

SOT2111-4

HVQFN148 Thermal enhanced very thin quad flat package; no leads, 148 terminals, 0.5 mm pitch, 11 mm x 11 mm x 0.85 mm body

17 April 2024

Package information



1 Package summary

Terminal position code	Q (quad)
Package type descriptive code	HVQFN148
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	16-05-2024
Manufacturer package code	98ASA02005D

Table 1. Package summary

Parameter	Min	Nom	Max	Unit
package length	10.9	11	11.1	mm
package width	10.9	11	11.1	mm
package height	-	0.85	0.9	mm
nominal pitch	-	0.5	-	mm
actual quantity of termination	-	148	-	



HVQFN148 Thermal enhanced very thin quad flat package; no leads, 148 terminals, 0.5 mm pitch, 11 mm x 11 mm x 0.85 mm body

2 Package outline

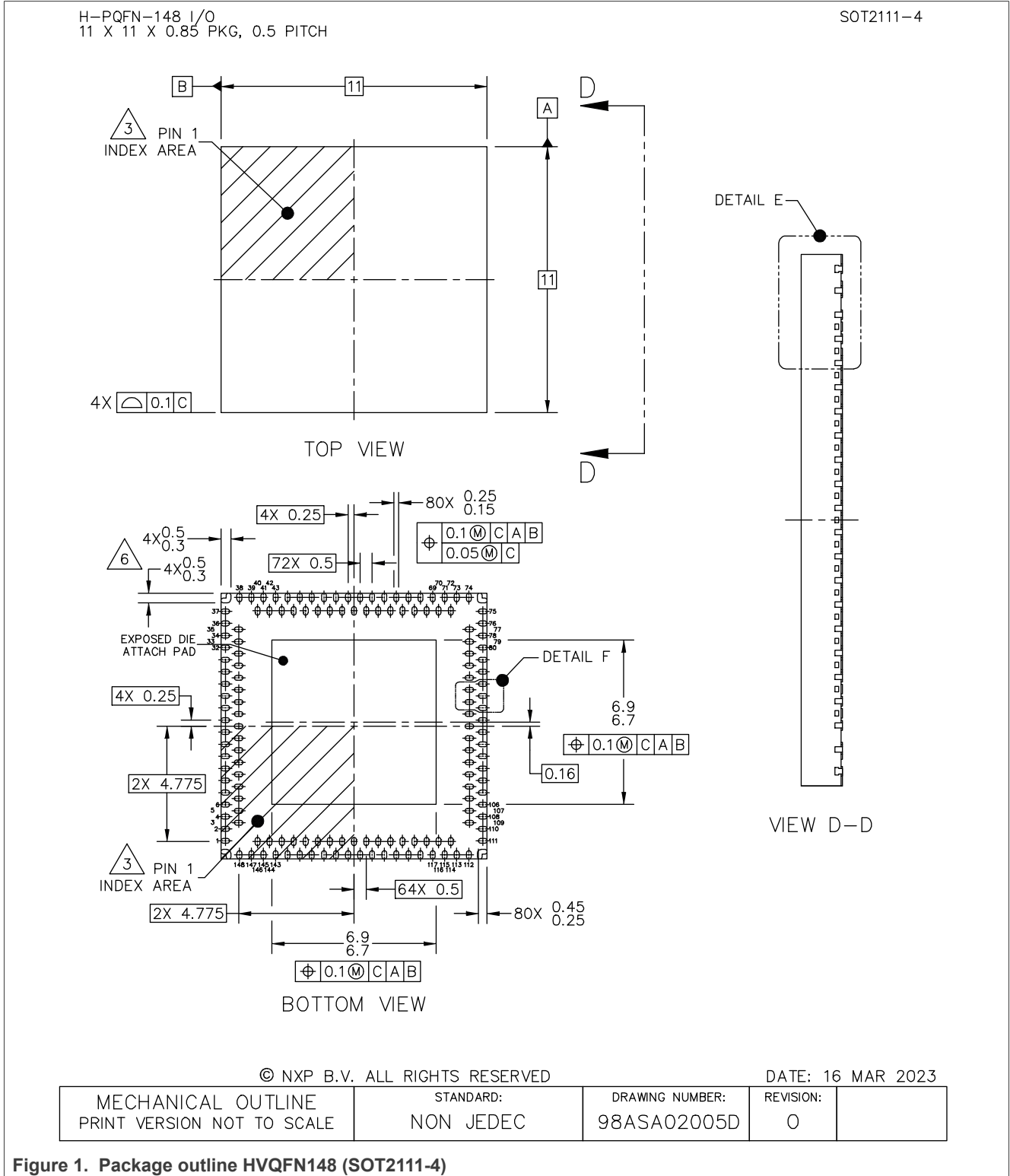
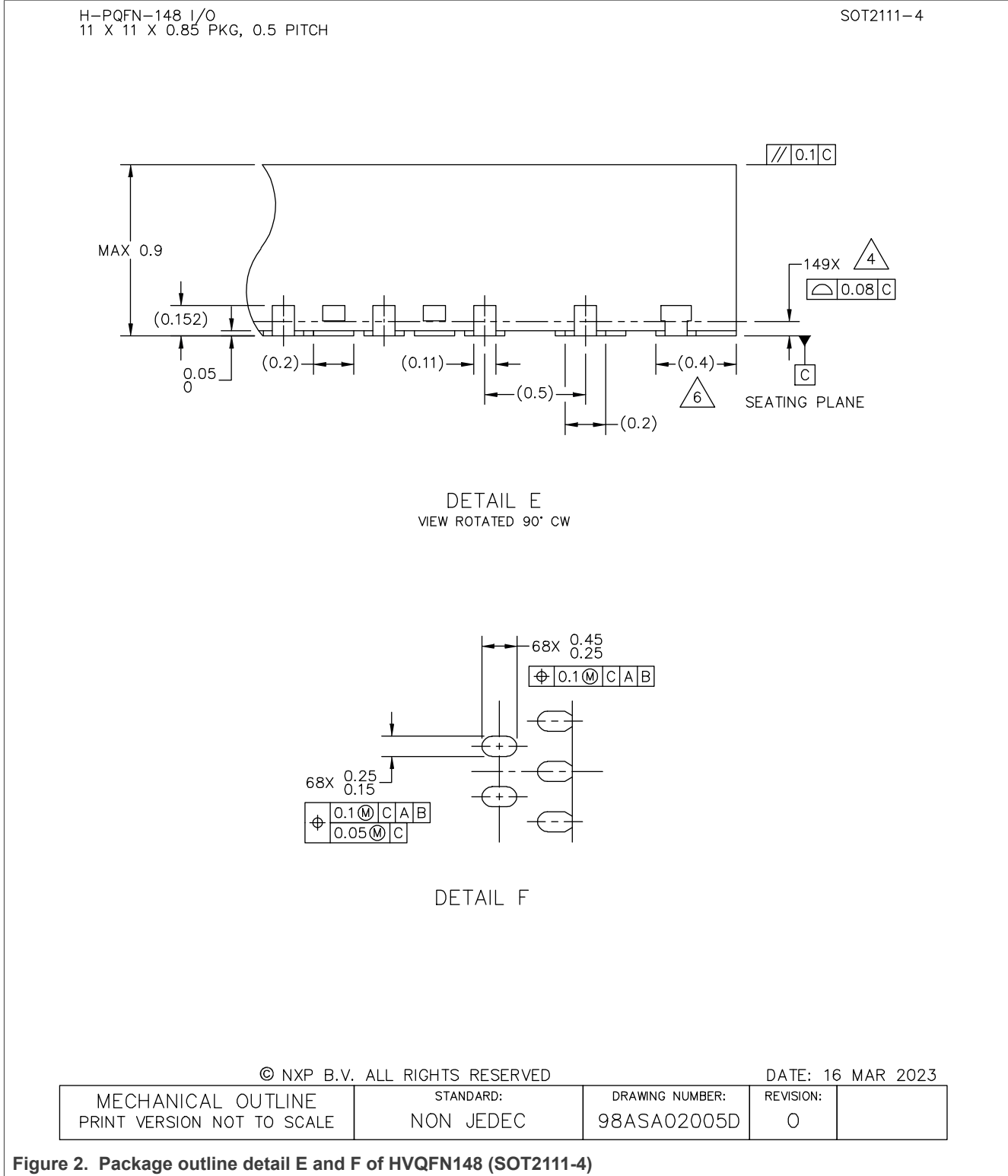


