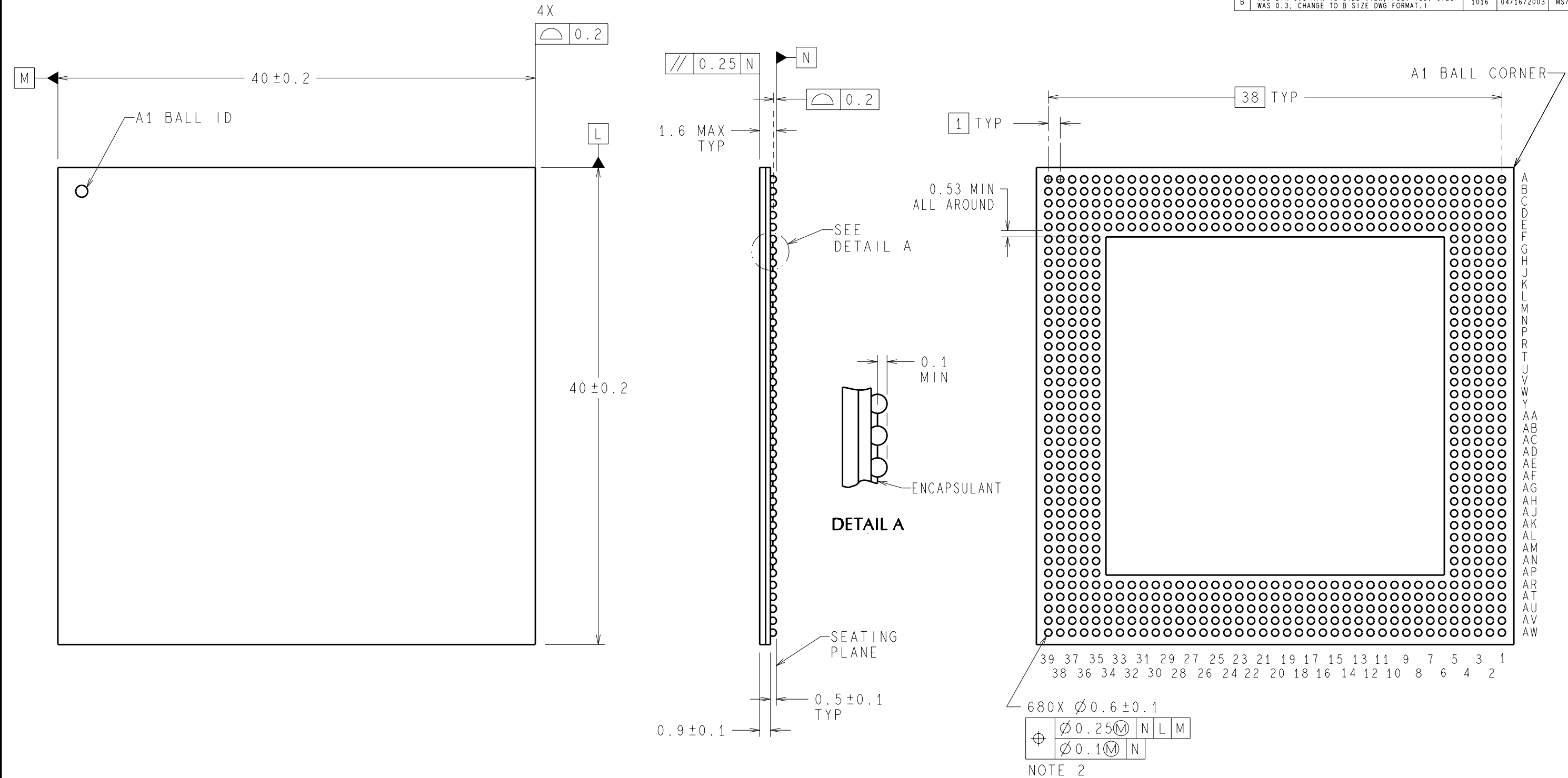


REVISIONS				
REV	DESCRIPTION	E.C.N.	DATE	BY/APP'D
A	RELEASE TO DOCUMENT CONTROL	384	07/30/2001	MS/AP
B	ADD DIM 0.1 MIN TO SIDE VIEW; POS. TOL. 0.25 WAS 0.3; CHANGE TO B SIZE DWG FORMAT.)	1016	04/16/2003	MS/CP



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 IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM N.
- REFERENCE JEDEC REGISTRATION MO-192, VARIATION AAU-1.

DIMENSIONS ARE IN MILLIMETERS

APPROVALS		DATE	 2900 Semiconductor Dr., Santa Clara, CA 95052-8090		
DRAWN	MARTA SUCHY	07/30/2001			
DFTG. CHK.	THANH LEQUANG	04/16/2003			
ENGR. CHK.	CHE TAN PAYDENKAR	04/16/2003			
			TSBGA, 40 X 40 X 1.6mm, 680 BALL, 1.0mm PITCH		
PROJECTION		SCALE	SIZE	DRAWING NUMBER	REV
 MM		NTS	B	(SC)MKT-UGC680A	B
FORMERLY: N/A			SHEET 1 of 1		