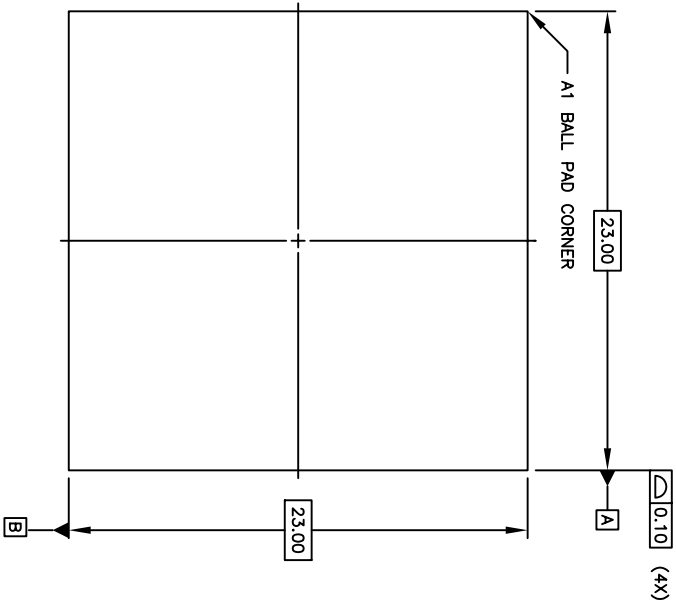
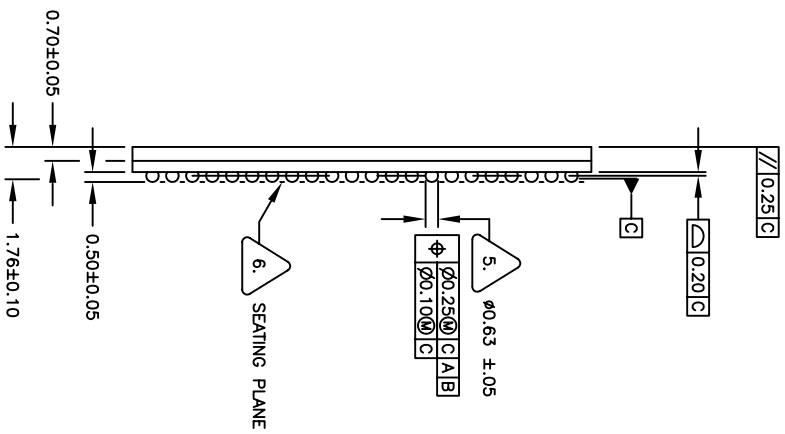


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	08/03/06	DP
01	Add tolerance on ball size	11/05/07	DP
02	COMBINE POD & LAND PATTERN	05/15/13	RC




TOP VIEW

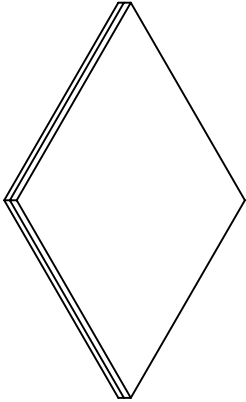


SIDE VIEW

TOLERANCES UNLESS SPECIFIED		ANGULAR	
DECIMAL	ANGULAR		
XX±			
XXX±			
APPROVALS	DATE	TITLE	SIZE
DRAWN <i>gpp</i>	08/03/06	BC/BCG484 PACKAGE OUTLINE	C
CHECKED		23.0 x 23.0 mm BODY	
		1.0 mm PITCH CABGA	
		DRAWING No.	REV
		PSC-4198	02
		DO NOT SCALE DRAWING	SHEET 1 OF 3

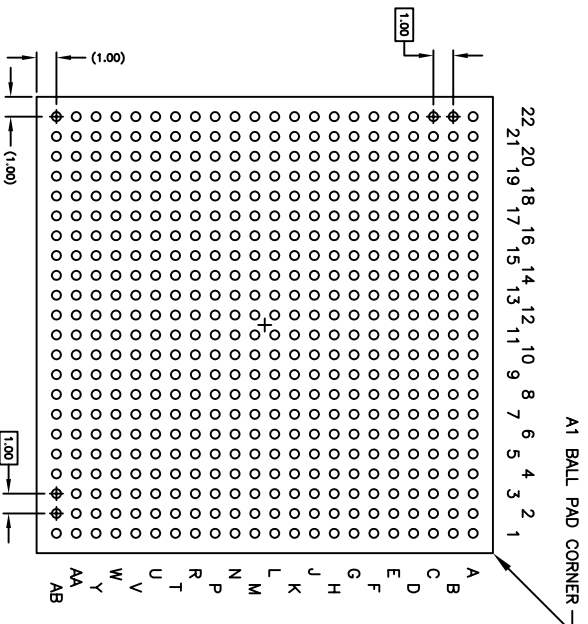

IDT™
 6024 Silver Creek Valley Road
 San Jose, CA 95138
 PHONE: (408) 284-8200
 FAX: (408) 284-8591
 www.IDT.com

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	08/03/06	DP
01	Add tolerance on ball size	11/05/07	DP
02	COMBINE PAD & LAND PATTERN	05/15/13	RC