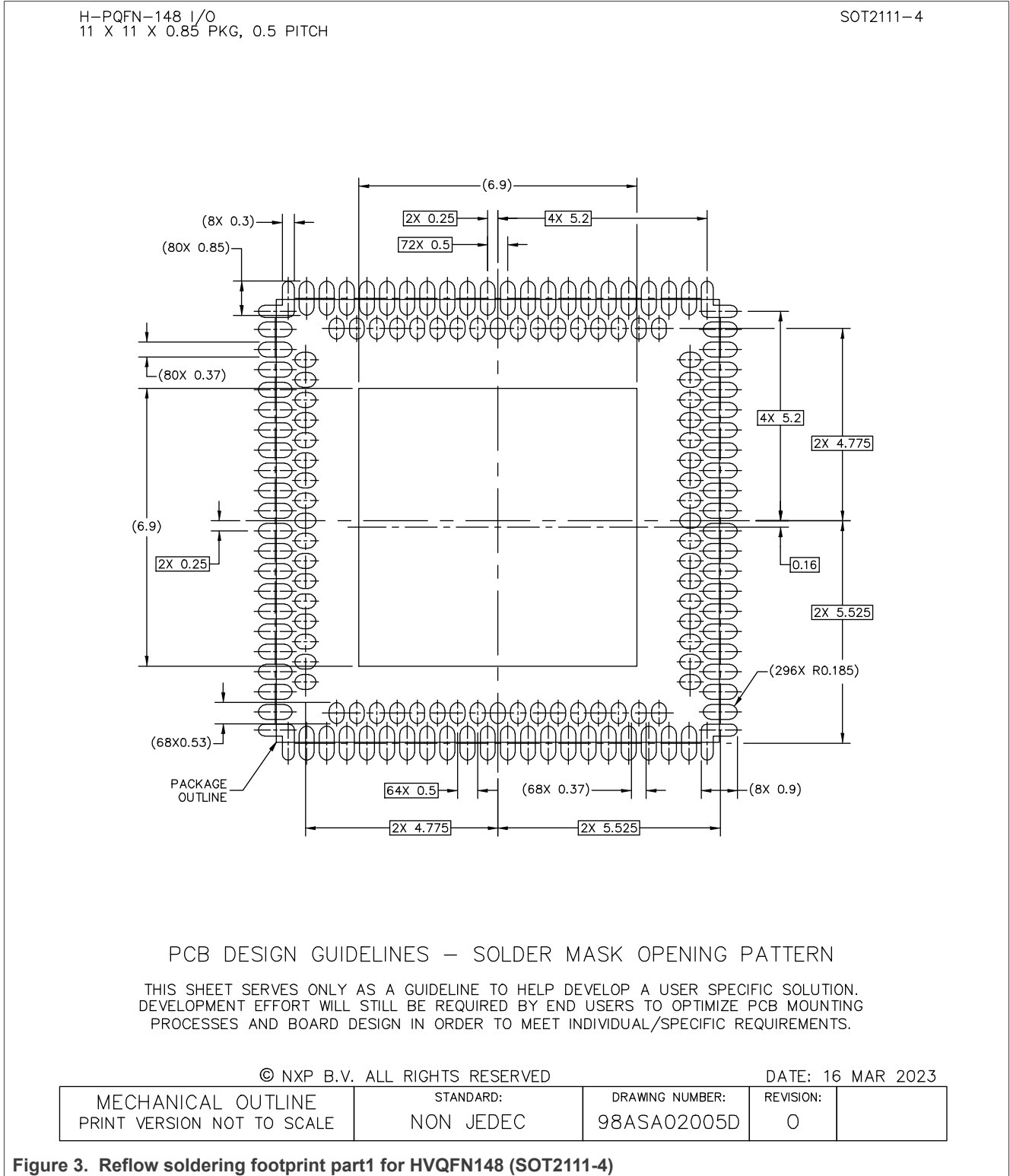
Figure 1. Package outline HVQFN148 (SOT2111-4)

HVQFN148 Thermal enhanced very thin quad flat package; no leads, 148 terminals, 0.5 mm pitch, 11 mm x 11 mm x 0.85 mm body



HVQFN148 Thermal enhanced very thin quad flat package; no leads, 148 terminals, 0.5 mm pitch, 11 mm x 11 mm x 0.85 mm body

