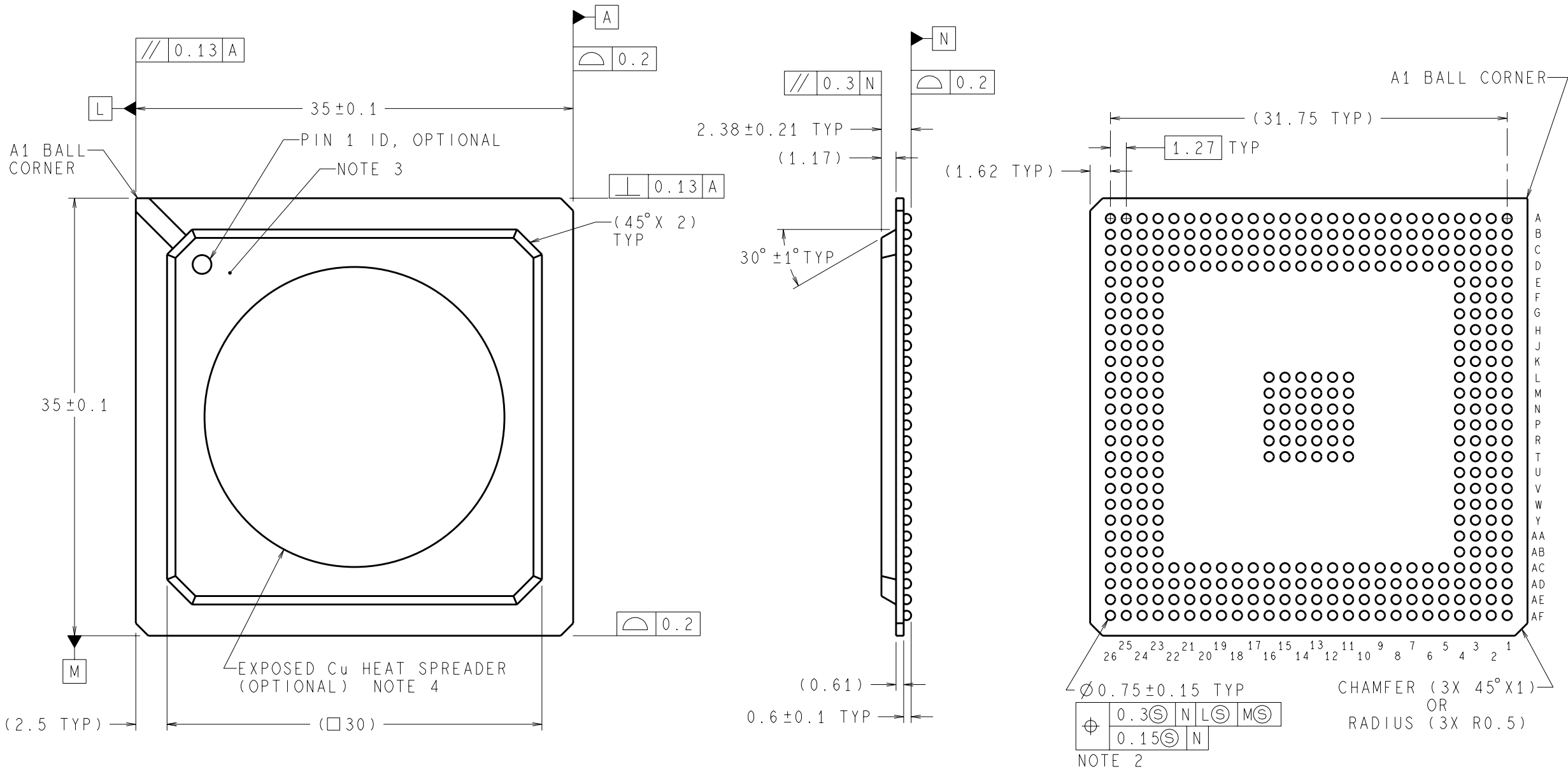


REVISIONS				
LTR	DESCRIPTION	E.C.N.	DATE	BY/APP'D
A	RELEASE TO DOCUMENT CONTROL	496	12/06/2001	MS/VG
B	ADD NOTE 4; RENUMBER OLD NOTE 4 TO 5.	594	03/05/2002	MS/VG



NOTES: UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN MILLIMETERS

- 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 AND MOLD EJECTOR PIN MARKS AT EACH CORNER OF MOLDED PACKAGE SURFACE.
- THE MOLD SURFACE ON PACKAGE MAY OR MAY NOT HAVE THE EXPOSED Cu HEAT SPREADER IN SOME OPTIONS.
- REFERENCE JEDEC REGISTRATION MS-034, VARIATION BAR-2.

APPROVALS		DATE		 National Semiconductor 2900 Semiconductor Dr., Santa Clara, CA 95052-8090	
DRAWN	MARTA SUCHY		12/06/2001		
DFTG. CHK.	THANH LEQUANG		03/05/2002	TE-PBGA, 35 X 35 X 2.38mm, 388 BALL, 1.27mm PITCH	
ENGR. CHK.	VIJAYA GUMASTE		03/05/2002		
 PROJECTION INCH [MM]		SCALE	SIZE	DRAWING NUMBER	REV
		N/A	C	(SC)MKT-UFH388A	B
DO NOT SCALE DRAWING				SHEET 1 of 1	