SOT1991-1(SC)

HTQFN24, thermal enhanced thin quad flat package; no leads; step-cut wettable flank; 24 terminals, 0.5 mm pitch, 4 mm x 4 mm x 1 mm body

11 February 2019   **Package information**

1   Package summary

Terminal position code	Q (quad)
Package type descriptive code	HTQFN24
Package style descriptive code	HTQFN (thermal enhanced thin quad flatpack; no leads)
Mounting method type	S (surface mount)
Issue date	03-01-2019
Manufacturer package code	98ASA01296D

Table 1. Package summary

Parameter	Min	Nom	Max	Unit
package length	-	4	-	mm
package width	-	4	-	mm
seated height	-	1	-	mm
nominal pitch	-	0.5	-	mm
actual quantity of termination	-	24	-	

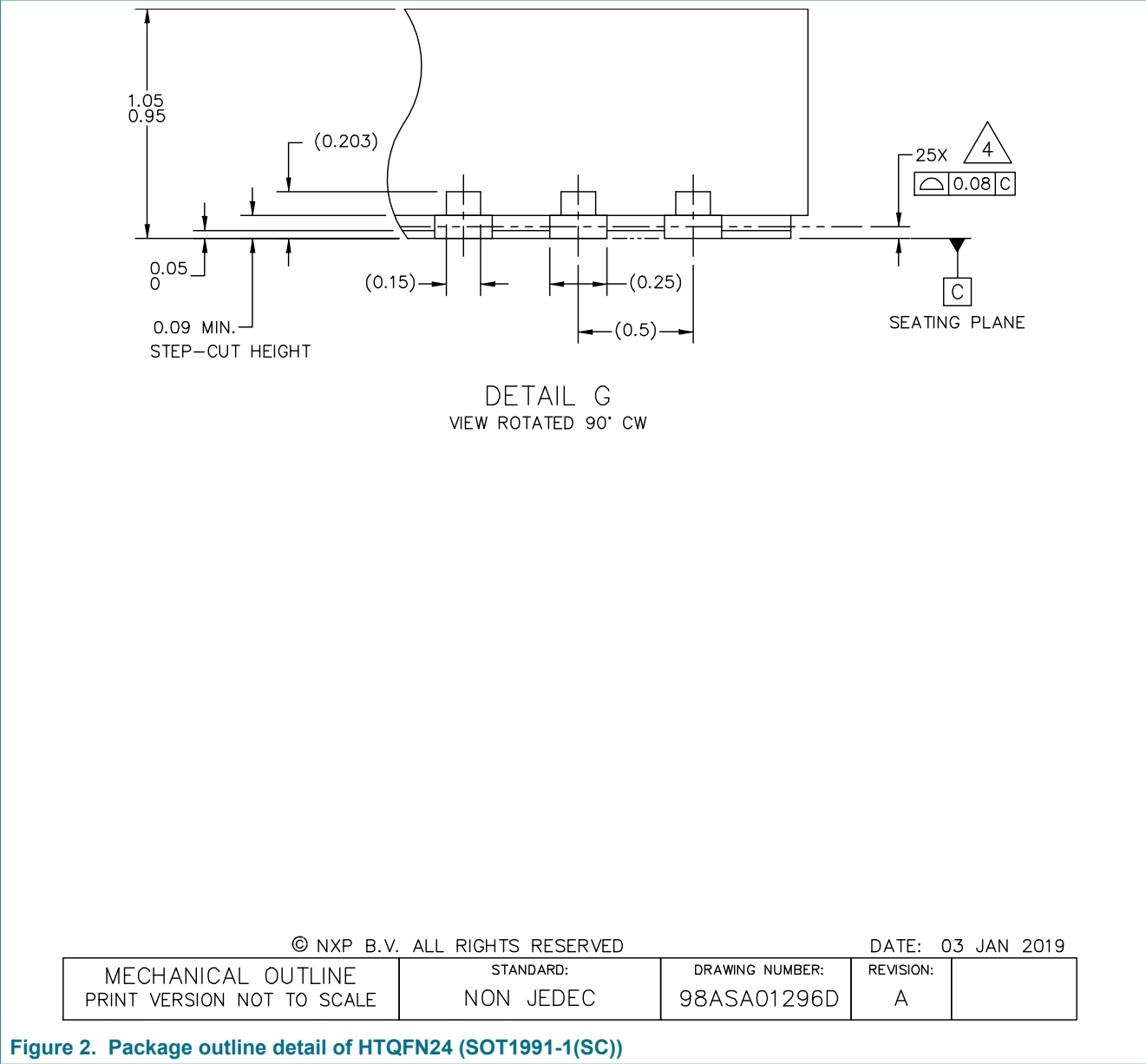**NXP Semiconductors**   **SOT1991-1(SC)**

