



SOT2089-1(SC)

HWQFN28, thermal enhanced very-very thin quad flat package, no leads, step-cut wettable flank, 0.5 mm pitch, 4.5 mm x 4.5 mm x 0.68 mm body

20 January 2022

Package information

1 Package summary

Terminal position code	Q (quad)
Package type descriptive code	HWQFN28
Package style descriptive code	HWQFN (thermal enhanced very very thin quad flatpack; no leads)
Package body material type	P (plastic)
Mounting method type	S (surface mount)
Issue date	25-06-2021
Manufacturer package code	98ASA01711D

Table 1. Package summary

Parameter	Min	Nom	Max	Unit
package length	-	4.5	-	mm
package width	-	4.5	-	mm
seated height	-	0.68	0.75	mm
nominal pitch	-	0.5	-	mm
actual quantity of termination	-	28	-	



HWQFN28, thermal enhanced very-very thin quad flat package, no leads, step-cut wettable flank, 0.5 mm pitch, 4.5 mm x 4.5 mm x 0.68 mm body

2 Package outline

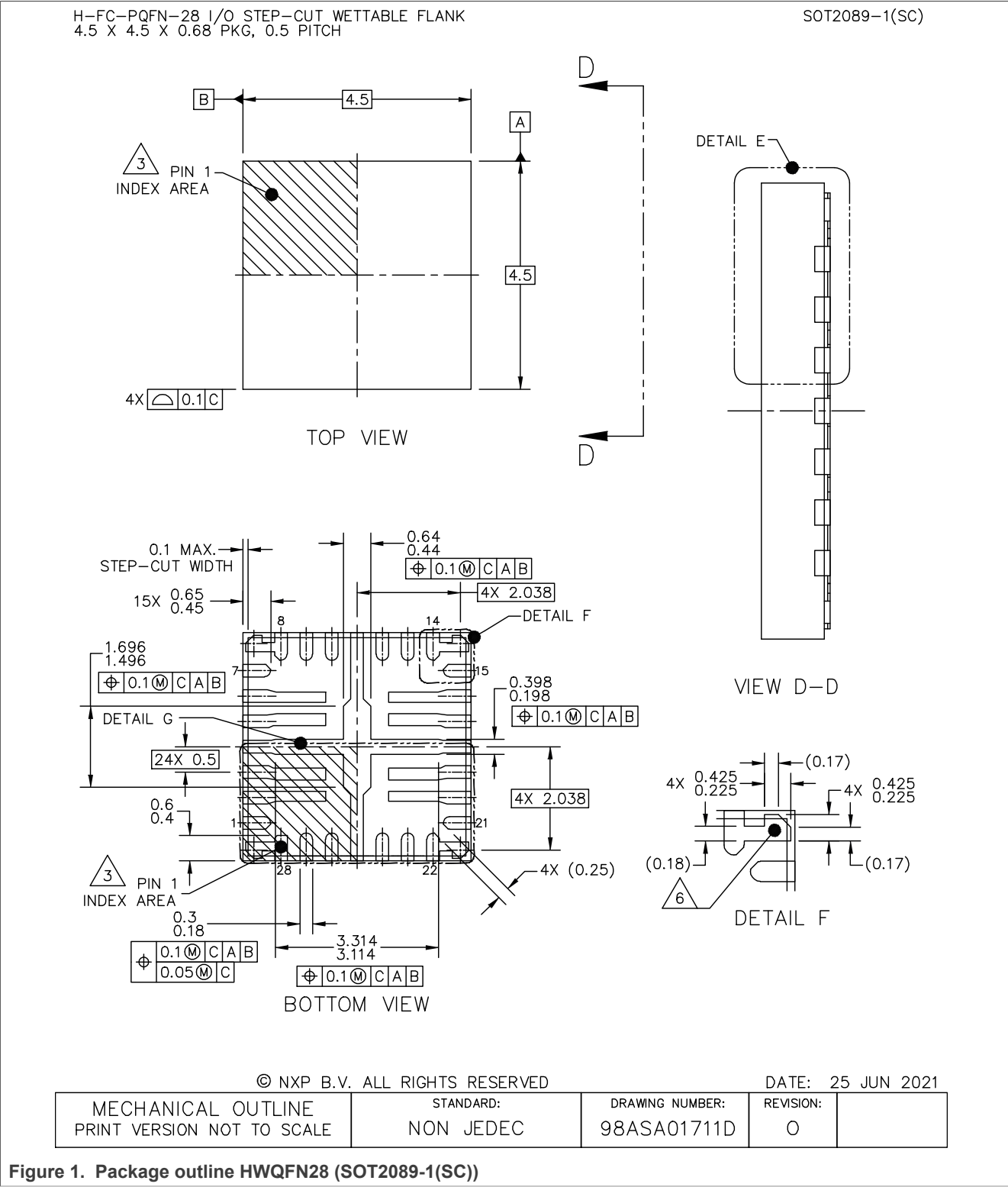


Figure 1. Package outline HWQFN28 (SOT2089-1(SC))

HWQFN28, thermal enhanced very-very thin quad flat package, no leads, step-cut wettable flank, 0.5 mm pitch, 4.5 mm x 4.5 mm x 0.68 mm body

