

SOT223-1

HVQFN81, plastic thermal enhanced very thin quad flat wettable flanks package; no leads; 81 terminals, 0.4 mm pitch, 8 mm x 7.5 mm x 0.85 mm body

12 December 2024

Package information



1 Package summary

Terminal position code	Q (quad)
Package type descriptive code	HVQFN81
Package style descriptive code	HVQFN (thermal enhanced very thin quad flatpack; no leads)
Package body material type	P (plastic)
Mounting method type	S (surface mount)
Issue date	10-12-2024
Manufacturer package code	98ASA02101D

Table 1. Package summary

Parameter	Min	Nom	Max	Unit
package length	7.9	8	8.1	mm
package width	7.4	7.5	7.6	mm
seated height	0.8	0.85	0.9	mm
package height	0.8	0.85	0.9	mm
nominal pitch	-	0.4	-	mm
actual quantity of termination	-	81	-	



HVQFN81, plastic thermal enhanced very thin quad flat wettable flanks package; no leads; 81 terminals, 0.4 mm pitch, 8 mm x 7.5 mm body

2 Package outline

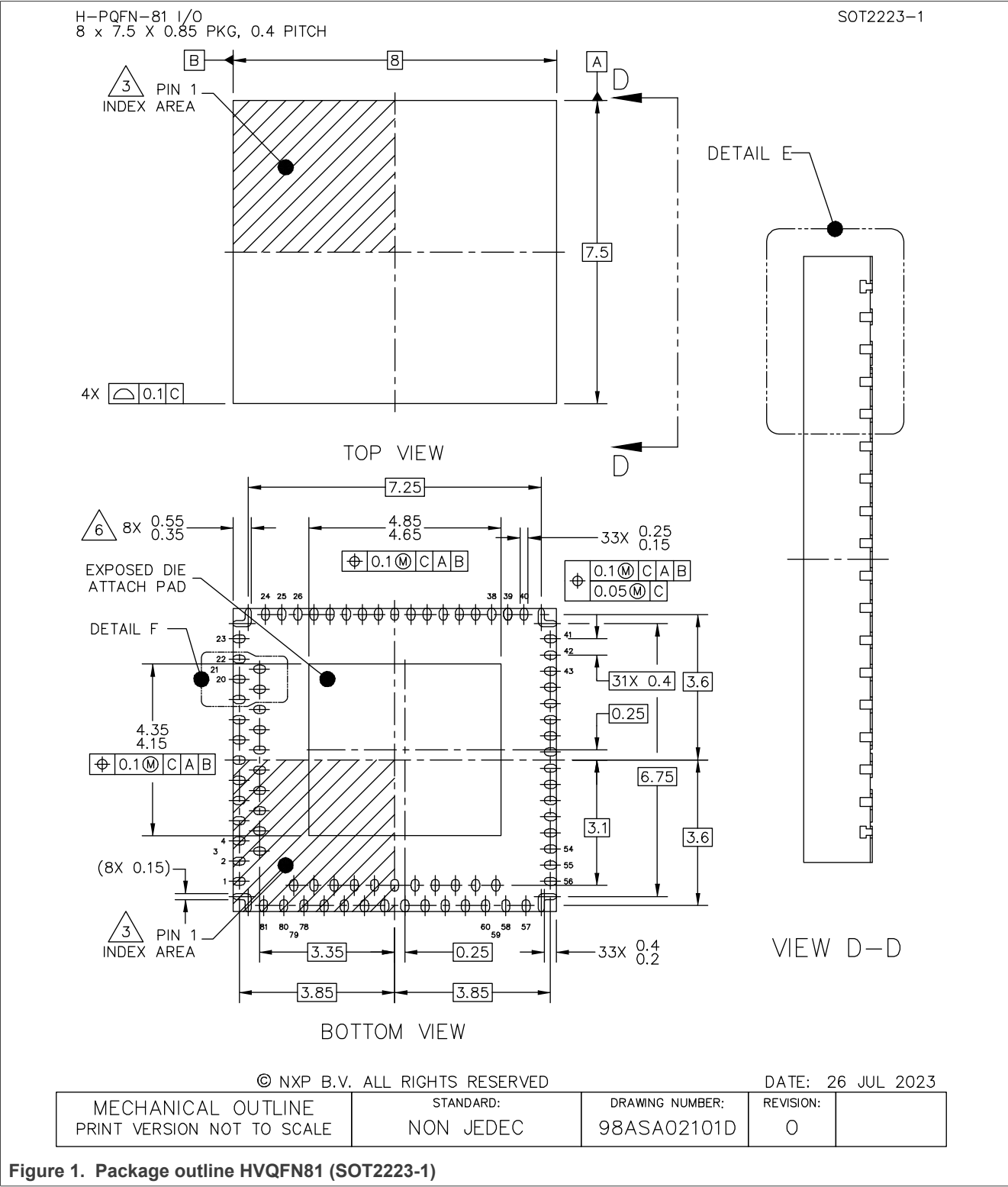
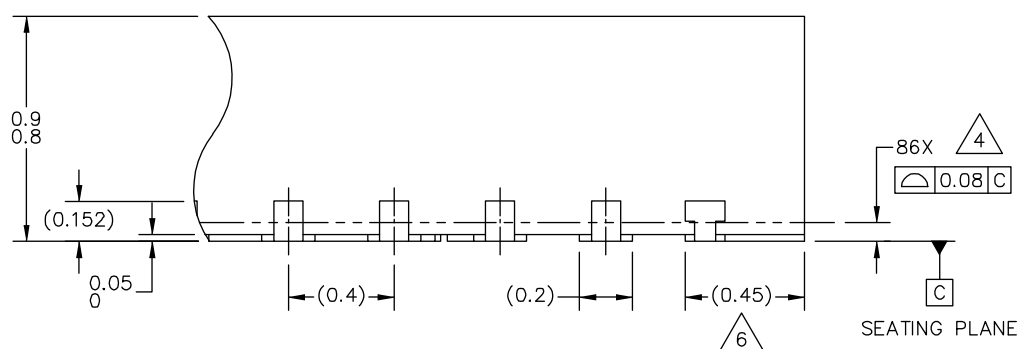


