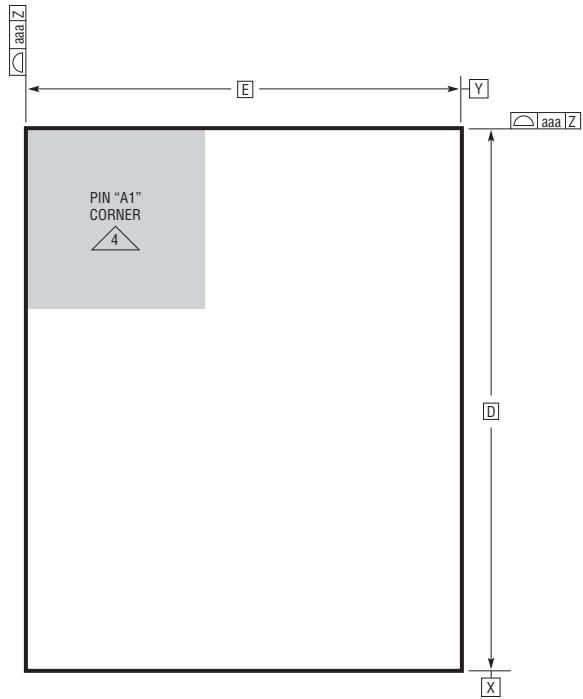
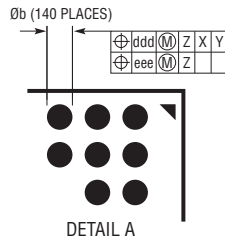
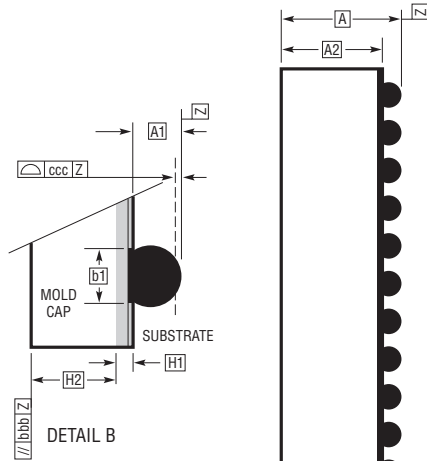


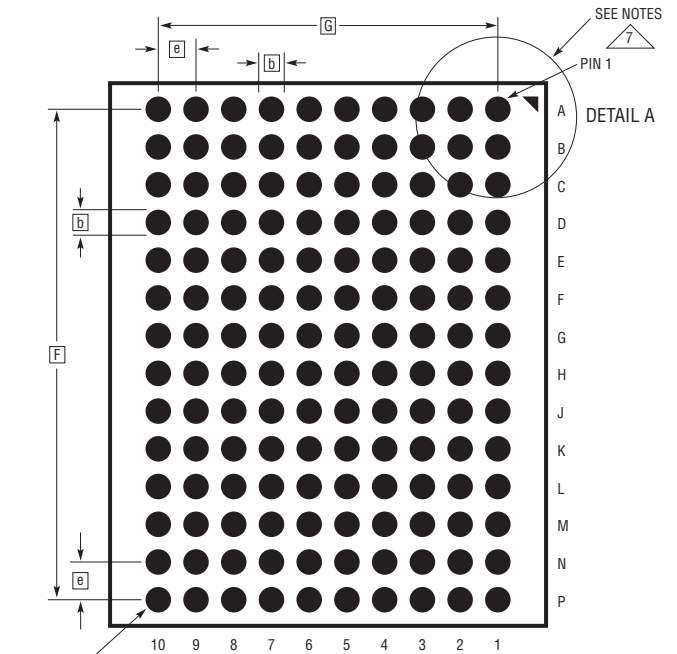
**BGA Package**  
**140-Lead (11.25mm × 9.00mm × 2.22mm)**  
 (Reference LTC DWG # 05-08-1569 Rev 0)



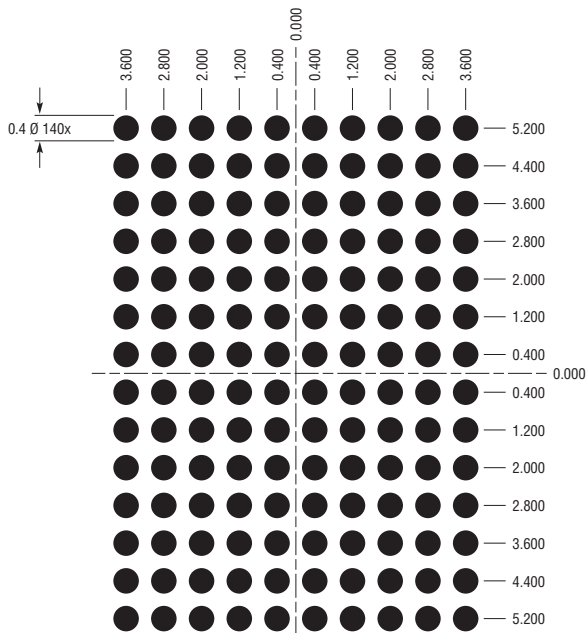
PACKAGE TOP VIEW



DETAIL B  
PACKAGE SIDE VIEW



PACKAGE BOTTOM VIEW

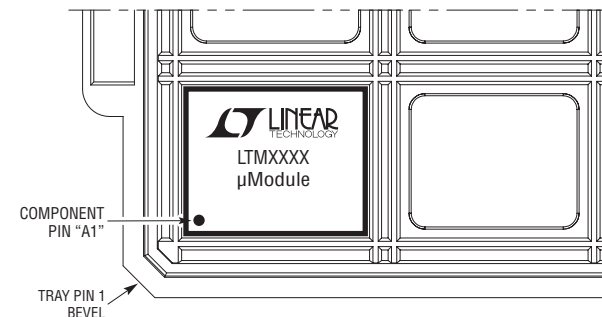


SUGGESTED PCB LAYOUT  
TOP VIEW

DIMENSIONS				
SYMBOL	MIN	NOM	MAX	NOTES
A	2.02	2.22	2.42	
A1	0.30	0.40	0.50	BALL HT
A2	1.72	1.82	1.92	
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	1.45	1.50	1.55	MOLD CAP HT
aaa			0.15	
bbb			0.10	
ccc			0.20	
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 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