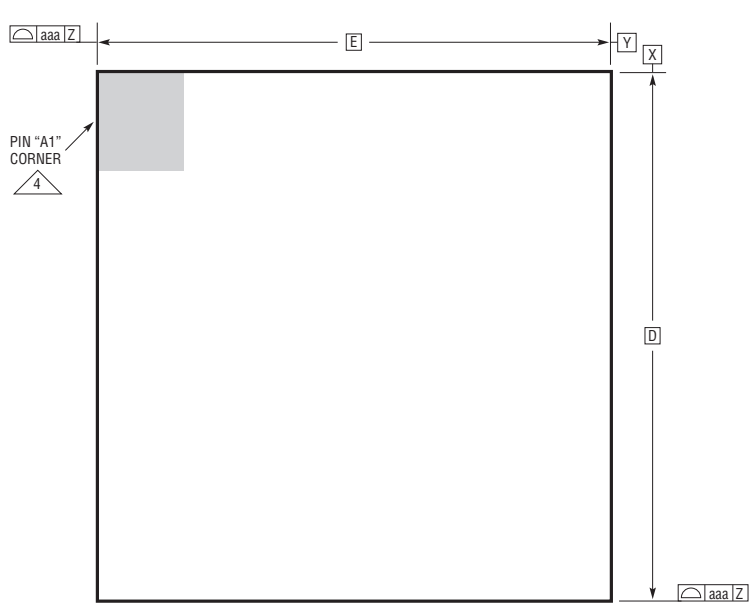
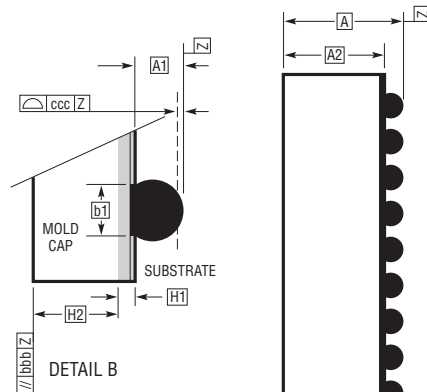


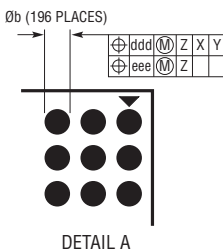
**BGA Package**  
**196-Lead (15mm × 15mm × 2.82mm)**  
 (Reference LTC DWG# 05-08-1907 Rev B)



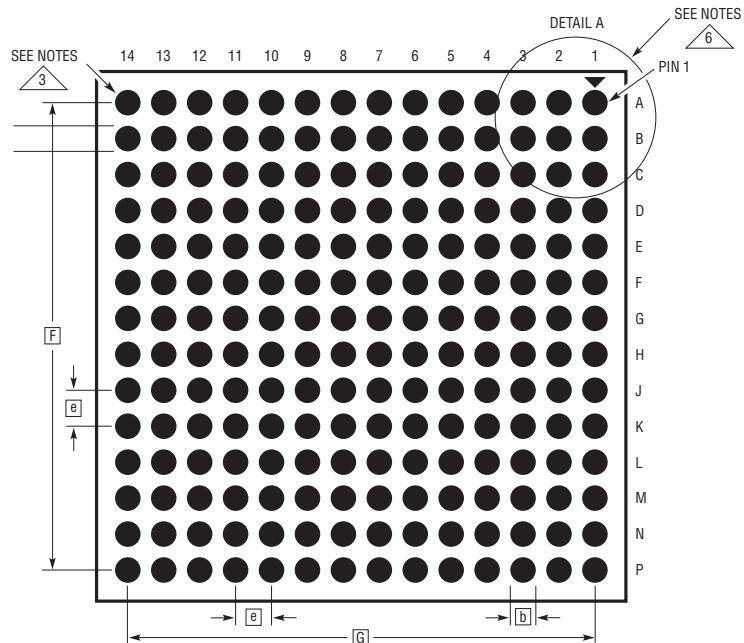
PACKAGE TOP VIEW



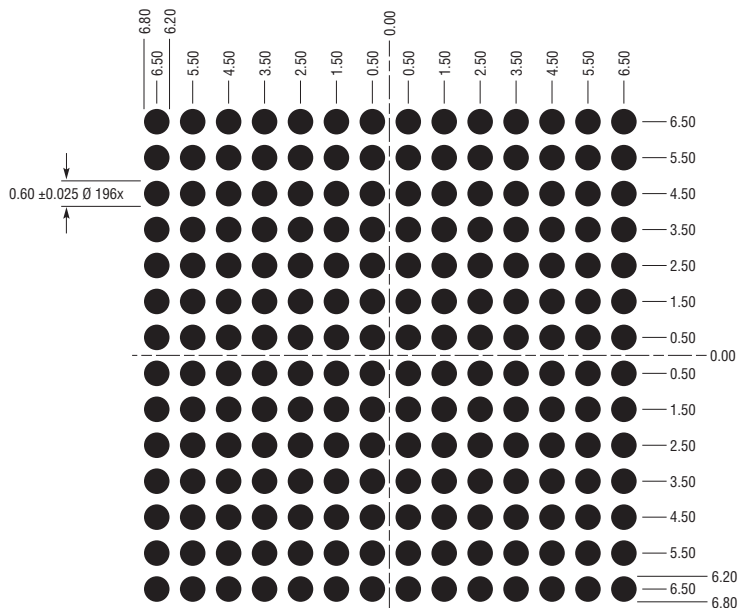
DETAIL B  
PACKAGE SIDE VIEW



DETAIL A



PACKAGE BOTTOM VIEW



SUGGESTED PCB LAYOUT  
TOP VIEW

DIMENSIONS				
SYMBOL	MIN	NOM	MAX	NOTES
A	2.62	2.82	3.02	
A1	0.40	0.50	0.60	BALL HT
A2	2.22	2.32	2.42	
b	0.50	0.60	0.70	BALL DIMENSION
b1	0.47	0.50	0.53	PAD DIMENSION
D		15.0		
E		15.0		
e		1.0		
F		13.0		
G		13.0		
H1	0.22	0.32	0.42	SUBSTRATE THK
H2	1.95	2.00	2.05	MOLD CAP HT
aaa			0.15	
bbb			0.20	
ccc			0.20	
ddd			0.15	
eee			0.08	

TOTAL NUMBER OF BALLS: 196

NOTES:

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

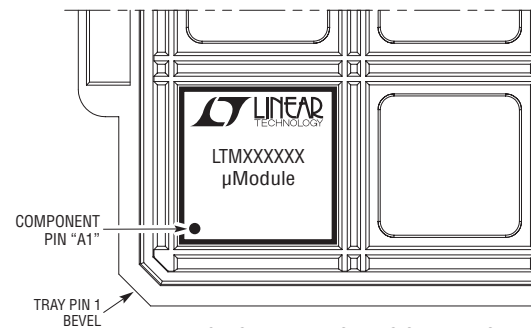
2. ALL DIMENSIONS ARE IN MILLIMETERS

3 BALL DESIGNATION PER JESD MS-028 AND 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  $\mu$ Module PRODUCTS. REVIEW EACH PACKAGE LAYOUT CAREFULLY



PACKAGE IN TRAY LOADING ORIENTATION