



# SOT2033-1

WLCSP91, wafer level chip scale package, 91 terminals with gold bump, 0.15 mm pitch, 4.425 mm x 4.06 mm x 0.263 mm body

27 October 2019

Package information

## 1 Package summary

Terminal position code	B (bottom)
Package type descriptive code	WLCSP91
Package style descriptive code	WLCSP (wafer level chip-size package)
Mounting method type	S (surface mount)
Issue date	08-07-2019
Manufacturer package code	98ASA01413D

Table 1. Package summary

Parameter	Min	Nom	Max	Unit
package length	4.395	4.425	4.455	mm
package width	4.03	4.06	4.09	mm
seated height	-	0.263	0.285	mm
nominal pitch	-	0.15	-	mm
actual quantity of termination	-	91	-	



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2 Package outline

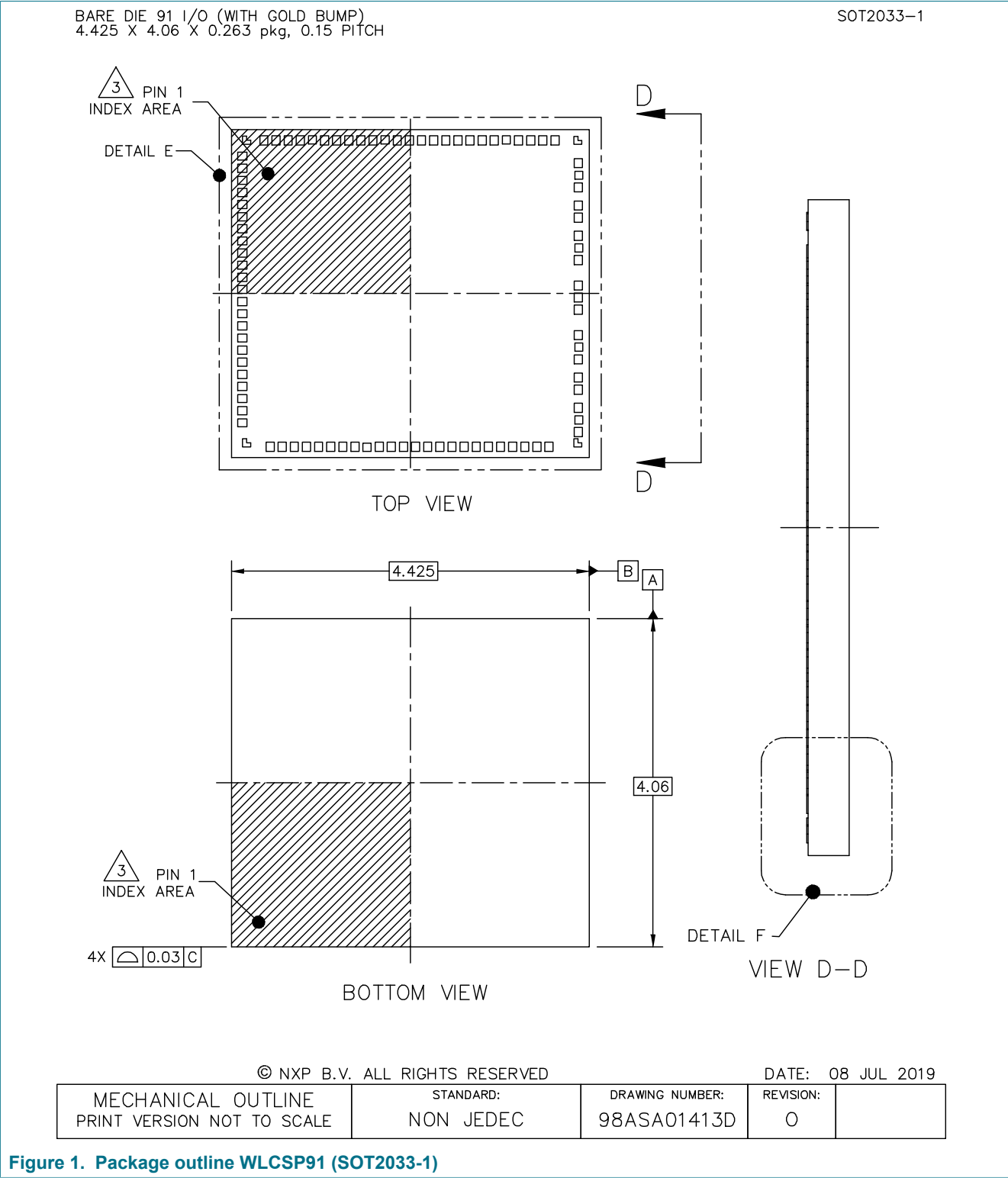
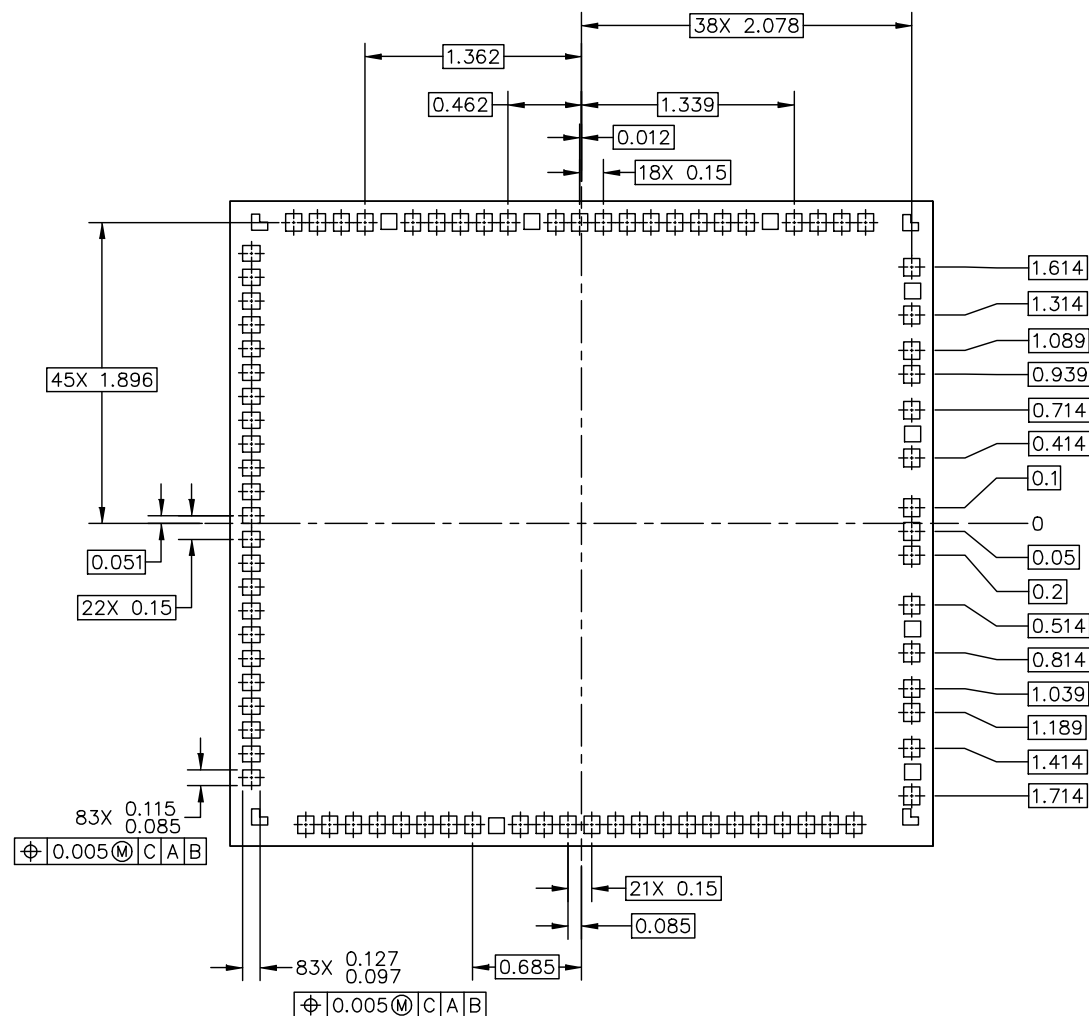


