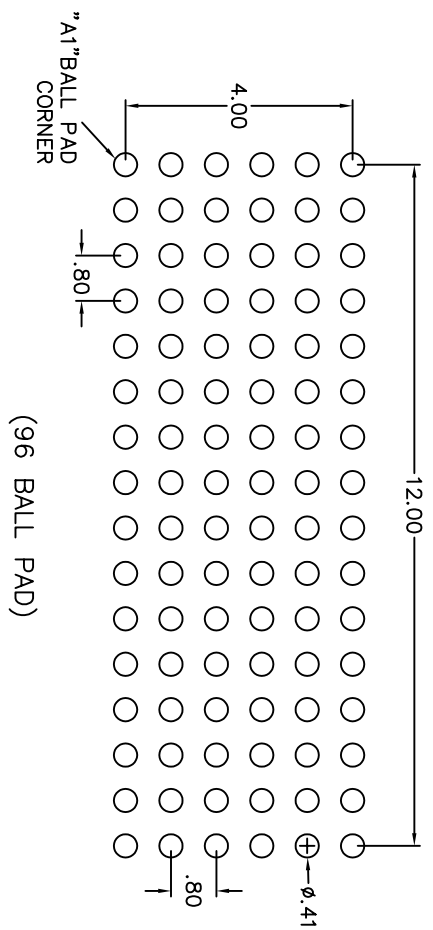
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	06/30/98	TV
01	ADDED "AF" IN TITLE BLOCK	06/24/03	TV
02	ADD "GREEN" BFG NOMENCLATURE	10/15/04	TU VU
03	COMBINE POD & LAND PATTERN	05/24/13	KS

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 "D" 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 IF "A1" ID CORNER IS ON PACKAGE BODY, IT MUST BE LOCATED WITHIN THE ZONE INDICATED
- 9 ALL DIMENSIONS ARE IN MILLIMETERS
- 10 BF USES STANDARD MATERIAL SET. AF USES "GREEN" MATERIAL SET.

TOLERANCES UNLESS SPECIFIED		 <p>6024 Silver Creek Valley Road San Jose CA 95138 PHONE (408) 298-8000 FAX (408) 298-5872</p>
DECIMAL	±	
ANGULAR	±	
XXX±		
APPROVALS	DATE	TITLE
DRAWN 979	06/30/98	BF/BFG PACKAGE OUTLINE
CHECKED		5.50 mm BODY WIDTH
		.80 mm BALL PITCH FPBGA
	SIZE	DRAWING No.
	C	PSC-4066
		REV
		03
DO NOT SCALE DRAWING		SHEET 2 OF 3

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	06/30/98	TV
01	ADDED "A1" IN TITLE BLOCK	06/24/03	TV
02	ADD "GREEN" BFG NOMENCLATURE	10/15/04	TU WU
03	COMBINE POD & LAND PATTERN	05/24/13	KS



RECOMMENDED LAND PATTERN DIMENSION (mm)

TOLERANCES UNLESS SPECIFIED DECIMAL ANGULAR XX.X .1° XXX.X .030 XXX.X .030		 www.IDT.com 6024 Silver Creek Valley Road San Jose CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-3572	
APPROVALS	DATE	TITLE	REV
DRAWN 371	06/20/98	BF/BFG PACKAGE OUTLINE 5.50 mm BODY 0.8 mm BALL PITCH FPBGA	03
CHECKED		SIZE DRAWING No.	
		C PSC-4066	
		DO NOT SCALE DRAWING	SHEET 3 OF 3