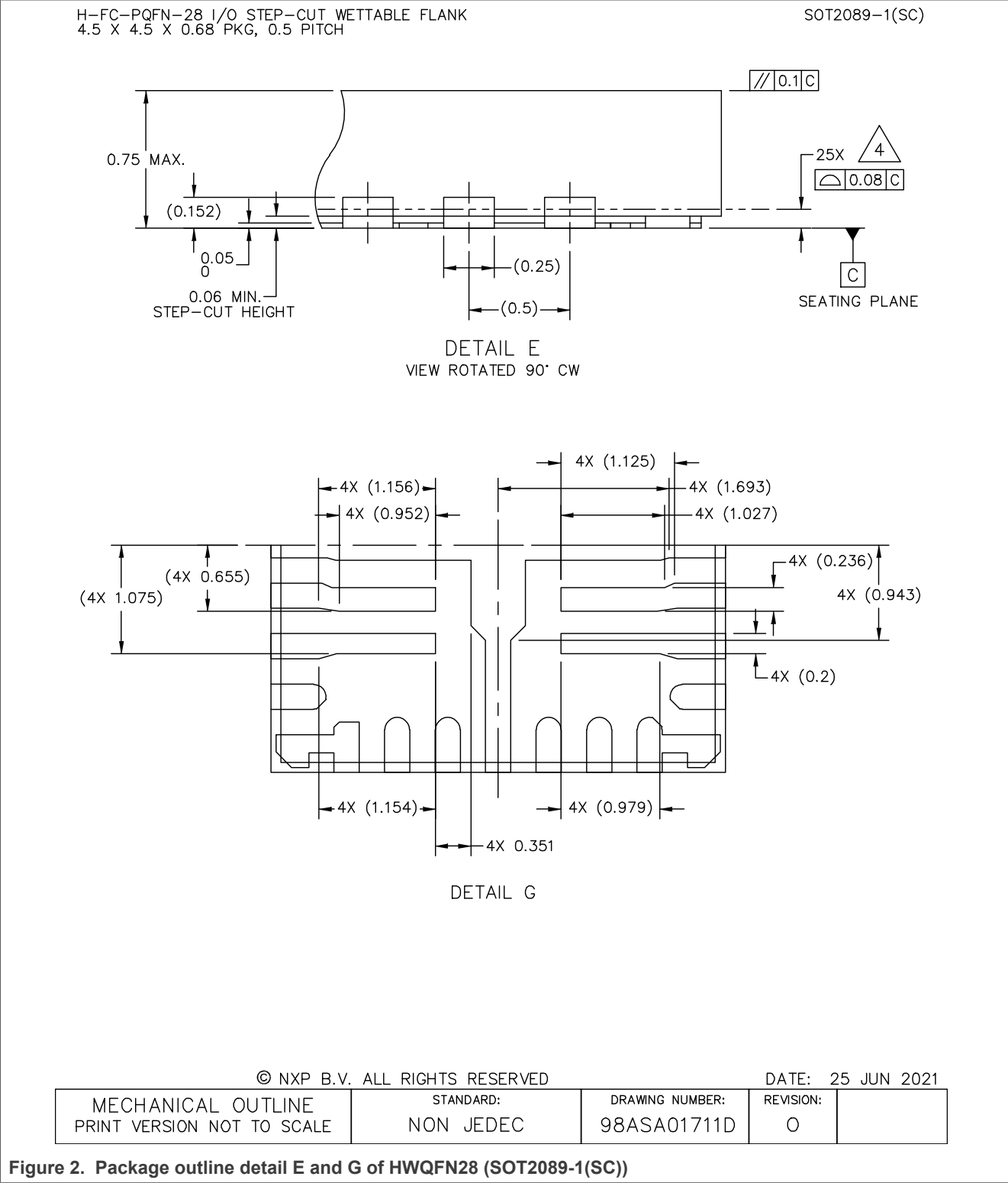
