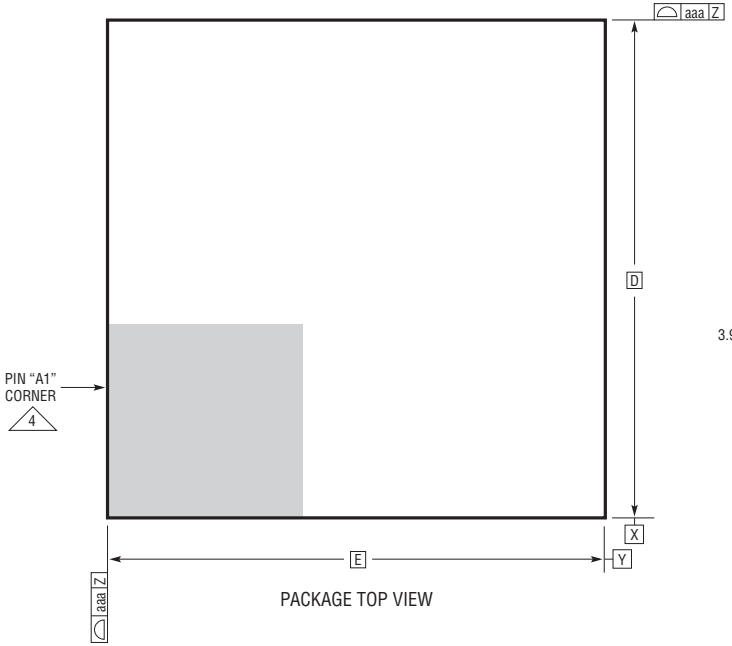
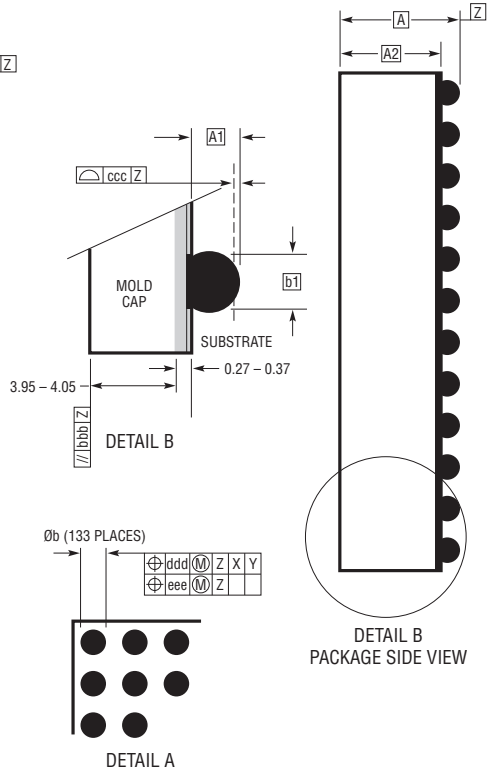
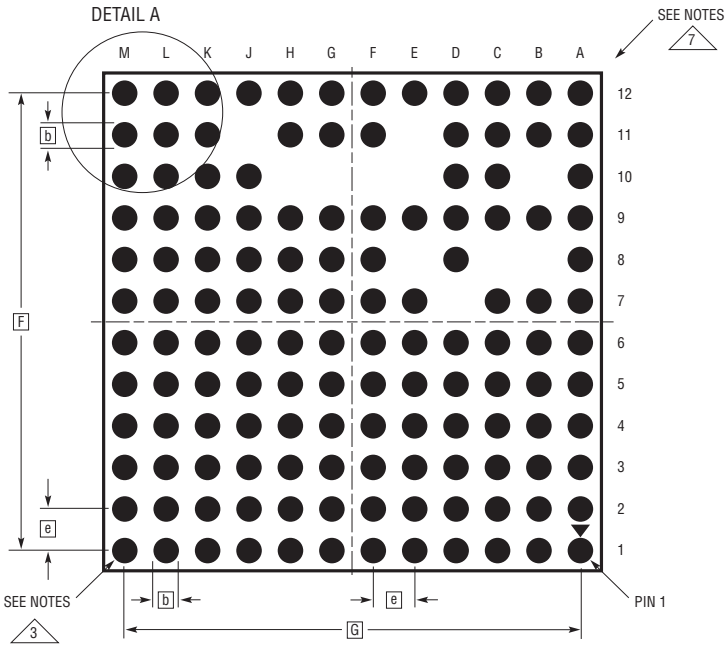
BGA Package
133-Lead (15mm × 15mm × 4.92mm)
(Reference LTC DWG # 05-08-1897 Rev A)

