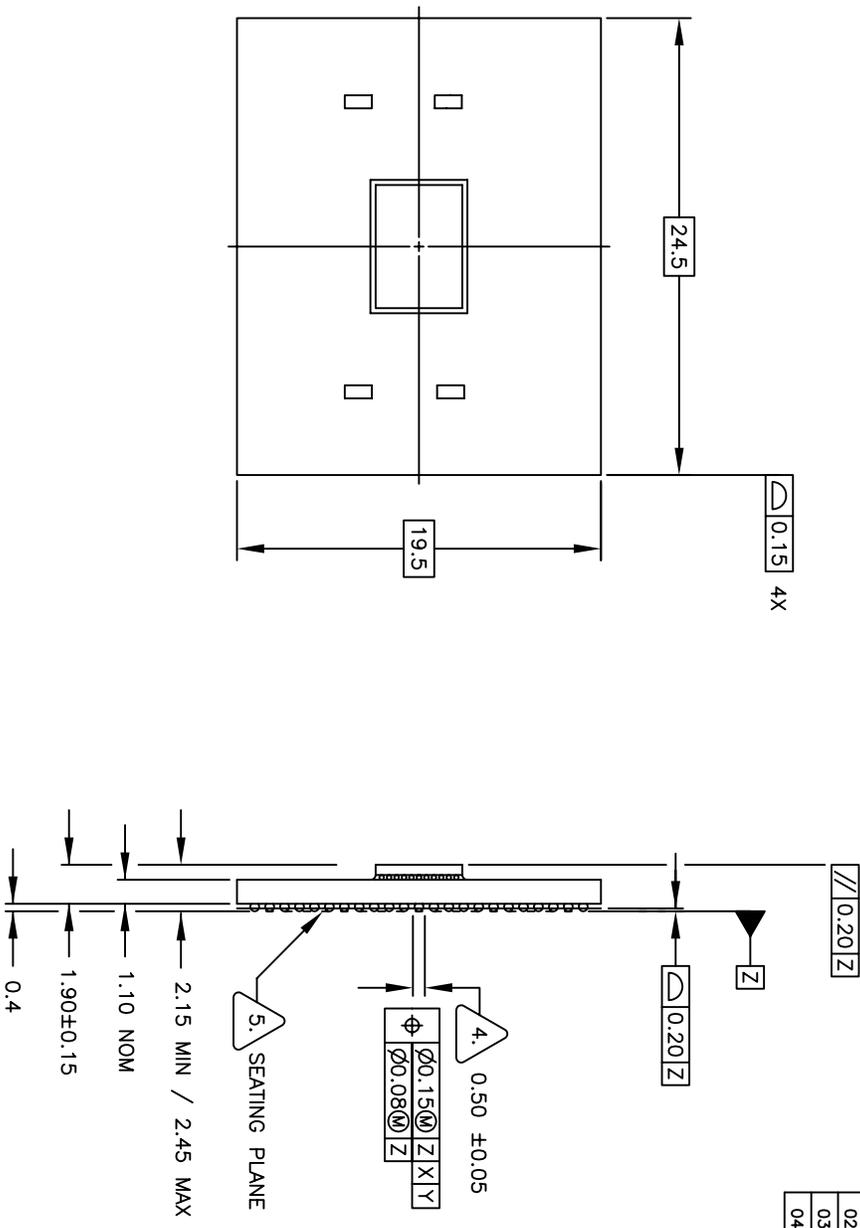


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	09/14/04	PKP
01	CHANGED BALL DIAMETER TO 0.50 MM	12/15/05	PKP
02	ADDED CHIP CAP DIMENSIONS	11/30/06	PKP
03	ADDED MIN PKG HEIGHT DIM	02/26/07	PKP
04	COMBINE POD & LAND PATTERN	5/31/13	KS