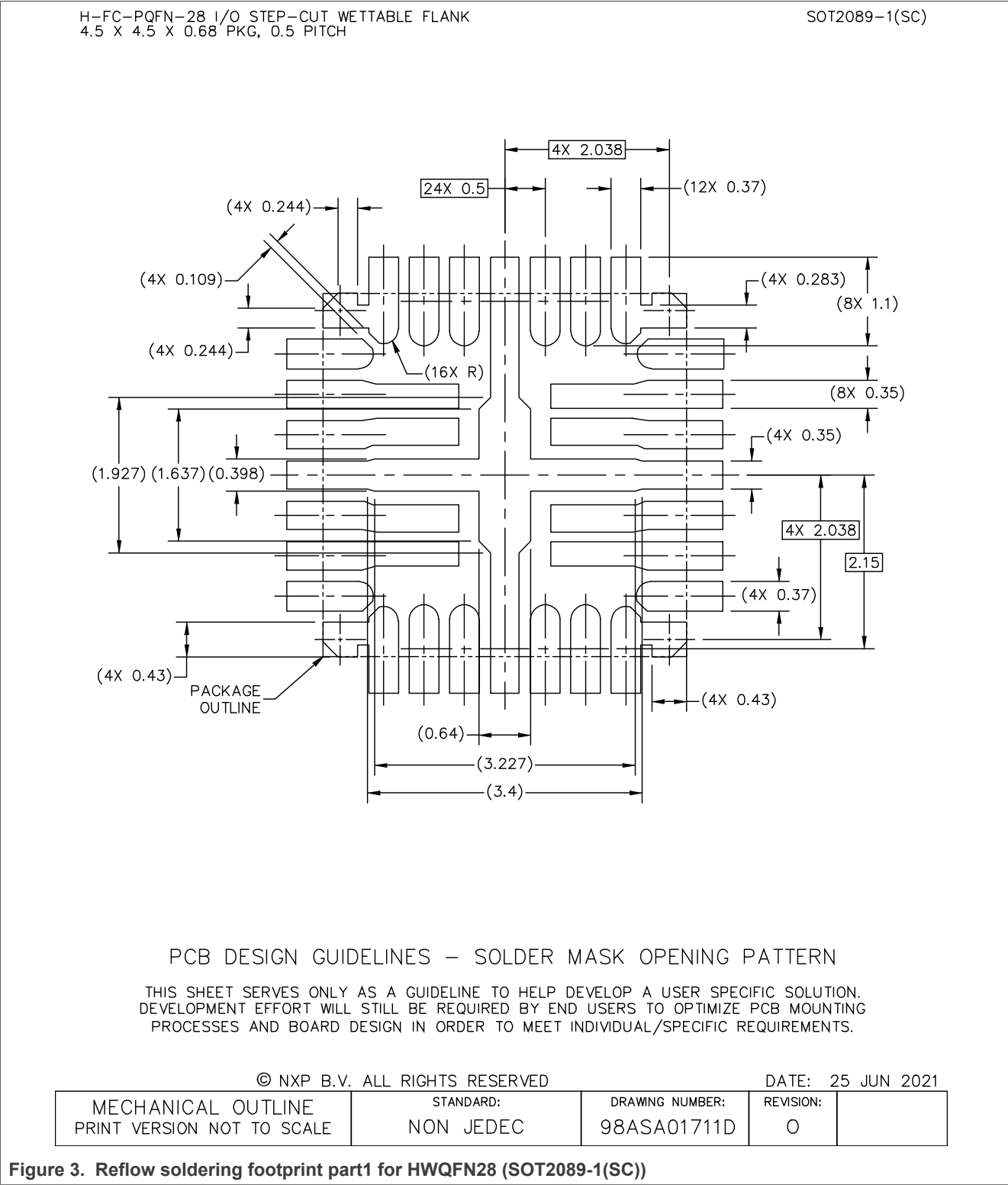


