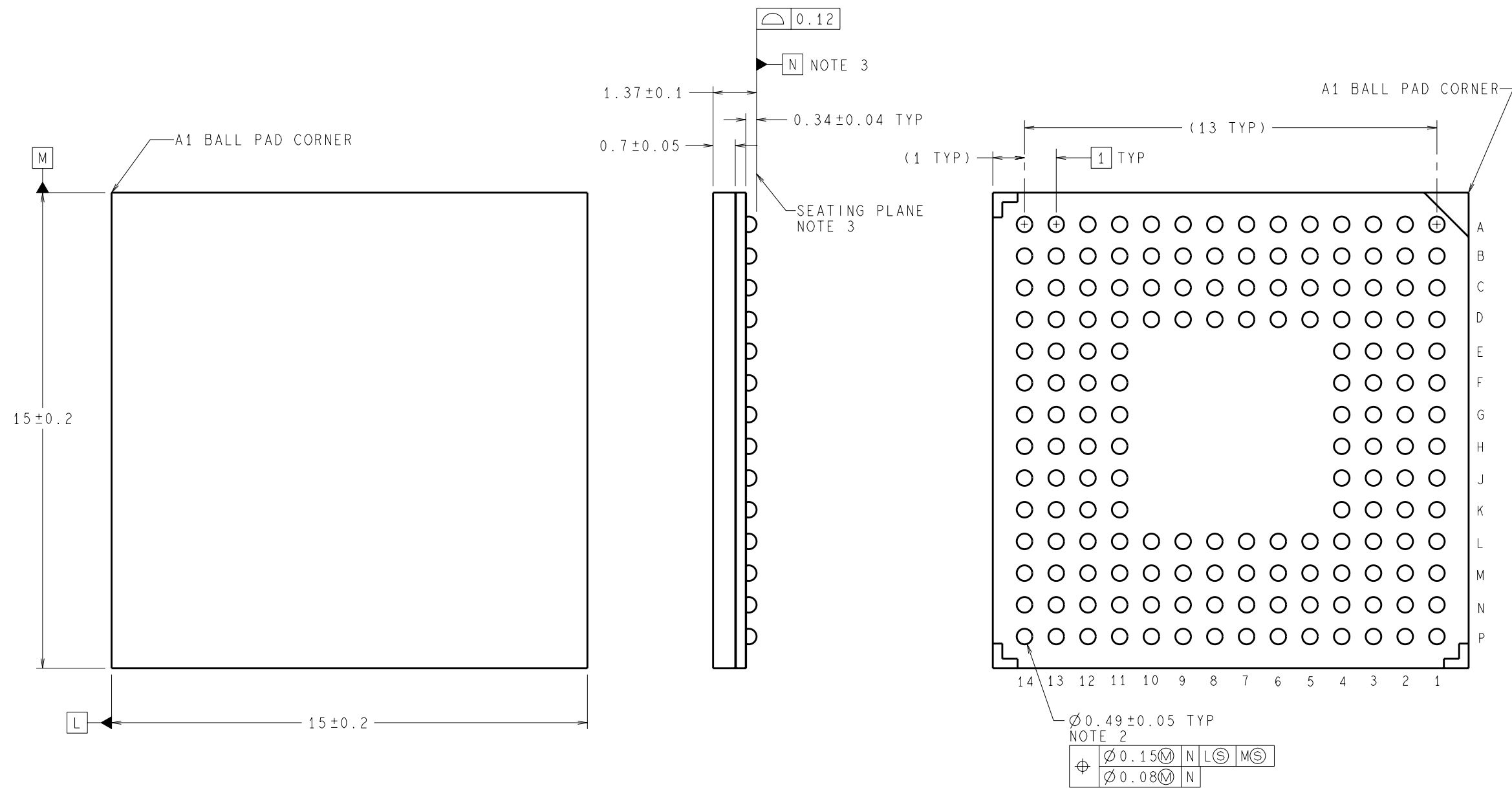


REVISIONS				
LTR	DESCRIPTION	E.C.N.	DATE	BY/APP'D
A	RELEASE TO DOCUMENT CONTROL	12468	04/21/2000	MS/MJL
B	DIM'S 1.37±0.1 WAS 1.46±0.19/-0.09, 1.34±0.04 WAS 0.4 MIN, Ø0.49±0.05 WAS Ø0.5 REVISE NOTE 4 & TITLE.	190	10/16/2000	MS/VG



DIMENSIONS ARE IN MILLIMETERS

NOTES: UNLESS OTHERWISE SPECIFIED

- SOLDER BALL COMPOSITION: Sn 63%, Pb 37%.
- DIMENSION MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM N.
- PRIMARY DATUM N AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
- REFERENCE JEDEC REGISTRATION MO-192, VARIATION AAE-1.

APPROVALS		DATE	National Semiconductor		
DRAWN	MARTA SUCHY	04/21/2000	2900 Semiconductor Dr., Santa Clara, CA 95052-8090		
DFTG. CHK.	MARTA SUCHY	10/16/2000	<b>LPGA,</b> <b>15 X 15 X 1.37mm,</b> <b>160 BALL, 1.0mm PITCH</b>		
ENGR. CHK.	VIJAYA GUMASTE	10/16/2000			
PROJECTION		SCALE	SIZE	DRAWING NUMBER	REV
		N/A	C	(SC)MKT-UJB160A	B
DO NOT SCALE DRAWING				SHEET 1 of 1	