Figure 1. Package outline WLCSP91 (SOT2033-1)

**WLCSP91, wafer level chip scale package, 91 terminals with gold bump, 0.15 mm pitch, 4.425 mm x 4.06 mm x 0.263 mm body**

BARE DIE 91 I/O (WITH GOLD BUMP)  
4.425 X 4.06 X 0.263 pkg, 0.15 PITCH

SOT2033-1



DETAIL E  
(EXCEPT PINS 5,11,21,27,32,38,43,60)

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DATE: 08 JUL 2019

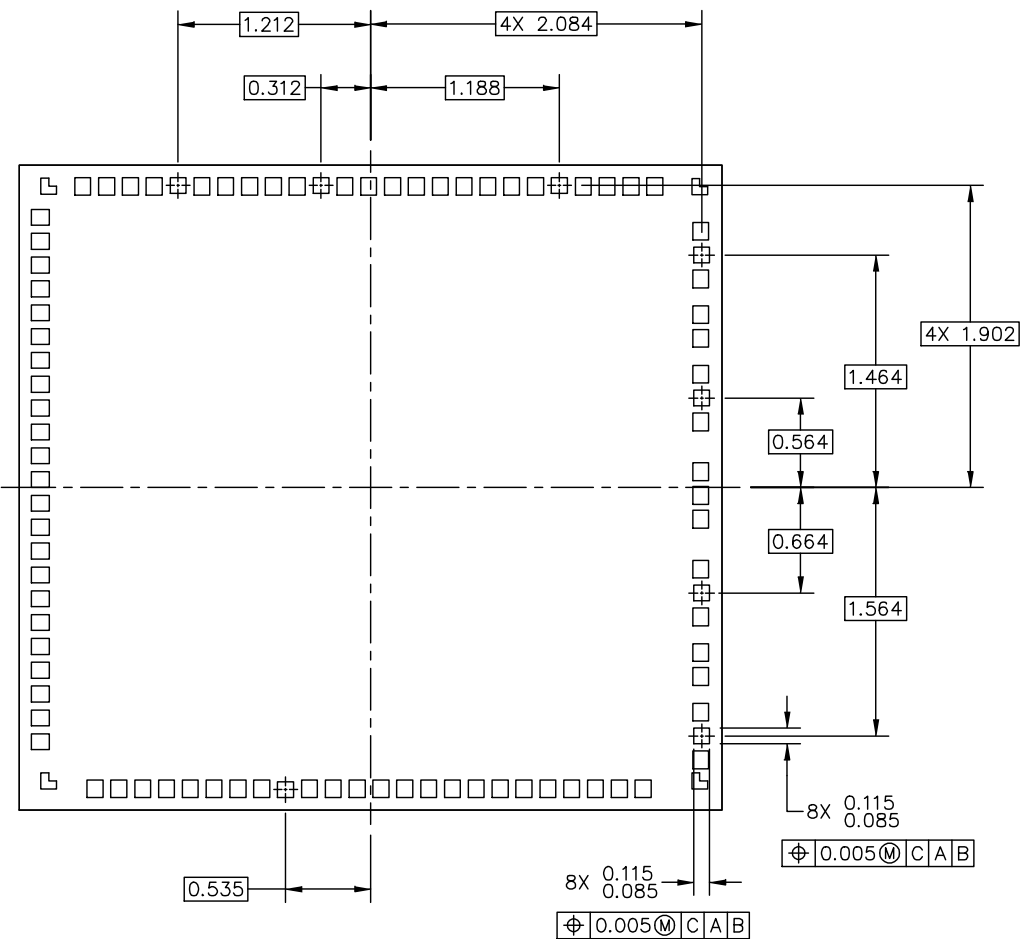
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01413D	REVISION: 0
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**Figure 2. Package outline detail E of WLCSP91 (SOT2033-1)**