Figure 2. Package outline detail E and G of HWQFN28 (SOT2089-1(SC))

HWQFN28, thermal enhanced very-very thin quad flat package, no leads, step-cut wettable flank, 0.5 mm pitch, 4.5 mm x 4.5 mm x 0.68 mm body

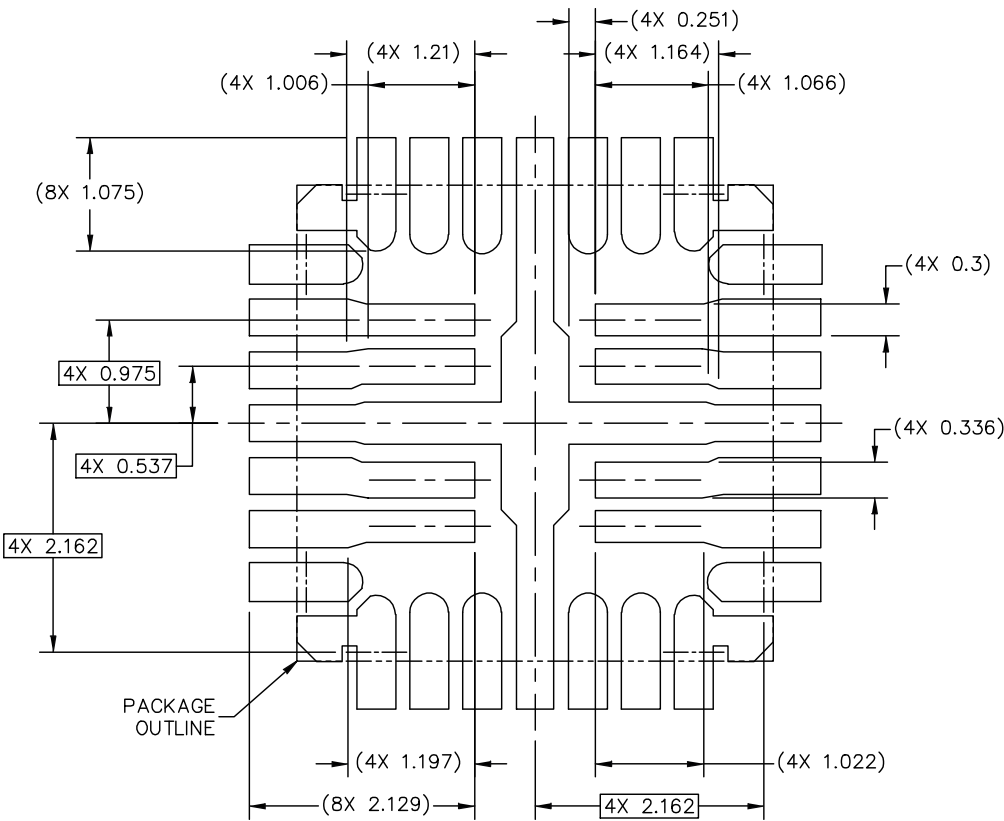
3 Soldering



HWQFN28, thermal enhanced very-very thin quad flat package, no leads, step-cut wettable flank, 0.5 mm pitch, 4.5 mm x 4.5 mm x 0.68 mm body