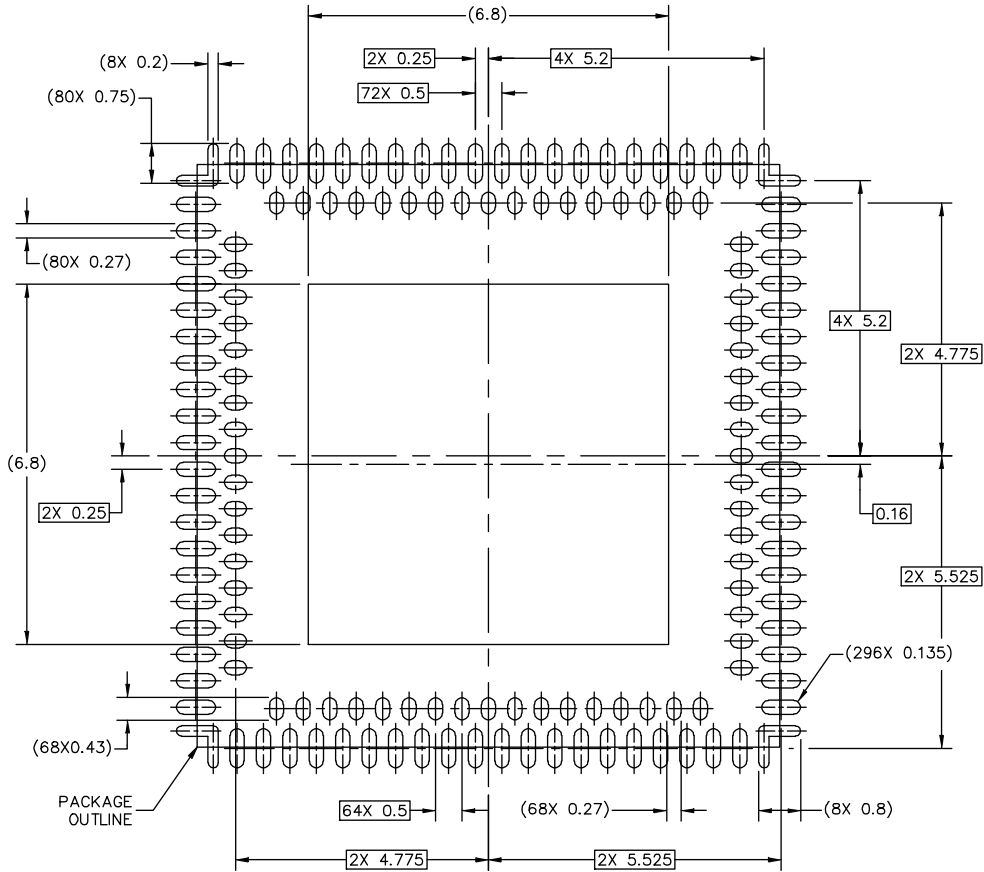
3 Soldering



HVQFN148 Thermal enhanced very thin quad flat package; no leads, 148 terminals, 0.5 mm pitch, 11 mm x 11 mm x 0.85 mm body

H-PQFN-148 I/O
11 X 11 X 0.85 PKG, 0.5 PITCH

SOT2111-4



PCB DESIGN GUIDELINES – I/O PADS AND SOLDERABLE AREA

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.

