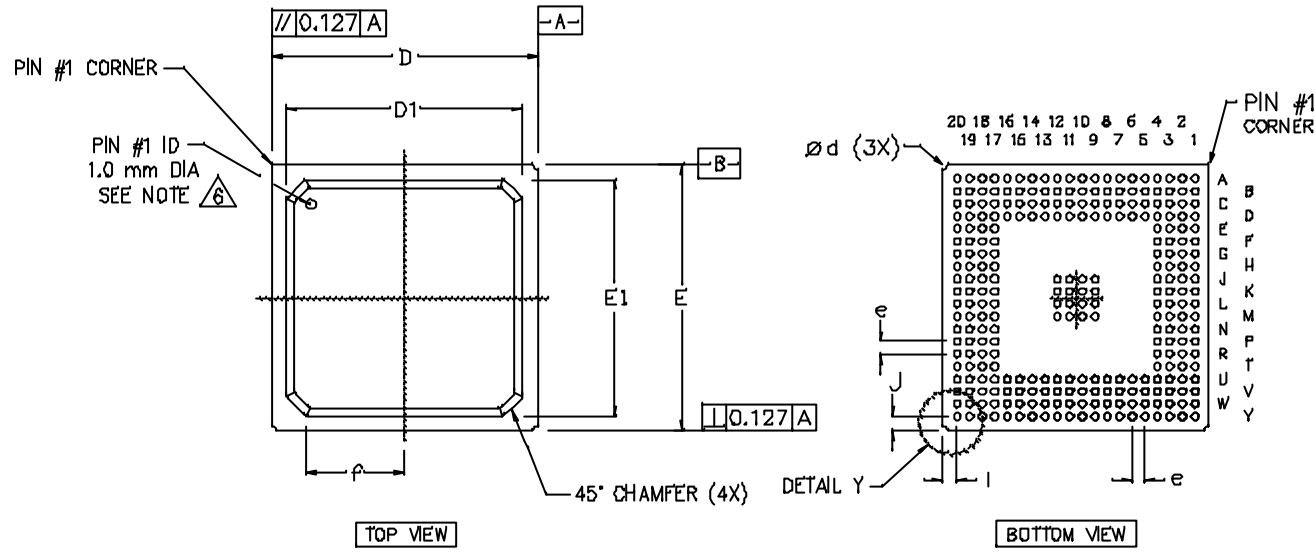


REV.	DESCRIPTION	DATE	ENG	APPROVAL
—	GENERATE		S.P TCHUN	

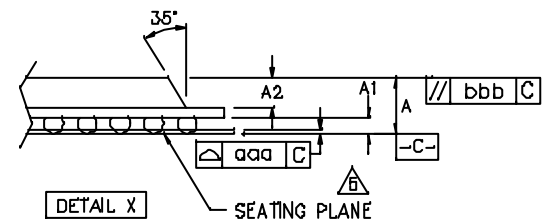
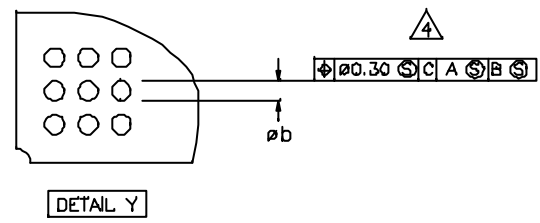
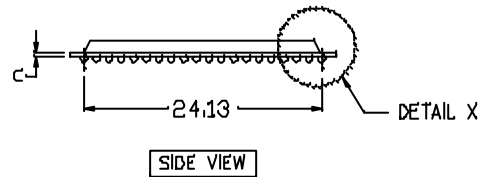


NOTE:

1. PACKAGE DIMENSIONS CONFORM TO JEDEC REGISTRATION MO-151(BAL-2)
2. "g" REPRESENTS THE BASIC SOLDER BALL GRID PITCH.
3. "w" REPRESENTS THE MAXIMUM SOLDER BALL MATRIX SIZE.
4. DIMENSIONS "b" IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER PARALLEL TO PRIMARY DATUM \overline{C} .
5. PRIMARY DATUM \overline{C} AND SEATING PLANE ARE DESIGNED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
6. PIN #1 ID FOR AUTO MOLD - TO BE ENGRAVED ON PKG TOP.
7. ALL DIMENSIONS ARE IN MILLIMETERS.
8. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994