H-FC-PQFN-28 I/O STEP-CUT WETTABLE FLANK
4.5 X 4.5 X 0.68 PKG, 0.5 PITCH

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PCB DESIGN GUIDELINES – SOLDER MASK OPENING PATTERN

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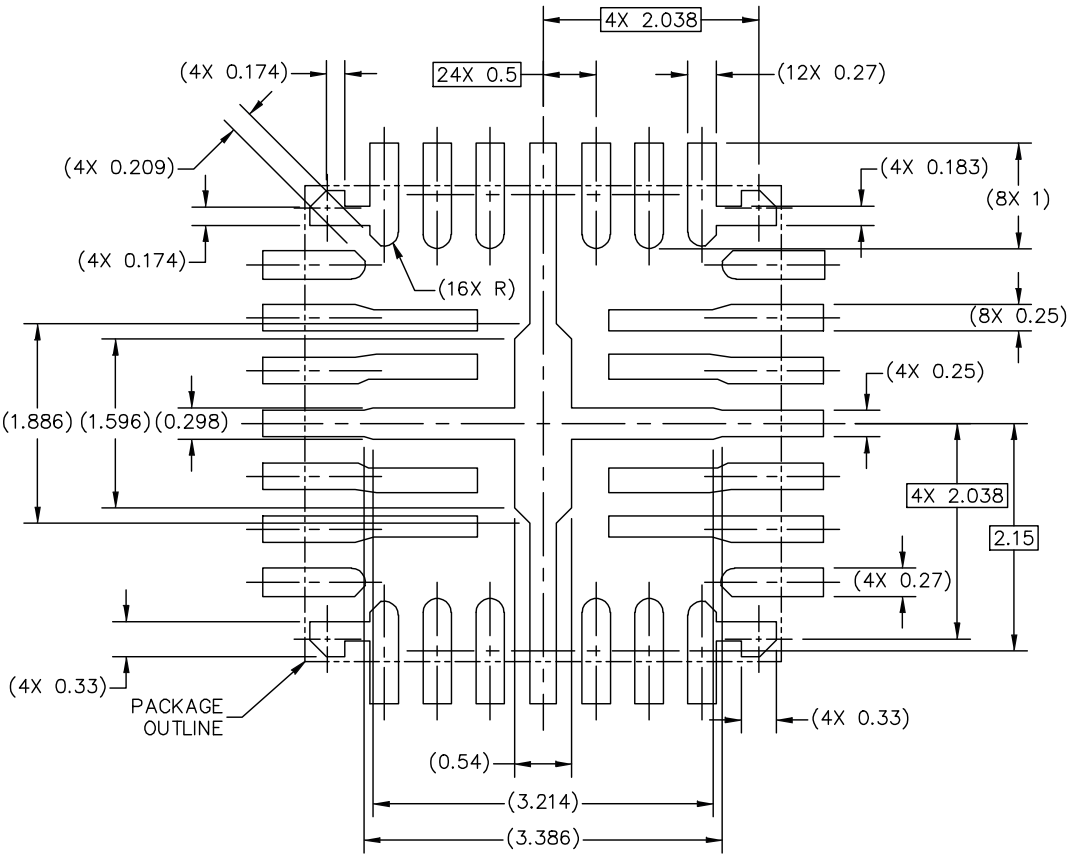
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01711D	REVISION: O	
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Figure 4. Reflow soldering footprint part2 for HWQFN28 (SOT2089-1(SC))

HWQFN28, thermal enhanced very-very thin quad flat package, no leads, step-cut wettable flank, 0.5 mm pitch, 4.5 mm x 4.5 mm x 0.68 mm body

