



MOTOROLA
Semiconductor Products Sector

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MECHANICAL OUTLINES
DICTIONARY

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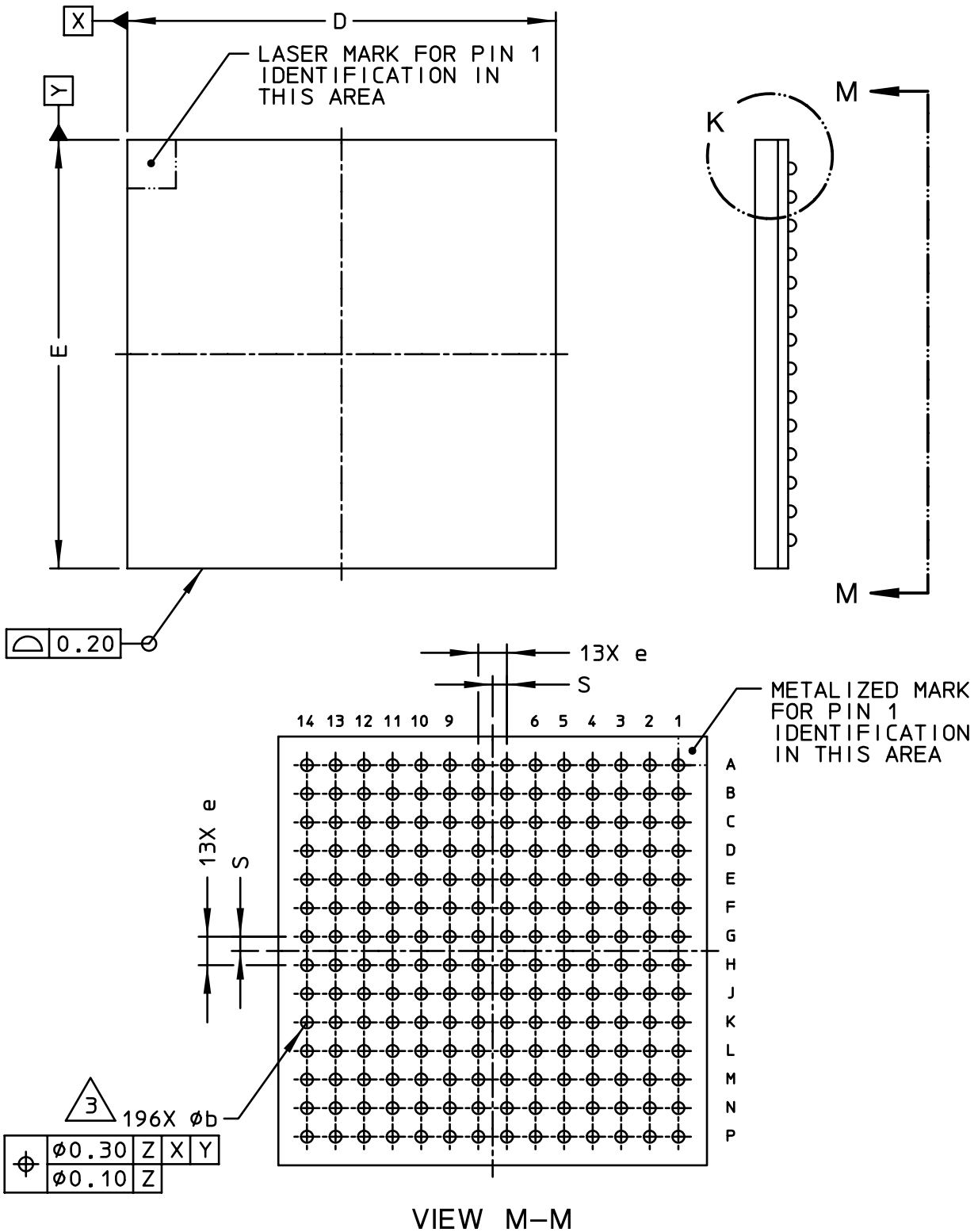
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PAGE

1128A

ISSUE 0

DATE 15DEC97



TITLE
196 I/O STD MAP BGA,
15 X 15 PACKAGE

CASE NUMBER: 1128A-01

STANDARD: MOTOROLA

REFERENCE: U, X

SHEET 1 OF 2



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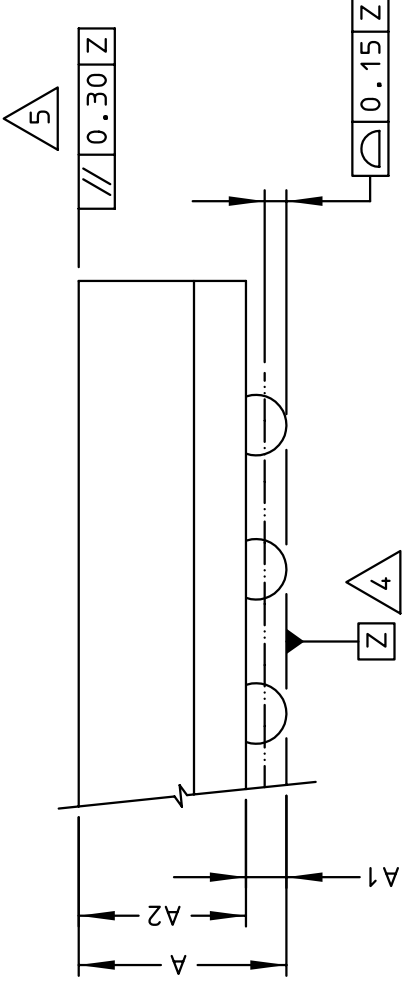
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DATE



DETAIL K
ROTATED 90° CLOCKWISE

DIM		MIN	MAX	NOTES
A		1.32	1.75	1. DIMENSIONS ARE IN MILLIMETERS.
A1		0.27	0.47	
A2		1.18	REF	2. INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994.
b		0.35	0.65	
D		15.00	BSC	3. DIMENSION b IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO DATUM PLANE Z.
E		15.00	BSC	
e		1.00	BSC	4. DATUM Z (SEATING PLANE) IS DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
S		0.50	BSC	
TITLE				5. PARALLELISM MEASUREMENT SHALL EXCLUDE ANY EFFECT OF MARK ON TOP SURFACE OF PACKAGE.
196 I/O STD MAP BGA,				
15 X 15 PACKAGE				
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