HTQFN24, thermal enhanced thin quad flat package; no leads; step-cut wettable flank; 24 terminals, 0.5 mm pitch, 4 mm x 4 mm x 1 mm body

2   Package outline
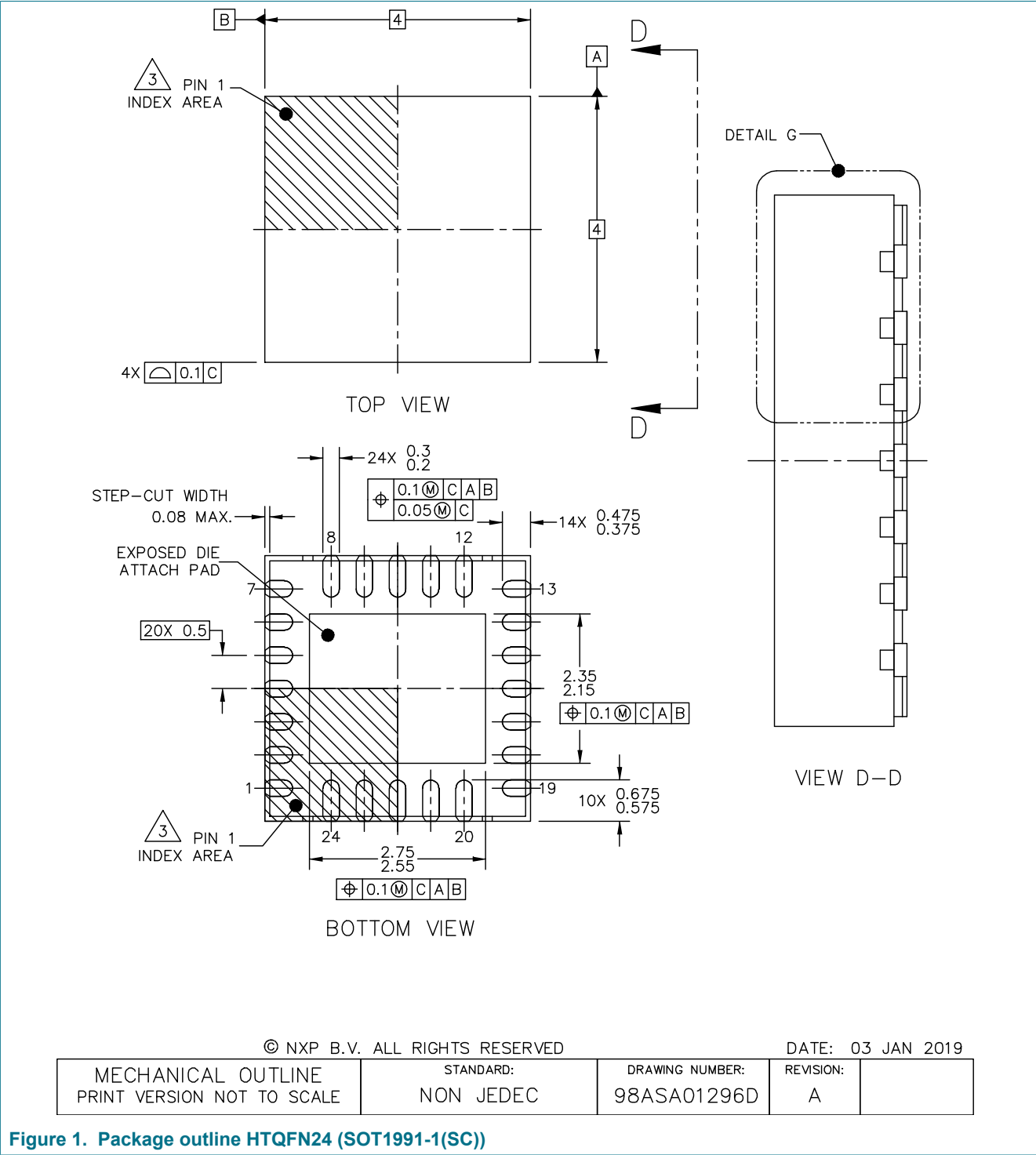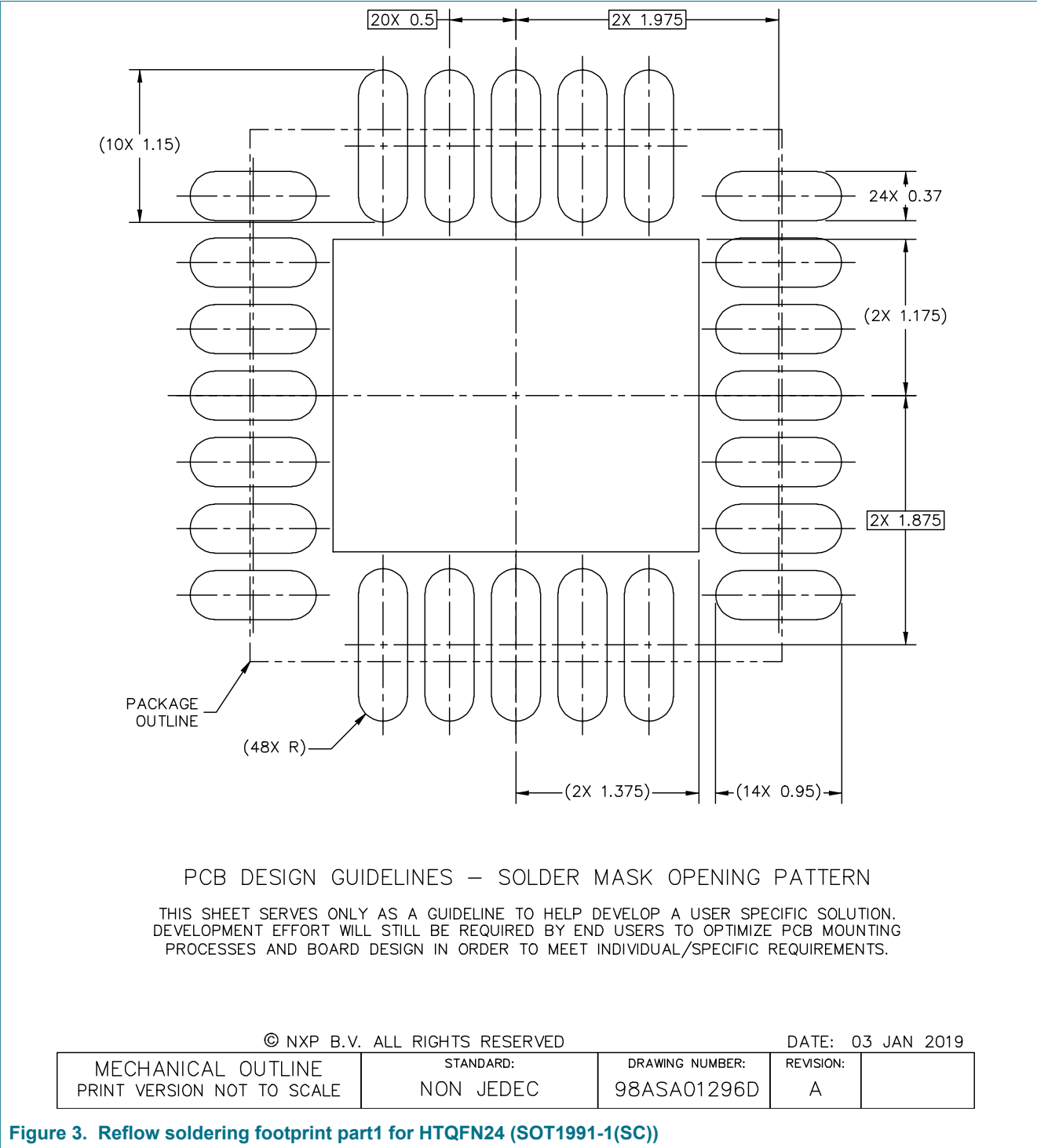

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01296D	REVISION: A

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Figure 1. Package outline HTQFN24 (SOT1991-1(SC))

1.05
0.95

(0.203)

0.05
0

0.09 MIN.
STEP—CUT HEIGHT

(0.15)

(0.25)

(0.5)

25X △4

□ 0.08 C

C

SEATING PLANE

DETAIL G
VIEW ROTATED 90° CW

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Figure 2. Package outline detail of HTQFN24 (SOT1991-1(SC))

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HTQFN24, thermal enhanced thin quad flat package; no leads; step-cut wettable flank; 24 terminals, 0.5 mm pitch, 4 mm x 4 mm x 1 mm body

3   Soldering

PCB DESIGN GUIDELINES — SOLDER MASK OPENING PATTERN

THIS SHEET SERVES ONLY AS A GUIDELINE TO HELP DEVELOP A USER SPECIFIC SOLUTION.
DEVELOPMENT EFFORT WILL STILL BE REQUIRED BY END USERS TO OPTIMIZE PCB MOUNTING
PROCESSES AND BOARD DESIGN IN ORDER TO MEET INDIVIDUAL/SPECIFIC REQUIREMENTS.

