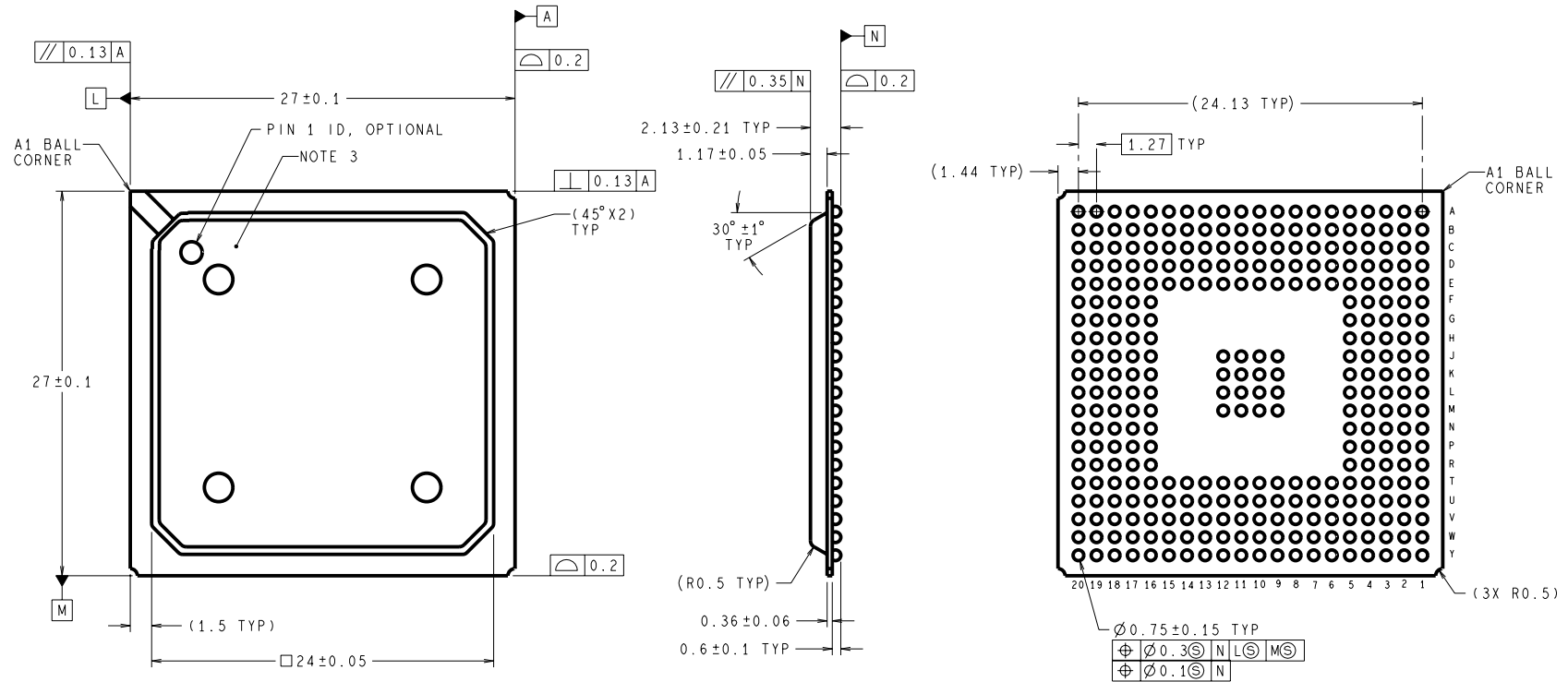


REVISIONS				
LTR	DESCRIPTION	E.C.N.	DATE	BY/APP'D
A	RELEASE TO DOCUMENT CONTROL	11479	05/16/96	MS/SL
B	UPDATE DIM TOL'S TO JEDEC STANDARD	11705	04/25/97	TL/SL
C	UPDATE DWG PER MARKUP INPUT.	11933	02/06/1998	MS/ACH
D	DIM 0.6±0.1 WAS 0.6±0.01; UPDATE NOTE 4.	12016	06/24/1998	MS/



DIMENSIONS ARE IN MILLIMETERS

NOTES: UNLESS OTHERWISE SPECIFIED

- SOLDER BALL COMPOSITION: Sn 63%, Pb 37%.
- DIMENSION IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM N.
- THE MOLD SURFACE AREA MAY INCLUDE DIMPLE FOR A1 BALL CORNER IDENTIFICATION.
- REFERENCE JEDEC REGISTRATION MO-151, VARIATION 1.27 PITCH, DATED JUNE 1997.

APPROVALS		DATE	National Semiconductor		
DRAWN	<i>D.E. Grady</i>	05/17/95	2900 Semiconductor dr., Santa Clara, CA 95052-8090		
DTG. CHK.			<b>PBGA, 27.0 X 27.0 X 2.13mm, 316 BALL, 1.27mm PITCH</b>		
ENGR. CHK.					
PROJECTION		SCALE	SIZE	DRAWING NUMBER	REV
		N/A	C	(ISC)MKT-UBD316A	D
DO NOT SCALE DRAWING			SHEET 1 of 1		