Figure 1. Package outline HVQFN81 (SOT2223-1)

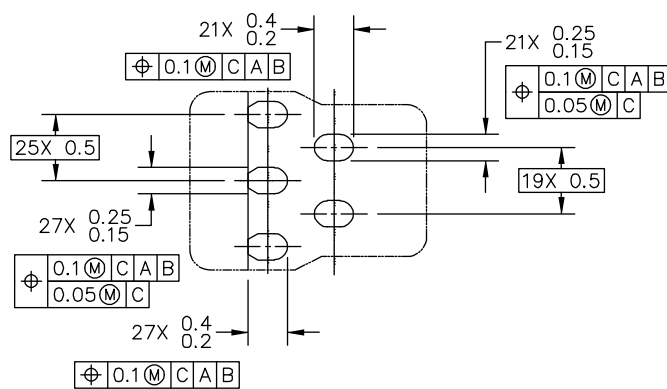
HVQFN81, plastic thermal enhanced very thin quad flat wettable flanks package; no leads; 81 terminals, 0.4 mm pitch, 8 mm x 7.5 mm x 0.85 mm body

H-PQFN-81 I/O
8 x 7.5 X 0.85 PKG, 0.4 PITCH

SOT2223-1



DETAIL E
VIEW ROTATED 90° CW



DETAIL F

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DATE: 26 JUL 2023

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA02101D	REVISION: 0
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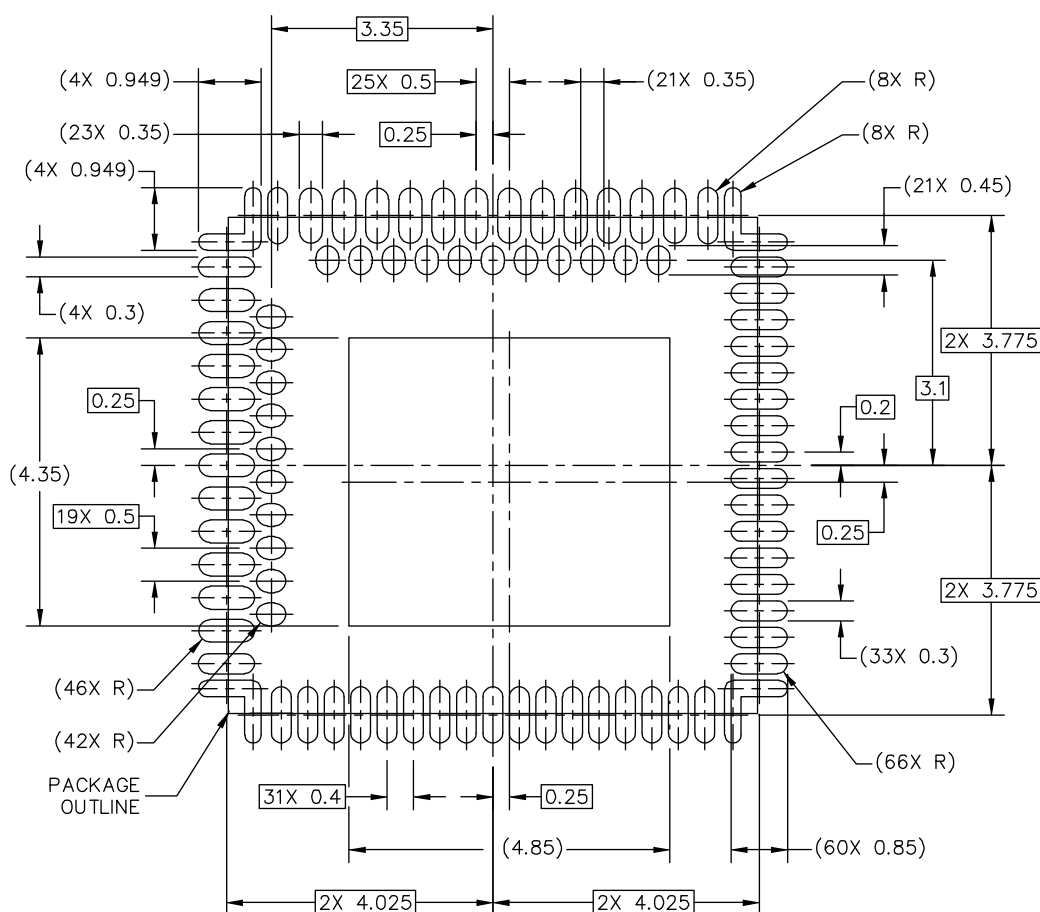
Figure 2. Package outline detail E and F of HVQFN81 (SOT2223-1)

HVQFN81, plastic thermal enhanced very thin quad flat wettable flanks package; no leads; 81 terminals, 0.4 mm pitch, 8 mm x 7.5 mm x 0.85 mm body

3 Soldering

H-PQFN-81 I/O
8 x 7.5 X 0.85 PKG, 0.4 PITCH

SOT2223-1



PCB DESIGN GUIDELINES – SOLDER MASK OPENING PATTERN

THIS SHEET SERVES ONLY AS A GUIDELINE TO HELP DEVELOP A USER SPECIFIC SOLUTION.
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PROCESSES AND BOARD DESIGN IN ORDER TO MEET INDIVIDUAL/SPECIFIC REQUIREMENTS.