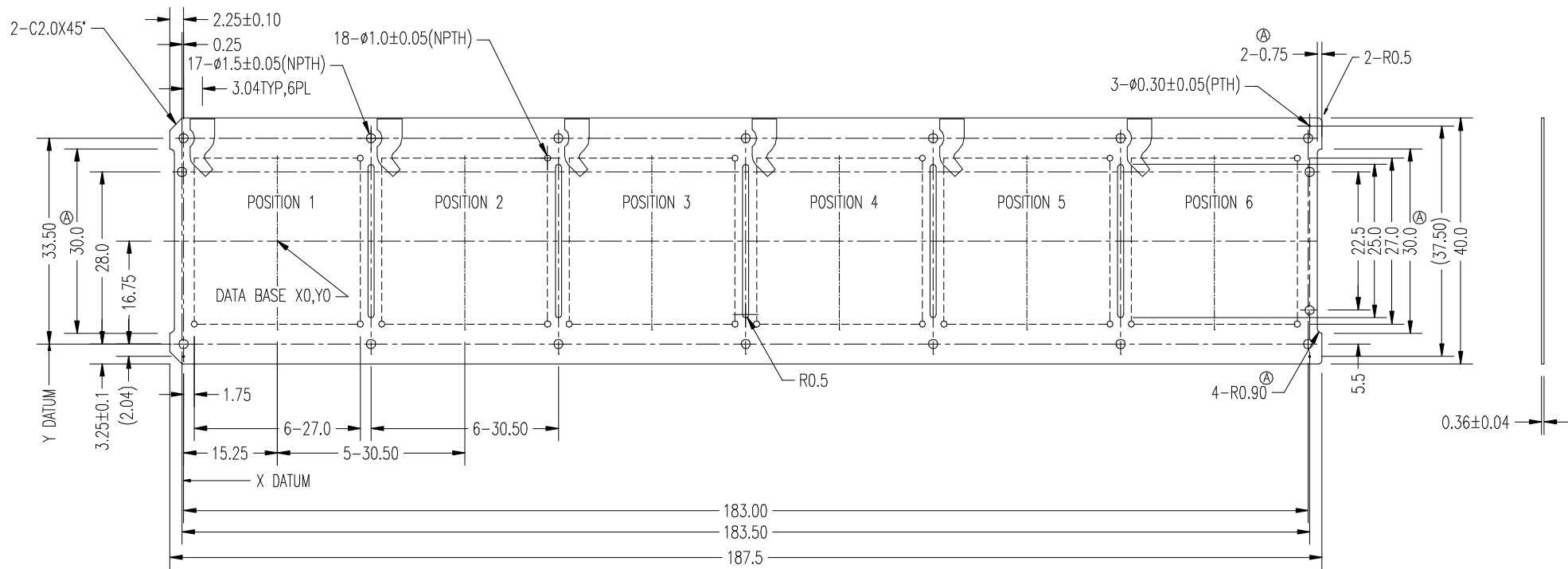
SYMBOL	MIN.	NOM.	MAX.
A	1.94(2.14)	2.13(2.33)	2.32(2.52)
A1	0.50	0.60	0.70
A2	1.12	1.17	1.22
D	26.80	27.00	27.20
D1	23.80	24.00	24.20
E	26.80	27.00	27.20
E1	23.80	24.00	24.20
l	1.44 REF.		
J	1.44 REF.		
M	20 <DEPOPULATED>		
aaa			0.15
bbb			0.15
b	0.60	0.76	0.90
c	0.32(0.52)	0.36(0.56)	0.40(0.60)
d	1.00 REF.		
e	1.27		
f	10.00 REF.		

* { } DENOTES THE VALUES FOR 4 LAYER PWB



LIST OF MATERIAL AND APPLICABLE DOCUMENTS							
SCALE:	N/S	DATE:	12/13/98	DRAWN:	HS OH	TITLE: 27 X 27 mm, 272 PBGA PACKAGE OUTLINE	
DIMENSIONAL UNIT:	MM	INTOLERANCED DIMENSIONS:		ENGINEER:	S.P TCHUN		
PROJECTION UNLESS SPECIFIED:		FRACTIONS:	±0.10	CHECKED:	J.Y SOHN		
		UNLESS SPECIFIED:	.XX ±0.05	APPROVED:			
			.XXX ±0.08				
			ANGLE ±1°				
		CAD NAME:	OPB27101	DRAWING NUMBER:	OPB-27101	REV:	—
						SHEET:	1 OF 1

REV.	DESCRIPTION	DATE	ENG	APPROVAL
-	GENERATION	05/11/98	SP TCHUN	
A	TO ADD STRIP SIDE SLOT TO CHANGE NI THICKNESS LIMITATION	07/21/00	SP TCHUN	



UNLESS SPECIFIED OTHERWISE	
LAMINATE CORE	BT CCL-HL832, 0.20MM
SOLDER MASK	TAIYO PSR4000-AUS5, MIN 40UM
LAMINATE COPPER	12±5UM
PLATING COPPER	15UM+15um/-0.0um
NICKEL	MIN 7.0UM Ⓐ
GOLD	MIN 0.5UM

STRIP LAYOUT
PKG TOP VIEW

LIST OF MATERIAL AND APPLICABLE DOCUMENTS					
SCALE:	N/S	DATE:	05/08/98	DRAWN:	SP TCHUN
DIMENSIONAL UNIT:	MM	UNTOLERANCED DIMENSIONS		ENGINEER:	SP TCHUN
PROJECTION		FRAC:	.X ± 0.10 .XX ± 0.05 .XXX ± 0.03 ANGLE ± 1°	CHECKED:	DS SEO
UNLESS SPECIFIED				APPROVED:	JS KIM
		CAD NAME:	FPB27051	DRAWING NUMBER:	FPB-27051
		REV.	A	SHEET:	1 OF 6

SUBSTRATE DESIGN
PBGA 27X27MM
BALL 2 LAYER
(OPEN DESIGN)