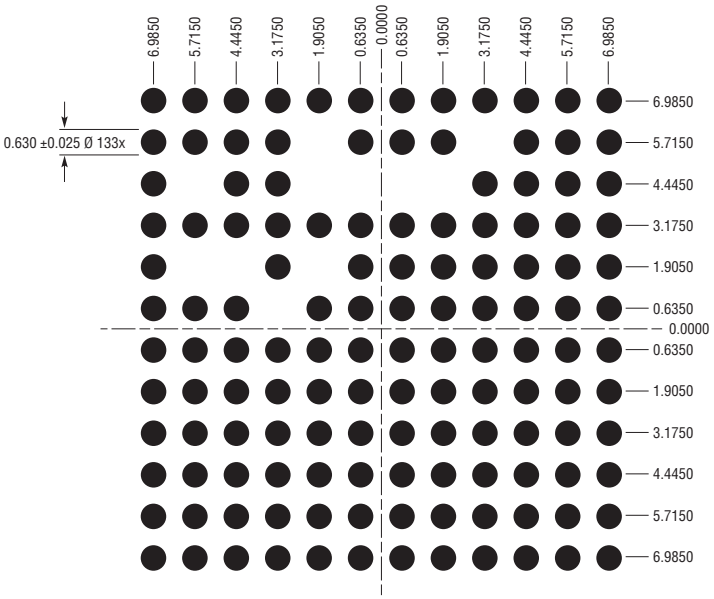


PACKAGE TOP VIEW





PACKAGE BOTTOM VIEW



SUGGESTED PCB LAYOUT
TOP VIEW

DIMENSIONS				
SYMBOL	**MIN**	**NOM**	**MAX**	**NOTES**
A	4.72	4.92	5.12	
A1	0.50	0.60	0.70	
A2	4.22	4.32	4.42	
b	0.60	0.75	0.90	
b1	0.60	0.63	0.66	
D		15.0		
E		15.0		
e		1.27		
F		13.97		
G		13.97		
aaa			0.15	
bbb			0.10	
ccc			0.20	
ddd			0.30	
eee			0.15	
TOTAL NUMBER OF BALLS: 133				

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

2. ALL DIMENSIONS ARE IN MILLIMETERS

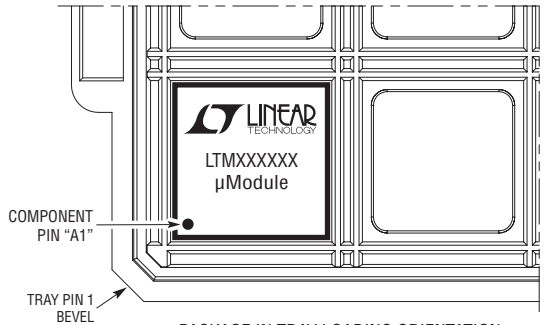
3 BALL DESIGNATION PER JESD MS-028 AND JEP95

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. SOLDER BALL COMPOSITION IS 96.5% Sn/3.0% Ag/0.5% Cu

7 ⚠ PACKAGE ROW AND COLUMN LABELING MAY VARY AMONG µModule PRODUCTS. REVIEW EACH PACKAGE LAYOUT CAREFULLY



PACKAGE IN TRAY LOADING ORIENTATION

BGA 133 1112 REV A