WLCSP91, wafer level chip scale package, 91 terminals with gold bump, 0.15 mm pitch, 4.425 mm x 4.06 mm x 0.263 mm body

BARE DIE 91 I/O (WITH GOLD BUMP)  
4.425 X 4.06 X 0.263 pkg, 0.15 PITCH

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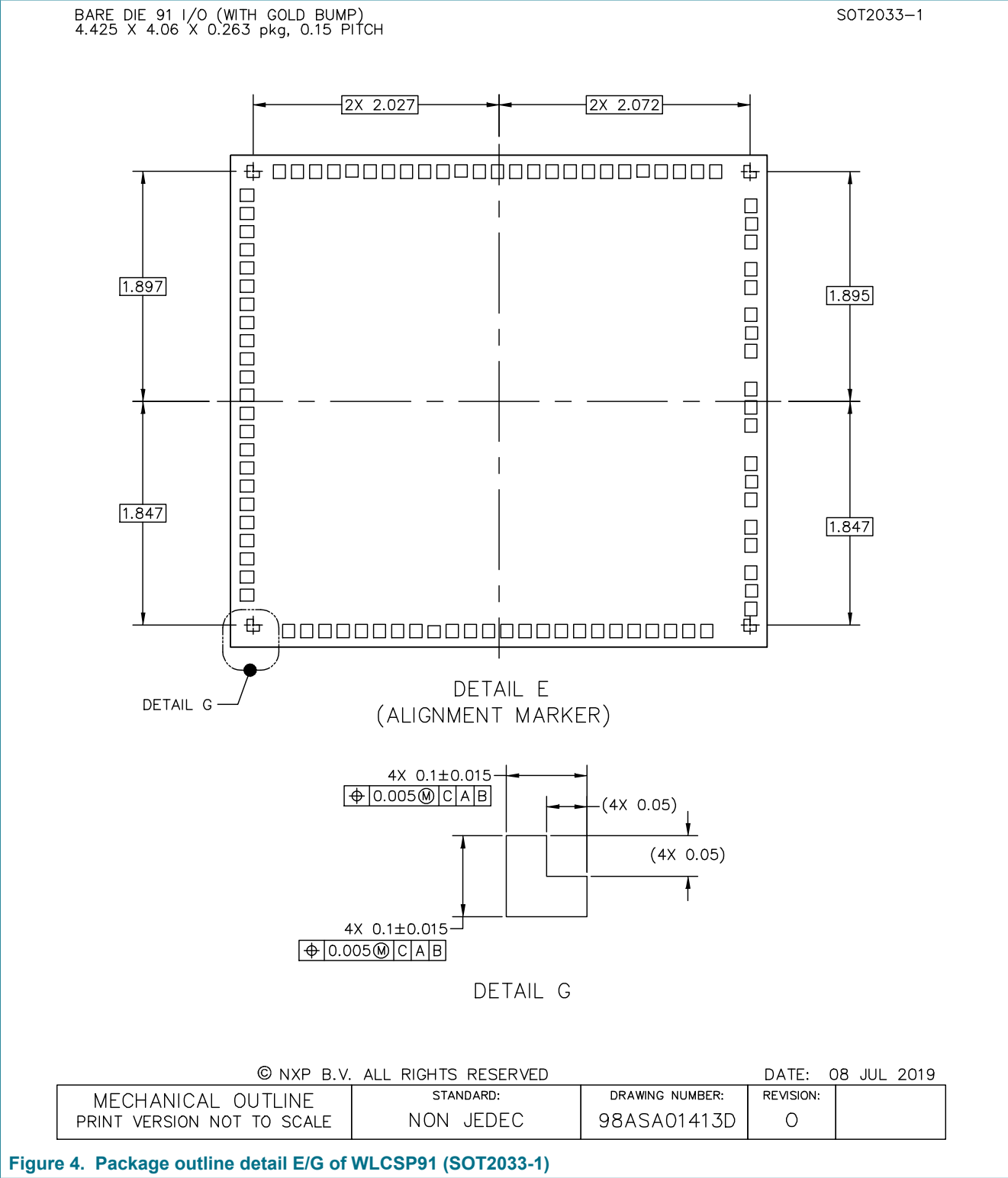