H-FC-PQFN-28 I/O STEP-CUT WETTABLE FLANK
4.5 X 4.5 X 0.68 PKG, 0.5 PITCH

SOT2089-1(SC)



PCB DESIGN GUIDELINES – I/O PADS AND SOLDERABLE AREA

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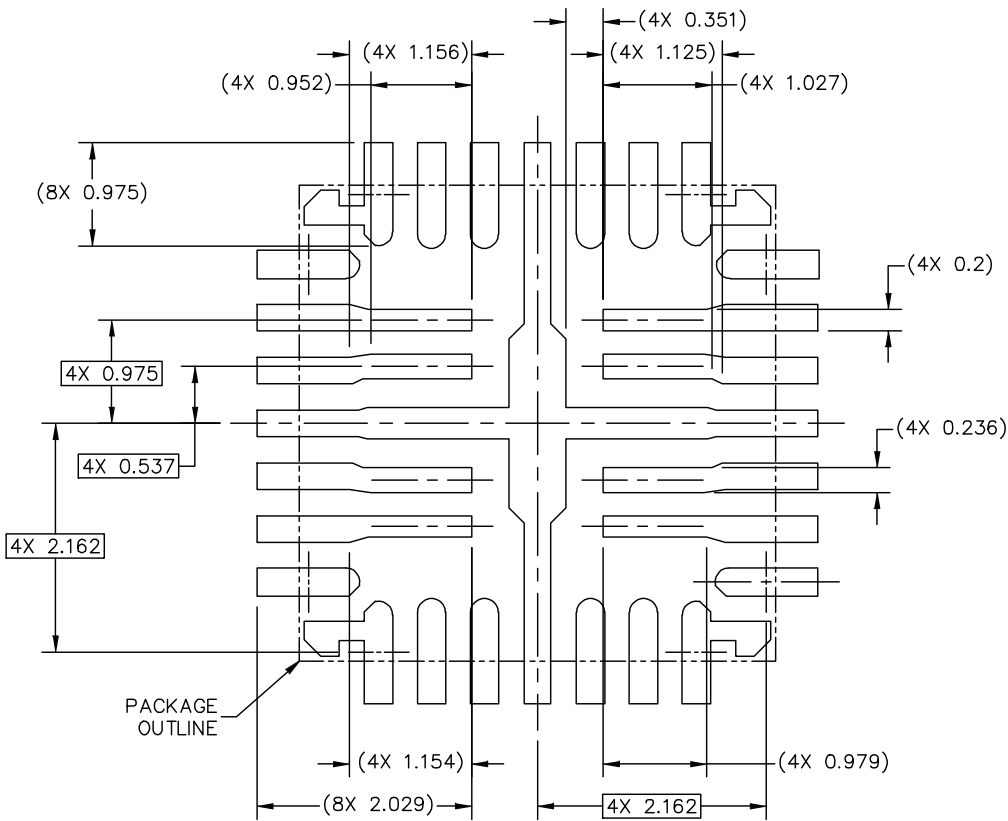
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Figure 5. Reflow soldering footprint part3 for HWQFN28 (SOT2089-1(SC))

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H-FC-PQFN-28 I/O STEP-CUT WETTABLE FLANK
4.5 X 4.5 X 0.68 PKG, 0.5 PITCH