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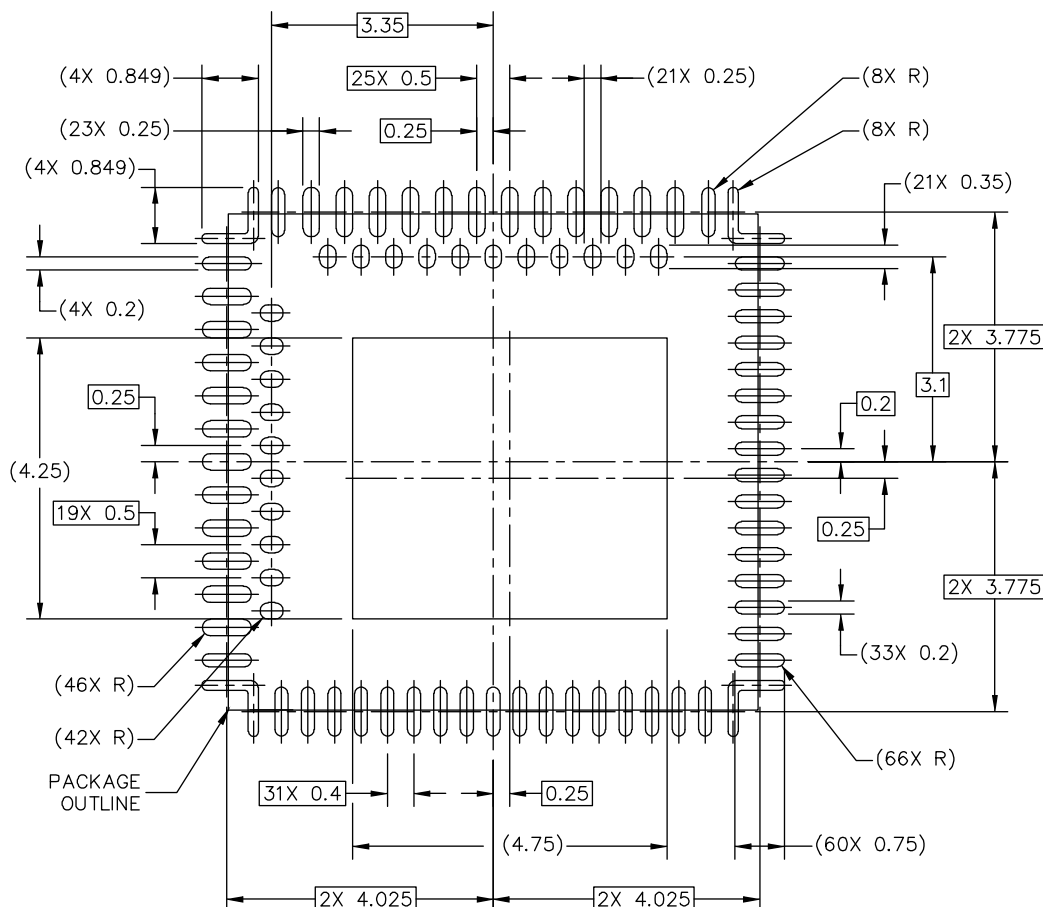
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Figure 3. Reflow soldering footprint part1 for HVQFN81 (SOT2223-1)

HVQFN81, plastic thermal enhanced very thin quad flat wettable flanks package; no leads; 81 terminals, 0.4 mm pitch, 8 mm x 7.5 mm x 0.85 mm body