DETAIL E  
(PINS 5,11,21,27,32,38,43,60)

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Figure 3. Package outline detail E of WLCSP91 (SOT2033-1)

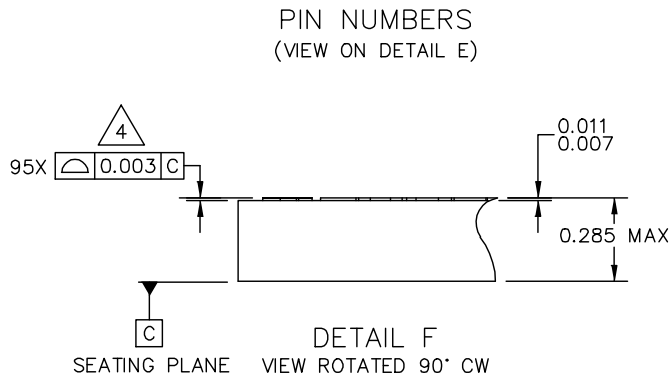
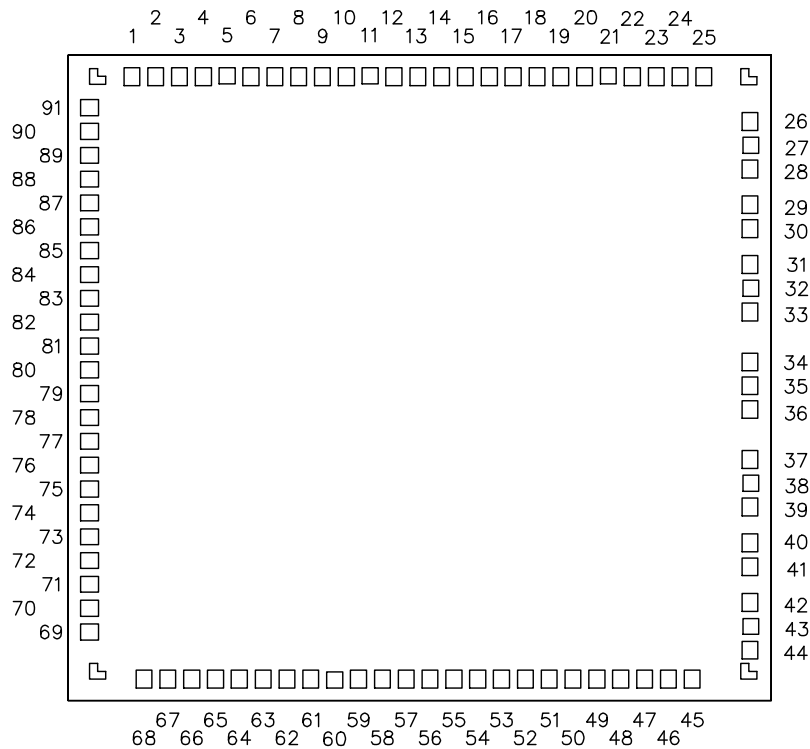
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Figure 5. Package outline detail F of WLCSP91 (SOT2033-1)

WLCSP91, wafer level chip scale package, 91 terminals with gold bump, 0.15 mm pitch, 4.425 mm x 4.06 mm x 0.263 mm body

BARE DIE 91 I/O (WITH GOLD BUMP)  
4.425 X 4.06 X 0.263 pkg, 0.15 PITCH

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- NOTES:
1.

ALL DIMENSIONS IN MILLIMETERS.
2.

DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
3.

PIN 1 FEATURE SHAPE, SIZE AND LOCATION MAY VARY.
4.

DIMENSIONS APPLY TO ALL PINS.

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Figure 6. Package outline note of WLCSP91 (SOT2033-1)

### 3 Legal information

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