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PCB DESIGN GUIDELINES – I/O PADS AND SOLDERABLE AREA

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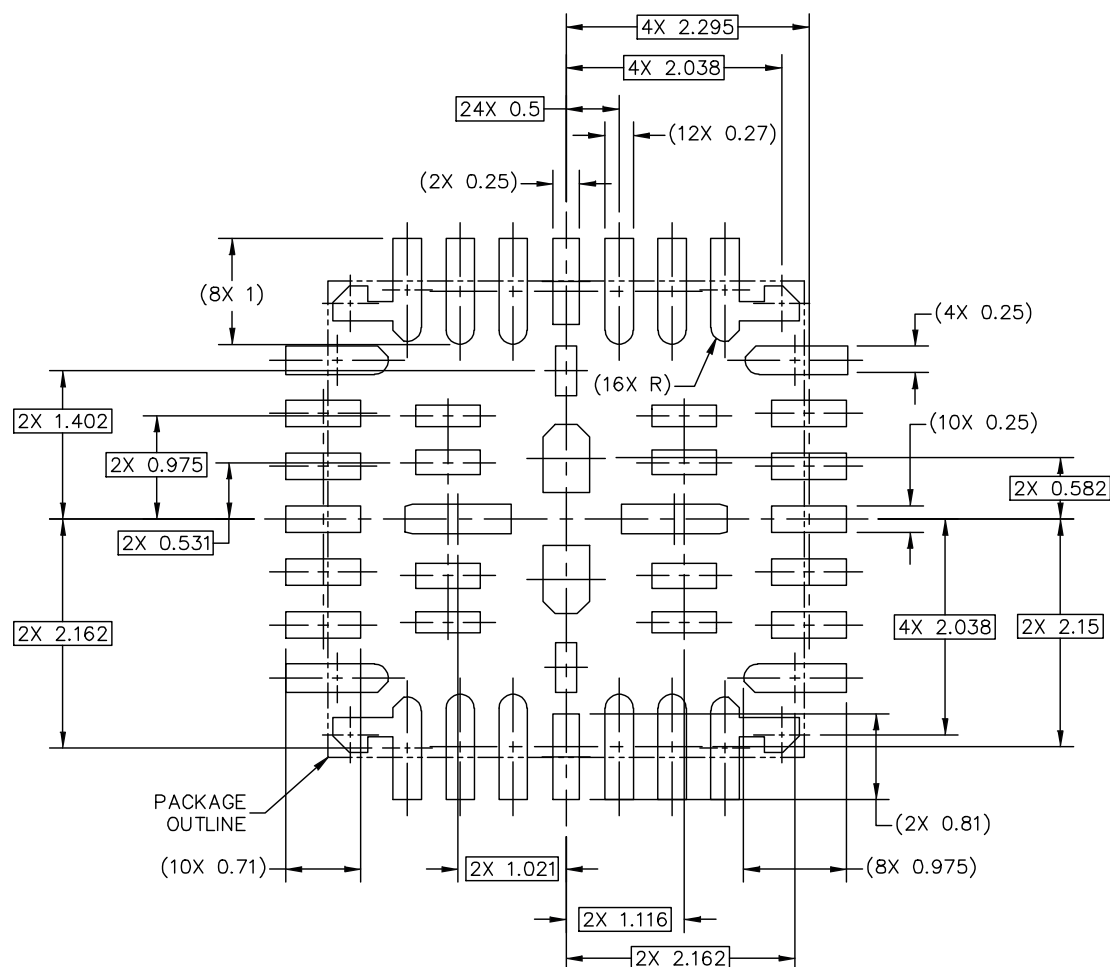
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Figure 6. Reflow soldering footprint part4 for HWQFN28 (SOT2089-1(SC))

HWQFN28, thermal enhanced very-very thin quad flat package, no leads, step-cut wettable flank, 0.5 mm pitch, 4.5 mm x 4.5 mm x 0.68 mm body

H-FC-PQFN-28 I/O STEP-CUT WETTABLE FLANK
4.5 X 4.5 X 0.68 PKG, 0.5 PITCH

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RECOMMENDED STENCIL THICKNESS 0.1