H-PQFN-81 I/O
8 x 7.5 X 0.85 PKG, 0.4 PITCH

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PCB DESIGN GUIDELINES – I/O PADS AND SOLDERABLE AREA

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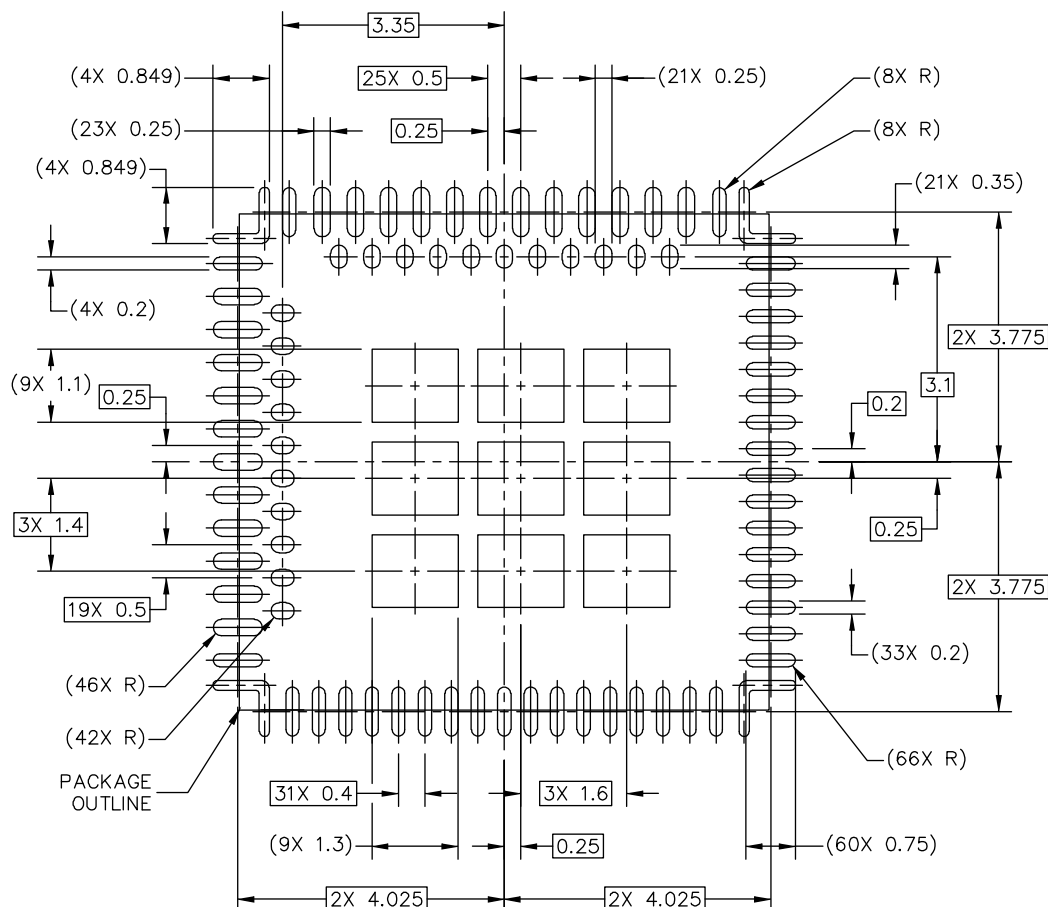
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA02101D	REVISION: 0
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Figure 4. Reflow soldering footprint part2 for HVQFN81 (SOT2223-1)

HVQFN81, plastic thermal enhanced very thin quad flat wettable flanks package; no leads; 81 terminals, 0.4 mm pitch, 8 mm x 7.5 mm x 0.85 mm body

H-PQFN-81 I/O
8 x 7.5 X 0.85 PKG, 0.4 PITCH

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RECOMMENDED STENCIL THICKNESS 0.1

PCB DESIGN GUIDELINES – SOLDER PASTE STENCIL

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Figure 5. Reflow soldering footprint part3 for HVQFN81 (SOT2223-1)

HVQFN81, plastic thermal enhanced very thin quad flat wettable flanks package; no leads; 81 terminals, 0.4 mm pitch, 8 mm x 7.5 mm x 0.85 mm body

H-PQFN-81 I/O
8 x 7.5 X 0.85 PKG, 0.4 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 6. Package outline note HVQFN81 (SOT2223-1)

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4 Legal information

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