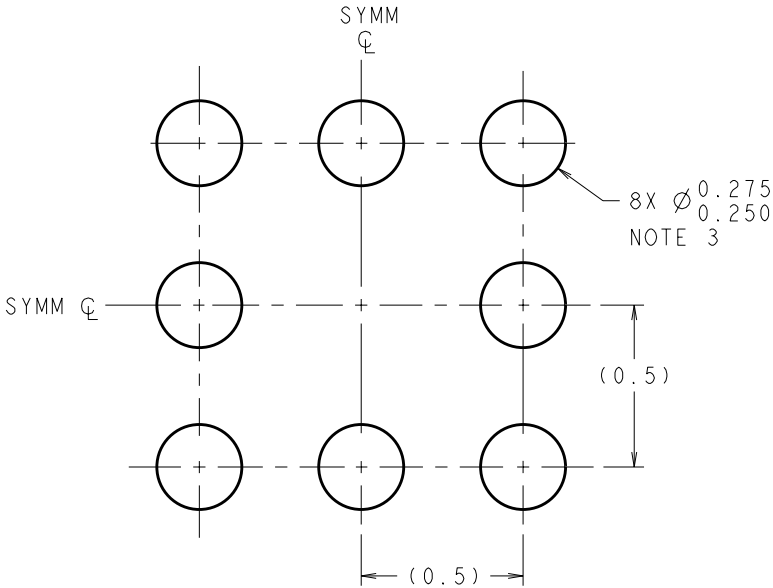
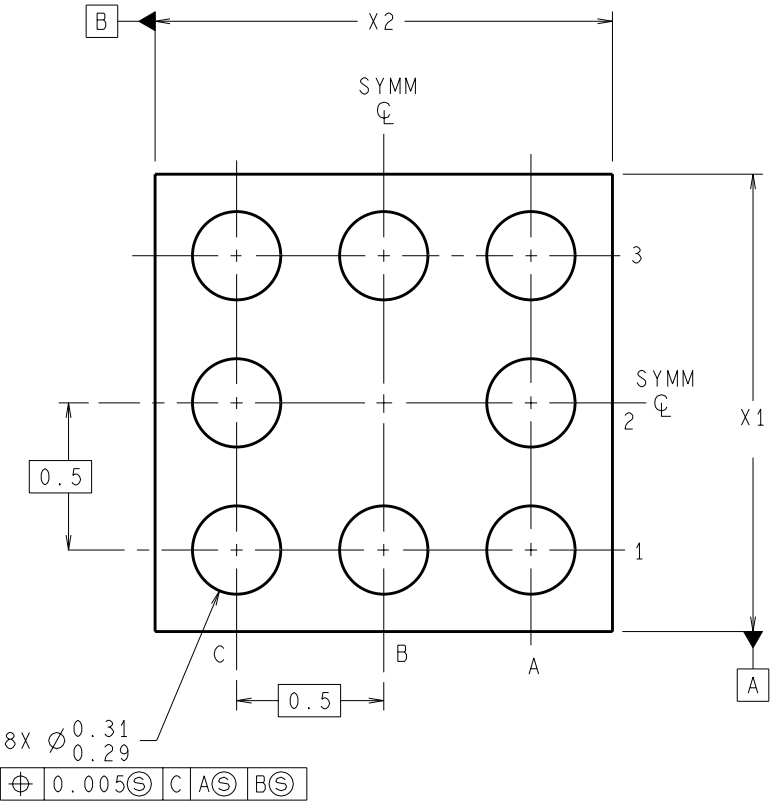
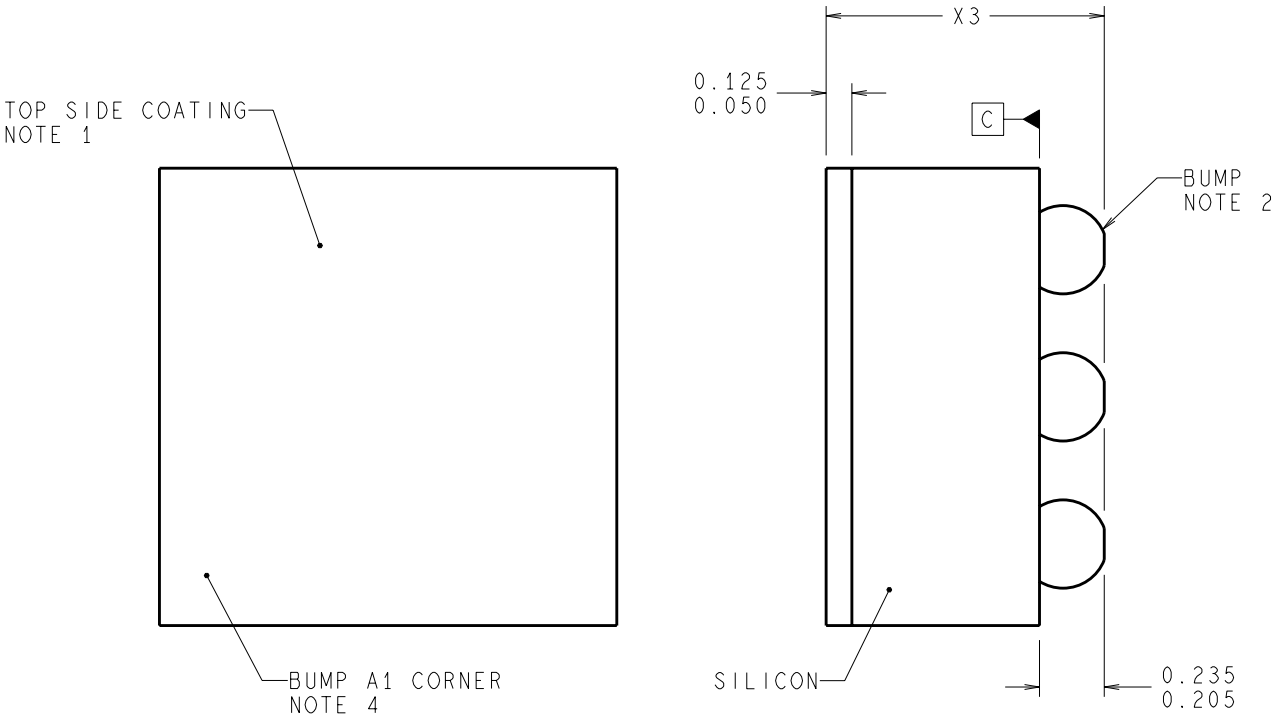


