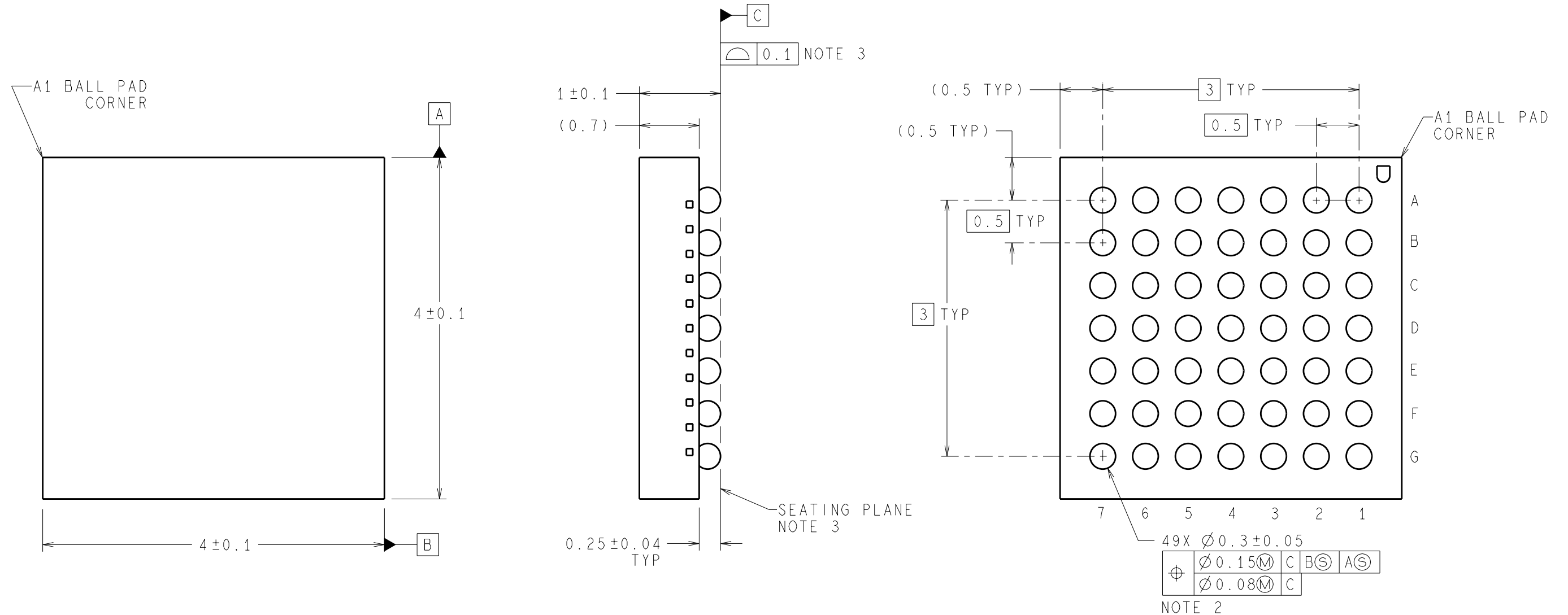


REVISIONS				
REV	DESCRIPTION	E.C.N.	DATE	BY/APP'D
A	RELEASE TO DOCUMENT CONTROL	1183	11/18/2003	TL/SN



DIMENSIONS ARE IN MILLIMETERS
 DIMENSIONS IN () FOR REFERENCE ONLY

NOTES: UNLESS OTHERWISE SPECIFIED

- FOR SOLDER BUMP COMPOSITION, SEE "SOLDER INFORMATION" IN THE PACKAGING SECTION OF THE NATIONAL SEMICONDUCTOR WEB PAGE (www.national.com).
- DIMENSION MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM C.
- PRIMARY DATUM C AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
- NO JEDEC REGISTRATION AS OF NOVEMBER 2003.

APPROVALS		DATE	 National Semiconductor 2900 Semiconductor Dr., Santa Clara, CA 95052-8090
DRAWN	T. LEQUANG	11/18/2003	
DFTG. CHK.	MARTA SUCHY	11/18/2003	
ENGR. CHK.	S. NADARAJAH	11/18/2003	
PROJECTION MM			MICRO-ARRAY, 4x4x1mm BODY, 49 PAD, 0.5mm PITCH
SCALE	SIZE	DRAWING NUMBER	REV
NTS	B	(SC)MKT-GRA49A	A
FORMERLY: X-01952			SHEET 1 of 1