TOP VIEW

SIDE VIEW

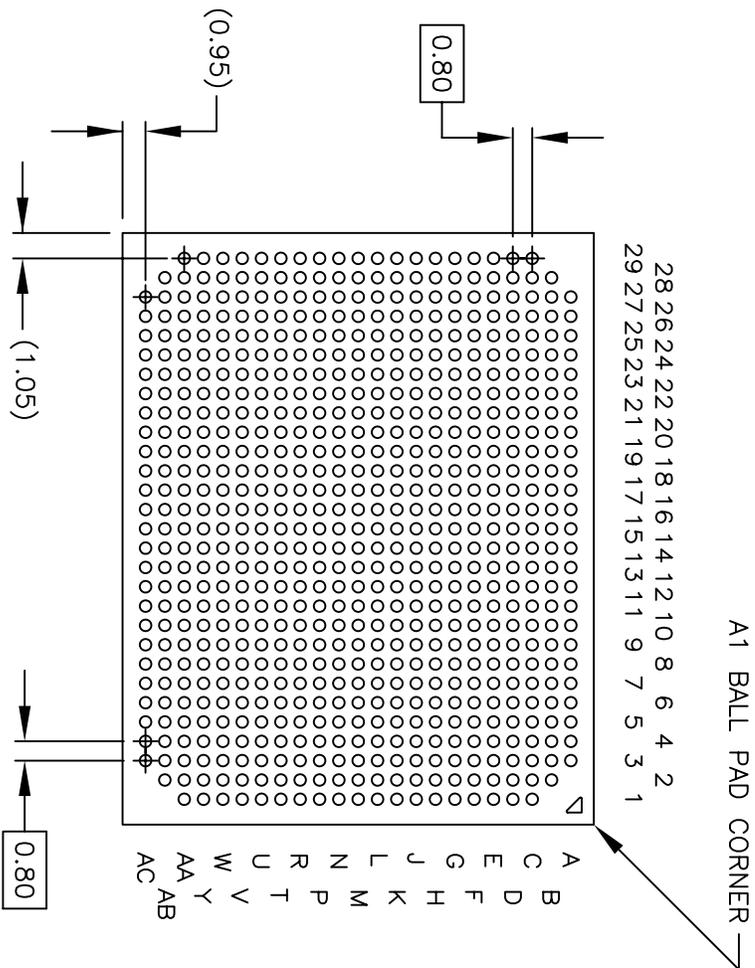
TOLERANCES UNLESS SPECIFIED		ANGULAR	
DECIMAL	±	ANGULAR	±
XX.X	.10	XX.X	.5
XXX.X	.050	XXX.X	.250
APPROVALS	DATE	TITLE	DATE
DRAWN: ϕ PKP	09/14/04	B1/R1/BIG 655 PACKAGE OUTLINE	
CHECKED		24.5 x 19.5 mm BODY	
		0.80 mm PITCH FOBGA	
SIZE	DRAWING NO.	REV	
C	PSC-4137	04	
DO NOT SCALE DRAWING		SHEET	1 OF 4



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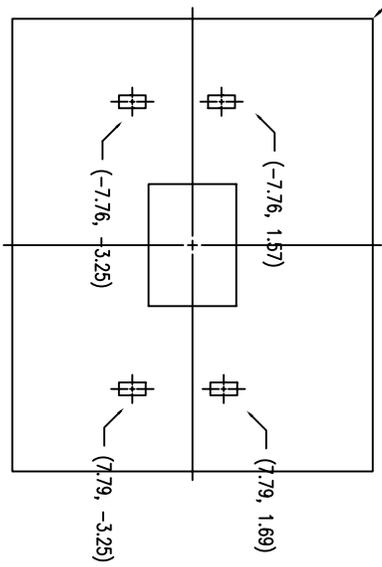
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	09/14/04	PKP
01	CHANGED BALL DIAMETER TO 0.50 MM	12/15/05	PKP
02	ADDED CHIP CAP DIMENSIONS	11/30/06	PKP
03	ADDED MIN PKG HEIGHT	02/26/07	PKP
04	COMBINE POD & LAND PATTERN	5/31/13	KS



BOTTOM VIEW
(655 SOLDER BALLS)

TOLERANCES UNLESS SPECIFIED			
DECIMAL ANGULAR		6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-3572	
XX± .05	±1°	www.IDT.com	
APPROVALS	DATE	TITLE	
DRAWN	09/14/04	BJ/RJ/BJG 655 PACKAGE OUTLINE	
CHECKED		24.5 x 19.5 mm BODY	
		0.80 mm PITCH FCBGA	
		SIZE	REV
		C	04
DO NOT SCALE DRAWING		DRAWING No.	PSC-4137
		SHEET	2 OF 4

