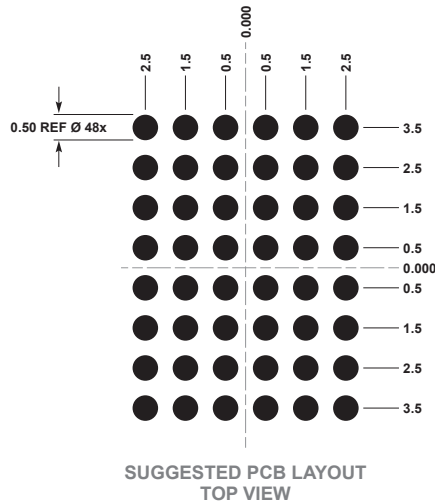
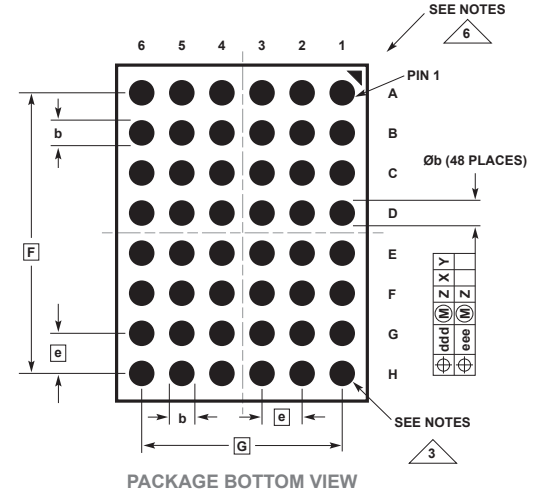
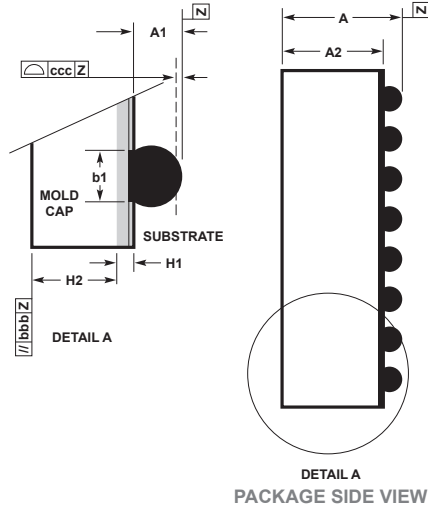
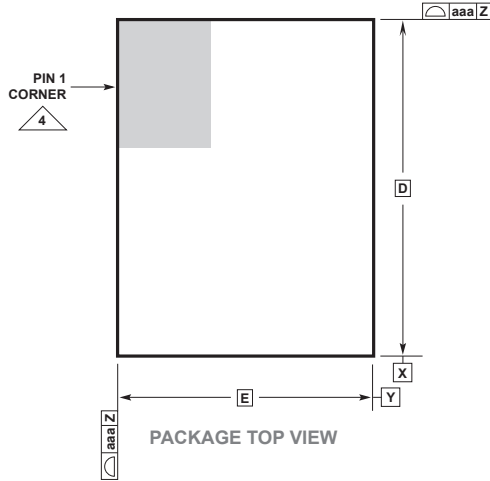


48-Ball Chip Scale Package Ball Grid Array [CSP_BGA]
9mm × 6.25mm × 3.32mm
 (Reference DWG # 05-08-1999)



DIMENSIONS				
SYMBOL	MIN	NOM	MAX	NOTES
A	3.12	3.32	3.52	
A1	0.40	0.50	0.60	BALL HT
A2	2.72	2.82	2.92	
b	0.50	0.60	0.70	BALL DIMENSION
b1	0.47	0.50	0.53	PAD DIMENSION
D		9.00		
E		6.25		
e		1.00		
F		7.00		
G		5.00		
H1		0.32 REF		SUBSTRATE THK
H2		2.50 REF		MOLD CAP HT
aaa			0.15	
bbb			0.10	
ccc			0.20	
ddd			0.25	
eee			0.10	

TOTAL NUMBER OF BALLS: 48

NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994

2. ALL DIMENSIONS ARE IN MILLIMETERS

3 BALL DESIGNATION PER JEP95

4 DETAILS OF PIN 1 IDENTIFIER ARE OPTIONAL, BUT MUST BE LOCATED WITHIN THE ZONE INDICATED. THE PIN 1 IDENTIFIER MAY BE EITHER A MOLD OR MARKED FEATURE

5. PRIMARY DATUM -Z- IS SEATING PLANE

6 PACKAGE ROW AND COLUMN LABELING MAY VARY AMONG μ Module PRODUCTS. REVIEW EACH PACKAGE LAYOUT CAREFULLY