PCB DESIGN GUIDELINES – SOLDER PASTE STENCIL

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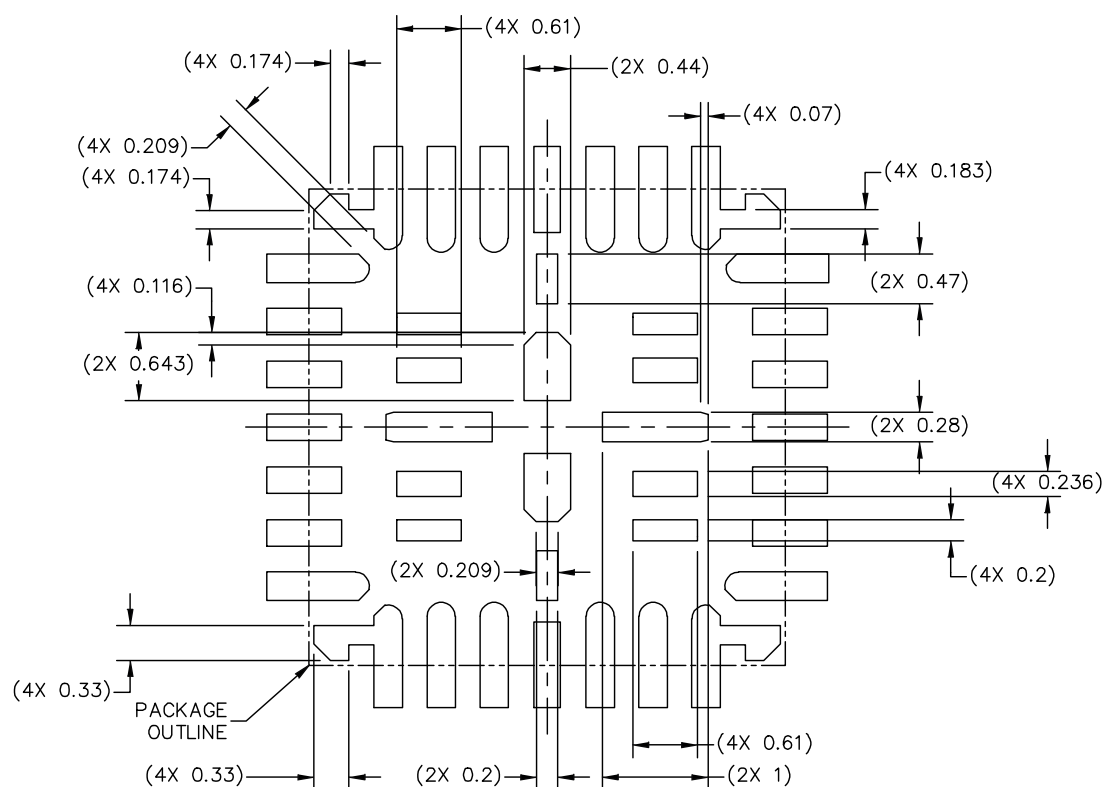
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Figure 7. Reflow soldering footprint part5 for HWQFN28 (SOT2089-1(SC))

HWQFN28, thermal enhanced very-very thin quad flat package, no leads, step-cut wettable flank, 0.5 mm pitch, 4.5 mm x 4.5 mm x 0.68 mm body

H-FC-PQFN-28 I/O STEP-CUT WETTABLE FLANK
4.5 X 4.5 X 0.68 PKG, 0.5 PITCH

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RECOMMENDED STENCIL THICKNESS 0.1

PCB DESIGN GUIDELINES – SOLDER PASTE STENCIL

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Figure 8. Reflow soldering footprint part6 for HWQFN28 (SOT2089-1(SC))

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H-FC-PQFN-28 I/O STEP-CUT WETTABLE FLANK
4.5 X 4.5 X 0.68 PKG, 0.5 PITCH

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NOTES:

- 1. ALL DIMENSIONS ARE IN MILLIMETERS.
- 2. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 3. PIN 1 FEATURE, SHAPE, SIZE AND LOCATION MAY VARY.
- 4. COPLANARITY APPLIES TO LEADS AND DIE ATTACH PAD.
- 5. MIN. METAL GAP FOR LEAD TO EXPOSED PAD SHALL BE 0.2 MM.
- 6. ANCHORING PADS.

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Figure 9. Package outline note HWQFN28 (SOT2089-1(SC))

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