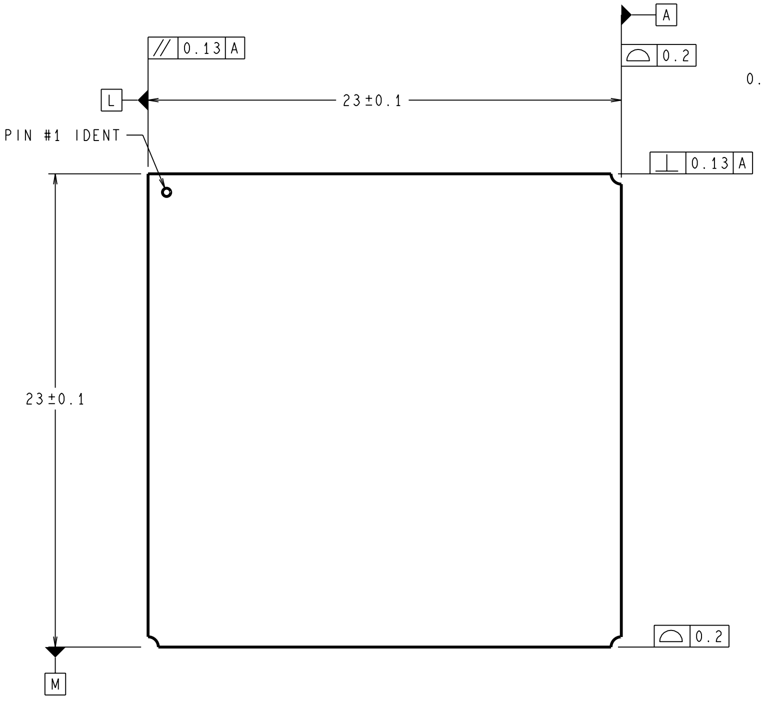
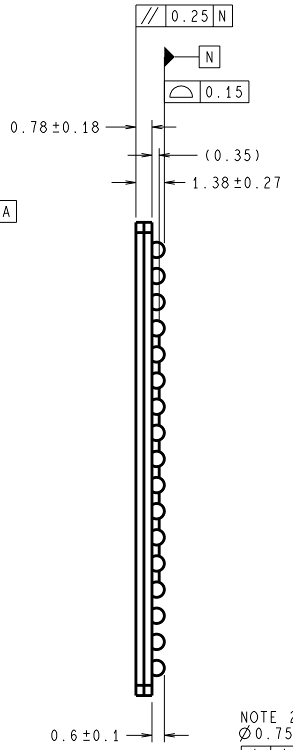
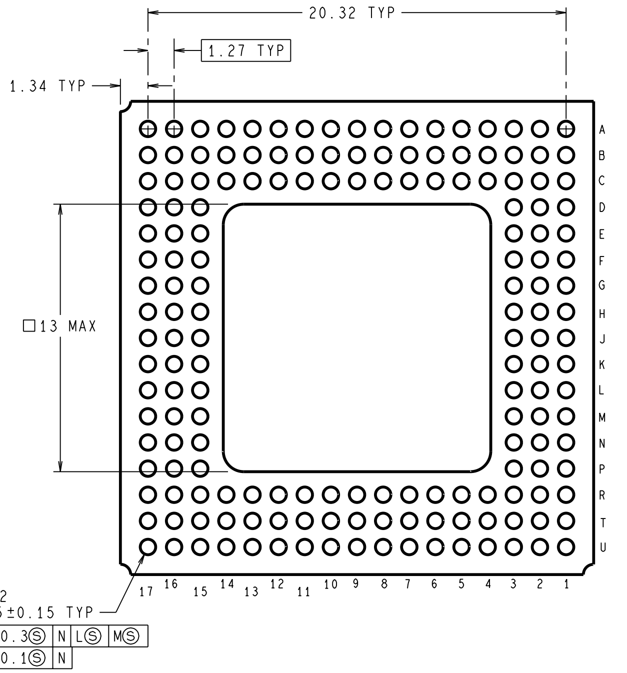
REVISIONS				
LTR	DESCRIPTION	E.C.N.	DATE	BY/APP'D
A	RELEASE TO DOCUMENT CONTROL.	10915	05/17/1995	DEG/SL
B	REMOVE EXTRA INNER ROWS OF BALLS	11508	08/05/1996	TL/







NOTE 2
Ø0.75±0.15 TYP

⌖	Ø0.3Ⓢ	N	LⓈ	MⓈ
⌖	Ø0.1Ⓢ	N		

DIMENSIONS ARE IN MILLIMETERS

NOTES: UNLESS OTHERWISE SPECIFIED

1. SOLDER BALL COMPOSITION:Sn 63%,Pb 37%.
2. DIMENSION IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM N.
3. REFERENCE JEDEC REGISTRATION MO-151, VARIATION -1.27 PITCH,DATED 11-93.

APPROVALS	DATE
DRAWN D.E.Grady	05/17/95
DFTG. CHK.	
ENGR. CHK.	
APPROVAL	

PROJECTION
INCH
[MM]

NATIONAL SEMICONDUCTOR CORPORATION
2900 Semiconductor Drive, Santa Clara, CA 95052-8090

SBGA,(S),
23 X 23 X 1.40mm,
168 BALL,1.27mm PITCH

SCALE	SIZE	DRAWING NUMBER	REV
N/A	C	MKT-UDB168A	B

DO NOT SCALE DRAWING
SHEET 1 of 1