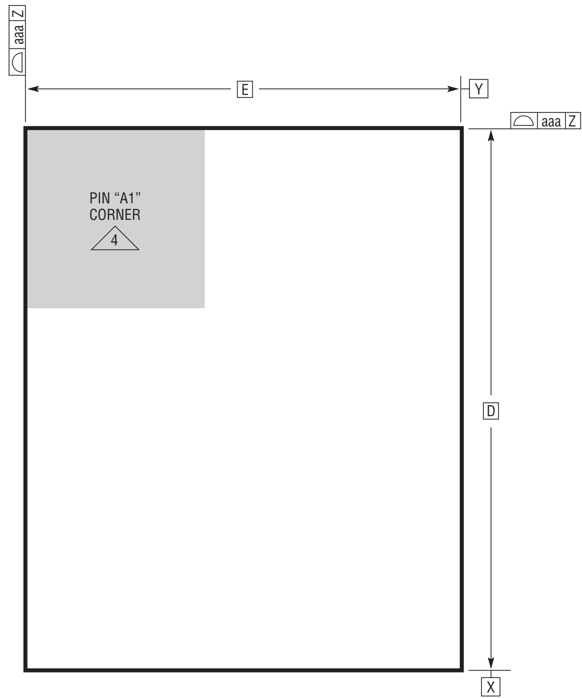
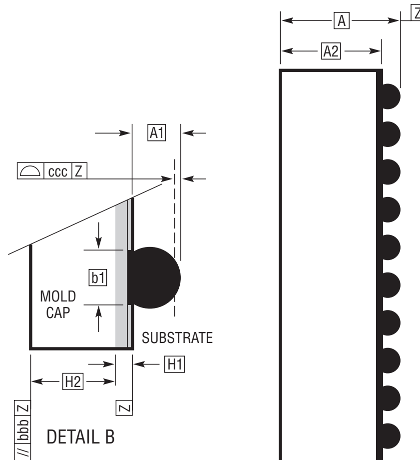
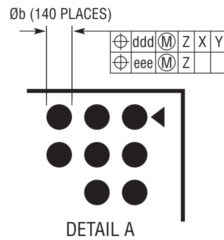
BGA Package
140-Lead (11.25mm × 9.00mm × 2.72mm)
(Reference LTC DWG # 05-08-1849 Rev C)



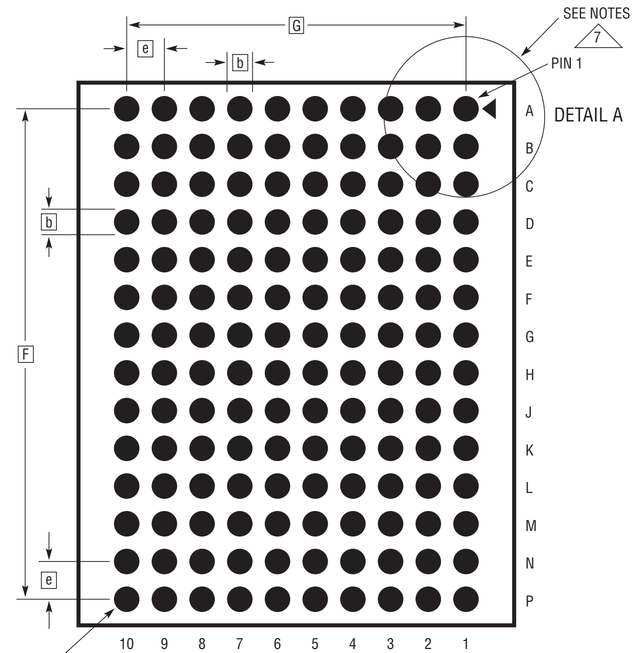
PACKAGE TOP VIEW



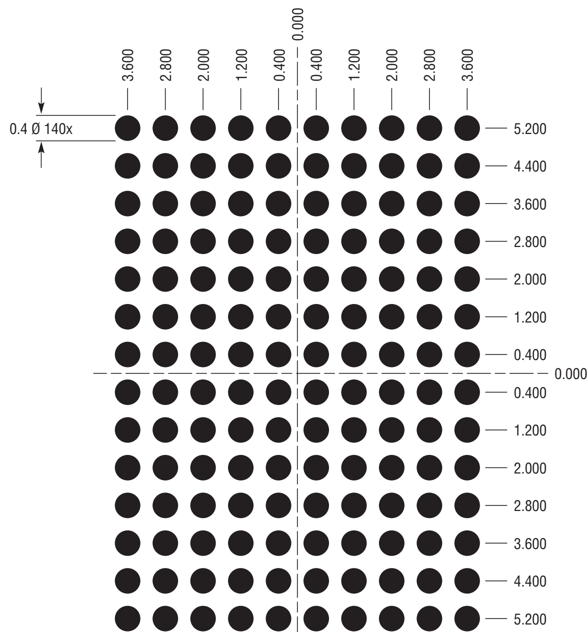
DETAIL B
PACKAGE SIDE VIEW



DETAIL A



PACKAGE BOTTOM VIEW

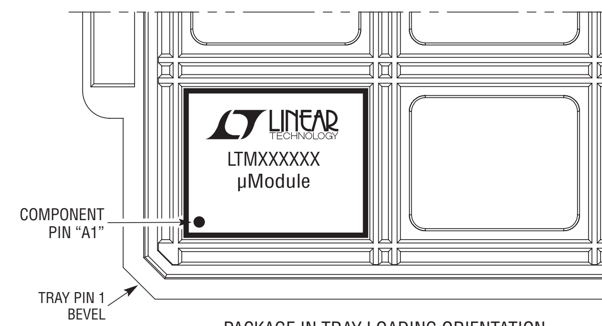


SUGGESTED PCB LAYOUT
TOP VIEW

DIMENSIONS

SYMBOL	MIN	NOM	MAX	NOTES
A	2.57	2.72	2.87	
A1	0.35	0.40	0.45	BALL HT
A2	2.22	2.32	2.42	
b	0.45	0.50	0.55	BALL DIMENSION
b1	0.37	0.40	0.43	PAD DIMENSION
D		11.25		
E		9.0		
e		0.80		
F		10.40		
G		7.2		
H1	0.27	0.32	0.37	SUBSTRATE THK
H2	1.95	2.00	2.05	MOLD CAP HT
aaa			0.15	
bbb			0.10	
ccc			0.12	
ddd			0.15	
eee			0.08	
TOTAL NUMBER OF BALLS: 140				

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