REVISIONS			
LTR	DESCRIPTION	E.C.N.	DATE
A	RELEASE TO DOCUMENT CONTROL	273	03/21/2001
B	CHANGE BUMPS NUMBERING ORDER PER JEDEC; UPDATE NOTE 4.	517	02/06/2002

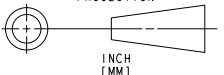


DIMENSIONS ARE IN MILLIMETERS

LAND PATTERN RECOMMENDATION

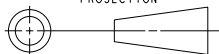


- NOTES: UNLESS OTHERWISE SPECIFIED
- EPOXY COATING.
 - 63 Sn / 37 Pb EUTECTIC BUMP.
 - RECOMMEND NON-SOLDER MASK DEFINED LANDING PAD.
 - PIN A1 IS ESTABLISHED BY LOWER LEFT CORNER WITH RESPECT TO TEXT ORIENTATION.
 - XXX IN DRAWING NUMBER REPRESENTS PACKAGE SIZE VARIATION WHERE X1 IS PACKAGE WIDTH, X2 IS PACKAGE LENGTH AND X3 IS PACKAGE HEIGHT (SEE TABLE, SHEET 2).
EXAMPLE: BLA08EFB HAS WIDTH=1615, LENGTH=1641, HEIGHT=945
 - REFERENCE JEDEC REGISTRATION MO-211, VARIATION BC.

APPROVALS		DATE		 <i>National Semiconductor</i> 2900 Semiconductor Dr., Santa Clara, CA 95052-8090	
DRAWN	MARTA SUCHY		03/21/2001		
DFTG. CHK.	THANH LEQUANG		02/06/2002	MICRO SMD, 8 BUMP(LARGE), 0.5mm PITCH	
ENGR. CHK.	VIRAJ PATWARDHAN		02/06/2002		
		SCALE	SIZE	DRAWING NUMBER	REV
		N/A	C	(SC)MKT-BLA08XXX	B
DO NOT SCALE DRAWING				SHEET 1 of 2	

REVISIONS				
LTR	DESCRIPTION	E.C.N.	DATE	BY/APP'D
	SEE SHEET 1			

PACKAGE DIMENSIONS					
X1 DESIGNATOR	X1 PACKAGE WIDTH (±30 μm)	X2 DESIGNATOR	X2 PACKAGE LENGTH (±30 μm)	X3 DESIGNATOR	X3 PACKAGE HEIGHT (±100 μm)
A	1514	A	1514	A	795
B	1539	B	1539	B	945
C	1565	C	1565	C	995
D	1590	D	1590		
E	1615	E	1615		
F	1641	F	1641		
G	1666	G	1666		
H	1692	H	1692		
J	1717	J	1717		
K	1742	K	1742		
L	1768	L	1768		
M	1793	M	1793		
N	1819	N	1819		
P	1844	P	1844		
Q	1869	Q	1869		
R	1895	R	1895		
S	1920	S	1920		
T	1946	T	1946		
U	1971	U	1971		

APPROVALS		DATE		 <i>National Semiconductor</i> 2900 Semiconductor Dr., Santa Clara, CA 95052-8090			
DRAWN	MARTA SUCHY	03/21/2001					
DFTG. CHK.	THANH LEQUANG	02/06/2002					
ENGR. CHK.	VIRAJ PATWARDHAN	02/06/2002					
				MICRO SMD, 8 BUMP(LARGE), 0.5mm PITCH			
PROJECTION  INCH [MM]				SCALE	SIZE	DRAWING NUMBER	REV
				N/A	C	(SC)MKT-BLA08XXX	B
				DO NOT SCALE DRAWING		SHEET 2 of 2	