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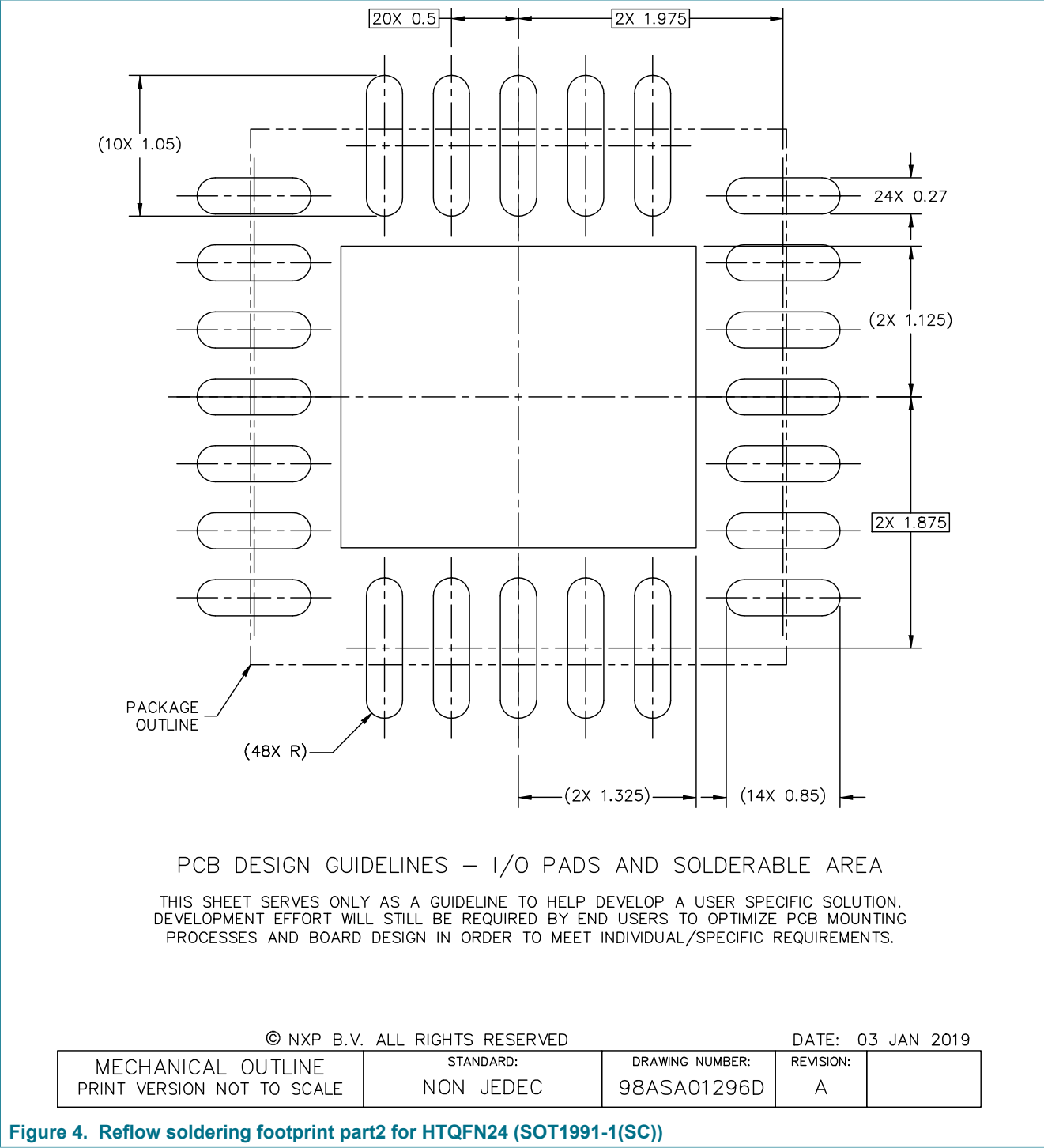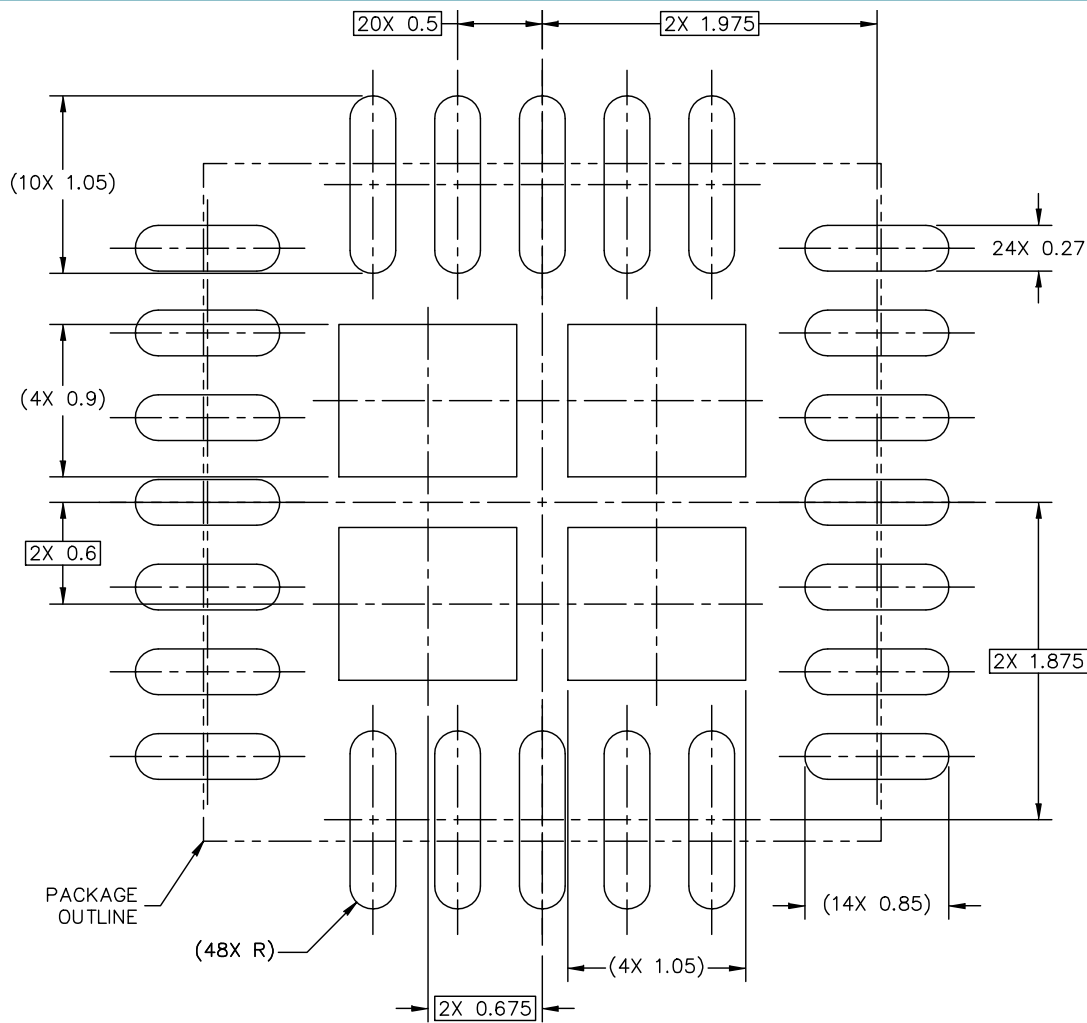| MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01296D	REVISION: A

Figure 3. Reflow soldering footprint part1 for HTQFN24 (SOT1991-1(SC))

HTQFN24, thermal enhanced thin quad flat package; no leads; step-cut wettable flank; 24 terminals, 0.5 mm pitch, 4 mm x 4 mm x 1 mm body

PCB DESIGN GUIDELINES — I/O PADS AND SOLDERABLE AREA

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MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01296D	REVISION: A

Figure 4. Reflow soldering footprint part2 for HTQFN24 (SOT1991-1(SC))

RECOMMENDED STENCIL THICKNESS 0.125 OR 0.15

PCB DESIGN GUIDELINES — SOLDER PASTE STENCIL

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MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01296D	REVISION: A	

Figure 5. Reflow soldering footprint part3 for HTQFN24 (SOT1991-1(SC))

SOT1991-1(SC)

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HTQFN24, thermal enhanced thin quad flat package; no leads; step-cut wettable flank; 24 terminals, 0.5 mm pitch, 4 mm x 4 mm x 1 mm body

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