NOTES: UNLESS OTHERWISE SPECIFIED

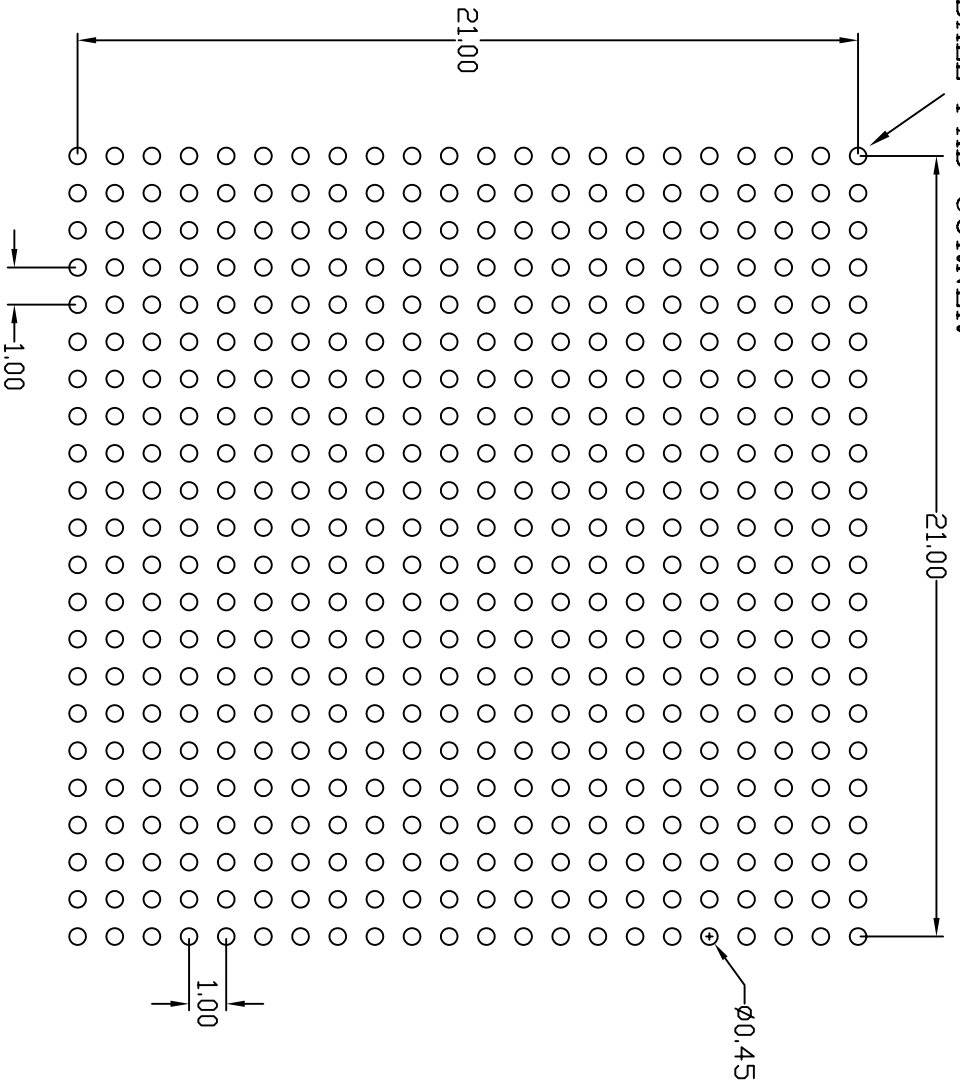
1. ALL DIMENSIONS AND TOLERANCES CONFORM TO ASME Y14.5M-1994.
2. THE BASIC SOLDER BALL GRID PITCH IS 1.00mm.
3. THE MAXIMUM SOLDER BALL MATRIX SIZE IS 22 X 22.
4. THE MAXIMUM ALLOWABLE NUMBER OF SOLDER BALLS IS 484.
5. DIMENSION IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM C.
6. PRIMARY DATUM C AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
7. "A1" ID CORNER MUST BE IDENTIFIED. IDENTIFICATION MAY BE BY MEANS OF CHAMFER, METALLIZED OR INK MARK, INDENTATION OR OTHER FEATURE OF THE PACKAGE BODY.
8. THIS DRAWING CONFORMS TO THE JEDEC REGISTERED OUTLINE MS-034/A, VARIATION AAG-1 EXCEPT FOR A1, b, AND cdd DIMENSIONS.



BOTTOM VIEW
484 SOLDER BALLS

TOLERANCES UNLESS SPECIFIED	ANGULAR		6024 Silver Creek Valley Road San Jose CA, 95138 PHONE: (408) 284-8200 FAX: (408) 284-8891
DECIMAL	XXX#		
APPROVALS	DATE	TITLE	SIZE
DRAWN <i>BP</i>	08/03/06	BC/BCG484 PACKAGE OUTLINE	23.0 x 23.0 mm BODY 1.0 mm PITCH CABGA
CHECKED			
		DRAWING No.	REV
		PSC-4198	02
DO NOT SCALE DRAWING			SHEET 2 OF 3


"A1" BALL PAD CORNER



RECOMMENDED LAND PATTERN DIMENSION (mm)

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	4/23/12	DP
01	ADD TOLERANCE ON BALL SIZE	11/05/07	DP
02	COMBINE PAD & LAND PATTERN	5/15/13	RC

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS		DECIMAL XX.XX		ANGULAR X.X	
DRAWN <i>g/p</i>		DATE		1/17/12	
CHECKED		APPROVALS			
DRAWING No.		BC/BCG484 PACKAGE OUTLINE		P3.0 x 53.0 mm BODY CABGA	
PSC-4198		SIZE		C	
DD NOT SCALE DRAWING		SCALE		N/A	
SHEET 3		DF 3			


IDT 6024 SILVER CREEK VALLEY ROAD
 San Jose, CA 95138
 PHONE: (408) 284-8200
 FAX: (408) 284-2775
 www.IDT.com