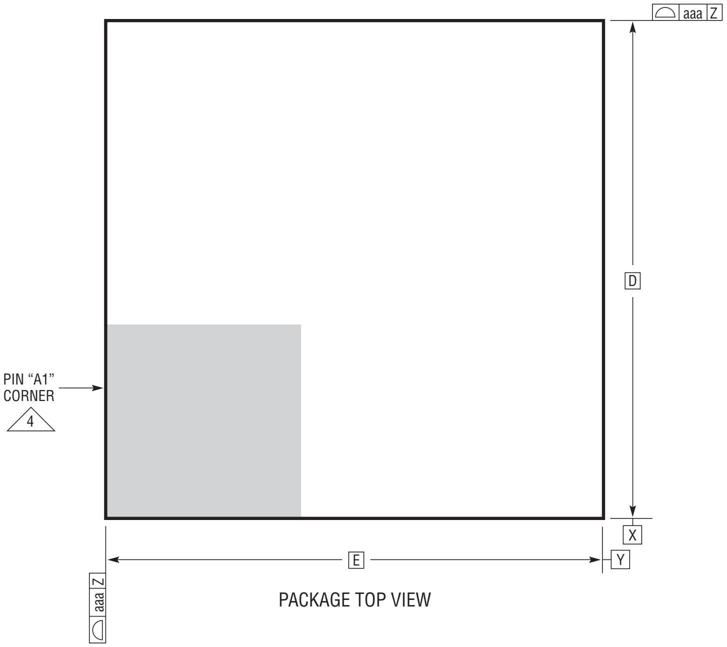
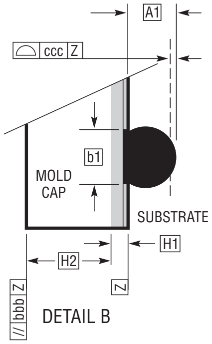
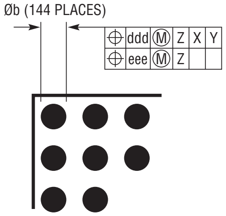
BGA Package
144-Lead (15mm × 15mm × 3.42mm)
(Reference LTC DWG # 05-08-1902 Rev C)



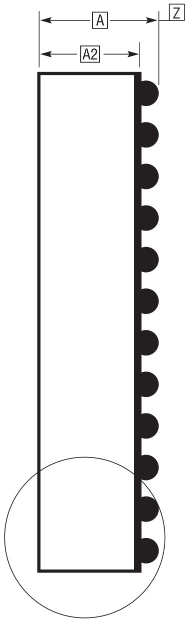
PACKAGE TOP VIEW



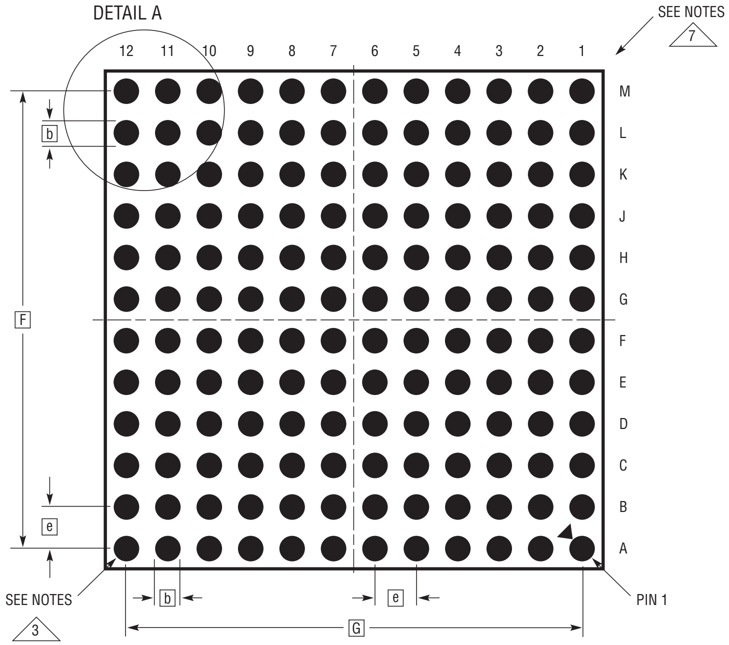
DETAIL B



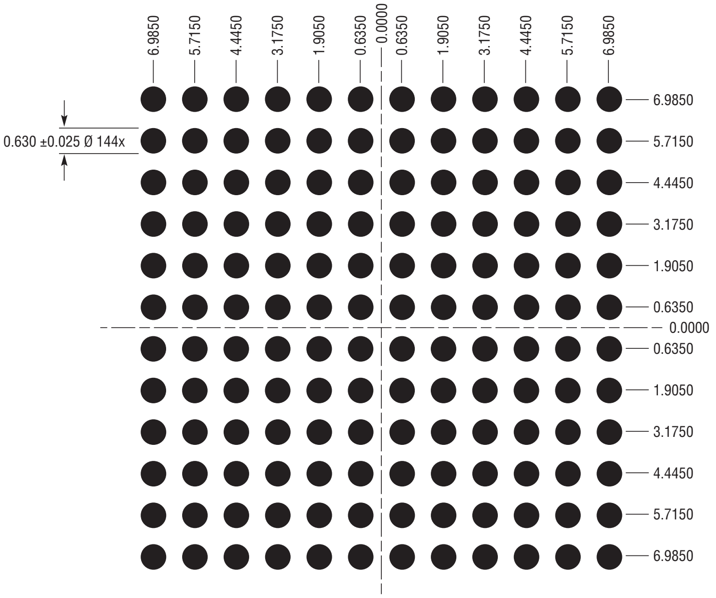
DETAIL A



DETAIL B
PACKAGE SIDE VIEW



PACKAGE BOTTOM VIEW



SUGGESTED PCB LAYOUT
TOP VIEW

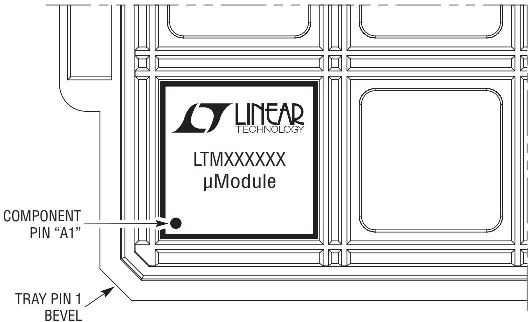
DIMENSIONS

SYMBOL	MIN	NOM	MAX	NOTES
A	3.22	3.42	3.62	
A1	0.50	0.60	0.70	BALL HT
A2	2.72	2.82	2.92	
b	0.60	0.75	0.90	BALL DIMENSION
b1	0.60	0.63	0.66	PAD DIMENSION
D		15.0		
E		15.0		
e		1.27		
F		13.97		
G		13.97		
H1	0.27	0.32	0.37	SUBSTRATE THK
H2	2.45	2.50	2.55	MOLD CAP HT
aaa			0.15	
bbb			0.10	
ccc			0.20	
ddd			0.30	
eee			0.15	

TOTAL NUMBER OF BALLS: 144

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 CAN BE 96.5% Sn/3.0% Ag/0.5% Cu OR Sn Pb EUTECTIC
7. ⚠ PACKAGE ROW AND COLUMN LABELING MAY VARY AMONG µModule PRODUCTS. REVIEW EACH PACKAGE LAYOUT CAREFULLY



PACKAGE IN TRAY LOADING ORIENTATION

BGA 144 1116 REV C