© NXP B.V. ALL RIGHTS RESERVED

DATE: 16 MAR 2023

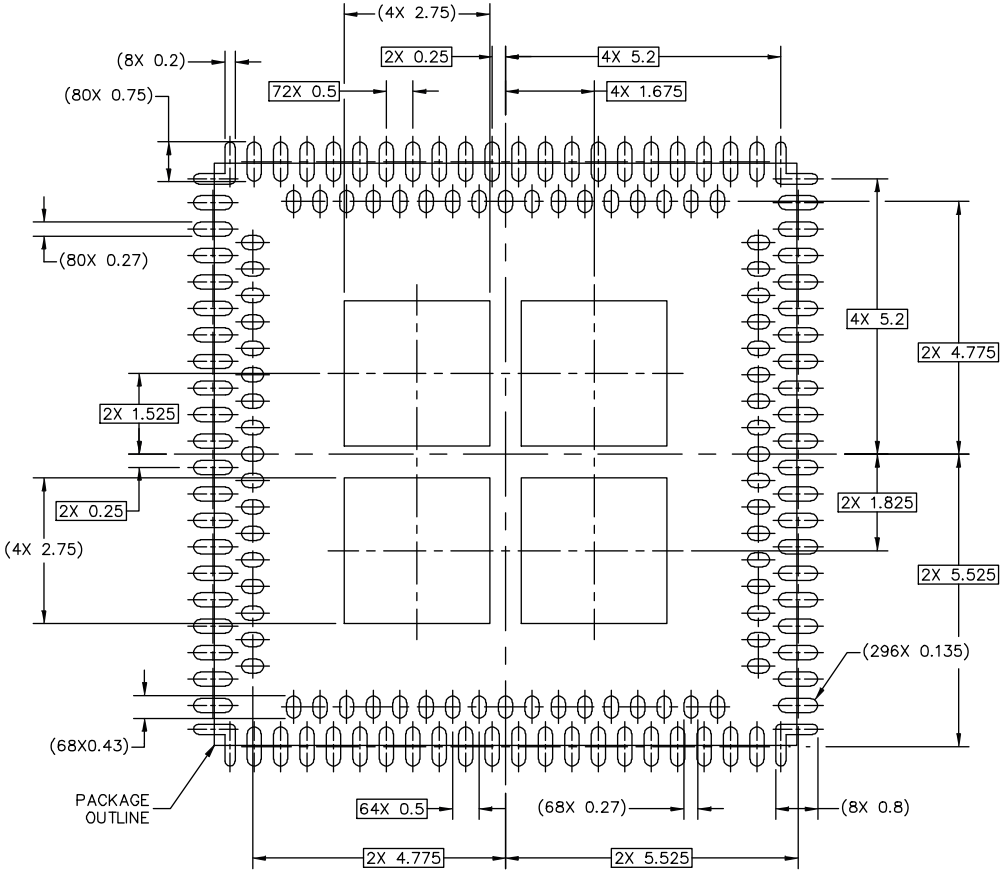
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA02005D	REVISION: 0
--	------------------------	--------------------------------	----------------

Figure 4. Reflow soldering footprint part2 for HVQFN148 (SOT2111-4)

HVQFN148 Thermal enhanced very thin quad flat package; no leads, 148 terminals, 0.5 mm pitch, 11 mm x 11 mm x 0.85 mm body

H-PQFN-148 I/O
11 X 11 X 0.85 PKG, 0.5 PITCH

SOT2111-4



RECOMMENDED STENCIL THICKNESS 0.125

PCB DESIGN GUIDELINES – SOLDER PASTE STENCIL

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.

© NXP B.V. ALL RIGHTS RESERVED

DATE: 16 MAR 2023

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA02005D	REVISION: 0	
--	------------------------	--------------------------------	----------------	--

Figure 5. Reflow soldering footprint part3 for HVQFN148 (SOT2111-4)

HVQFN148 Thermal enhanced very thin quad flat package; no leads, 148 terminals, 0.5 mm pitch, 11 mm x 11 mm x 0.85 mm body

H-PQFN-148 I/O
11 X 11 X 0.85 PKG, 0.5 PITCH

SOT2111-4

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.

© NXP B.V. ALL RIGHTS RESERVED

DATE: 16 MAR 2023

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA02005D	REVISION: 0	
--	------------------------	--------------------------------	----------------	--

Figure 6. Package outline note HVQFN148 (SOT2111-4)

4 Legal information

Disclaimers

Limited warranty and liability — Information in this document is believed to be accurate and reliable. However, NXP Semiconductors does not give any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information. NXP Semiconductors takes no responsibility for the content in this document if provided by an information source outside of NXP Semiconductors.

In no event shall NXP Semiconductors be liable for any indirect, incidental, punitive, special or consequential damages (including - without limitation - lost profits, lost savings, business interruption, costs related to the removal or replacement of any products or rework charges) whether or not such damages are based on tort (including negligence), warranty, breach of contract or any other legal theory.

Notwithstanding any damages that customer might incur for any reason whatsoever, NXP Semiconductors' aggregate and cumulative liability towards customer for the products described herein shall be limited in accordance with the Terms and conditions of commercial sale of NXP Semiconductors.

Right to make changes — NXP Semiconductors reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.

HVQFN148 Thermal enhanced very thin quad flat package; no leads, 148 terminals, 0.5 mm pitch, 11 mm x 11 mm x 0.85 mm body

Contents

1 Package summary 1
2 Package outline 2
3 Soldering 4
4 Legal information8