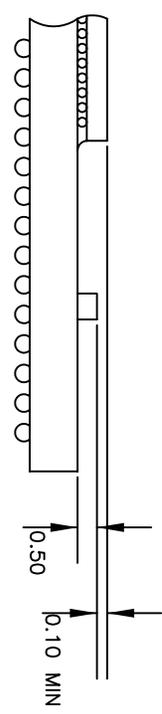
"A1" CORNER



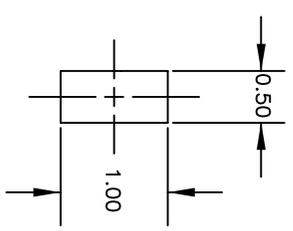
PASSIVE COMPONENT LOCATION
PACKAGE CENTER = (0,0)

NOTES: UNLESS OTHERWISE SPECIFIED

1. ALL DIMENSIONS AND TOLERANCES CONFORM TO ASME Y14.5M-1994.
2. THE MAXIMUM SOLDER BALL MATRIX SIZE IS 29 X 23.
3. THE MAXIMUM ALLOWABLE NUMBER OF SOLDER BALLS IS 667.
4. DIMENSION IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM Z.
5. PRIMARY DATUM Z AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.



PASSIVE COMPONENT HEIGHT

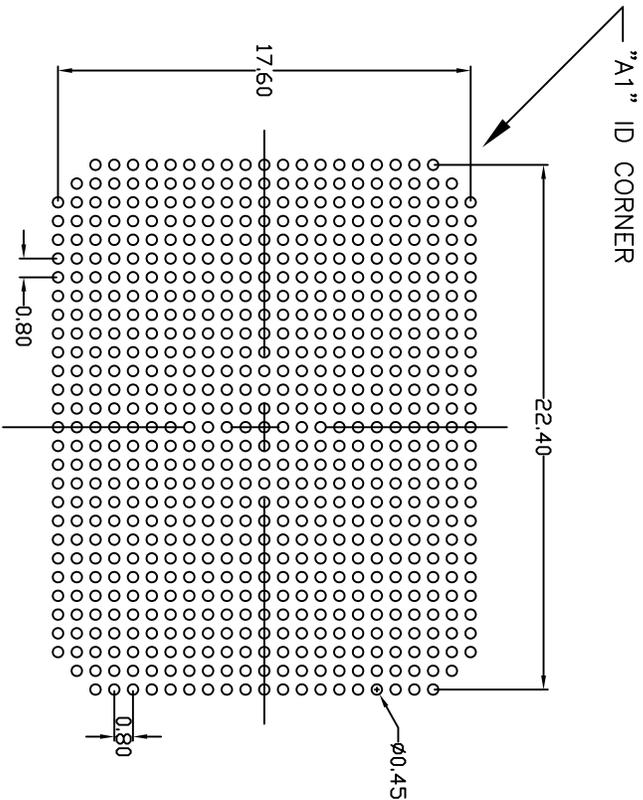


PASSIVE COMPONENT
DIMENSION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	09/14/04	PKP
01	CHANGED BALL DIAMETER TO 0.50 MM	12/15/05	PKP
02	ADDED CHIP CAP DIMENSIONS	11/30/06	PKP
03	ADDED MIN PKG HEIGHT	02/26/07	PKP
04	COMBINE POD & LAND PATTERN	5/31/13	KS

TOLERANCES UNLESS SPECIFIED		 6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 284-8000 FAX: (408) 284-3572
DECIMAL	ANGULAR	
X.X	±1°	
XXX.X	.030	
APPROVALS	DATE	TITLE
DRAWN: <i>gjkp</i>	09/14/04	BJ/RJ/BJG 655 PACKAGE OUTLINE
CHECKED		24.5 x 19.5 mm BODY
		0.80 mm PITCH FCBCGA
SIZE	DRAWING No.	REV
C	PSC-4137	04
DO NOT SCALE DRAWING		SHEET 3 OF 4

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	09/14/04	PKP
01	CHANGED BALL DIAMETER TO 0.50 MM	12/15/05	PKP
02	ADDED CHIP CAP DIMENSIONS	11/30/06	PKP
03	ADDED MIN PKG HEIGHT	02/26/07	PKP
04	COMBINE POD & LAND PATTERN	5/31/13	KS



RECOMMENDED LAND PATTERN DIMENSION

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 ±1°	
DECIMAL			
XX.X	.05		
XXX.X	.030		
APPROVALS	DATE	TITLE	REV
DRAWN	09/14/04	BJ/RJ/BJG 655 PACKAGE OUTLINE	04
CHECKED		24.5 x 19.5 mm BODY	
		0.80 mm PITCH FCBGA	
		SIZE DRAWING No.	REV
		C	PSC-4137
		DO NOT SCALE DRAWING	SHEET 4 OF 4



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