SOT618-14

HVQFN40, plastic thermal enhanced very thin quad flatpack; no leads, 40 terminals, 0.5 mm pitch, 6 mm x 6 mm x 0.85 mm body

15 January 2018 **Package information**

1. Package summary

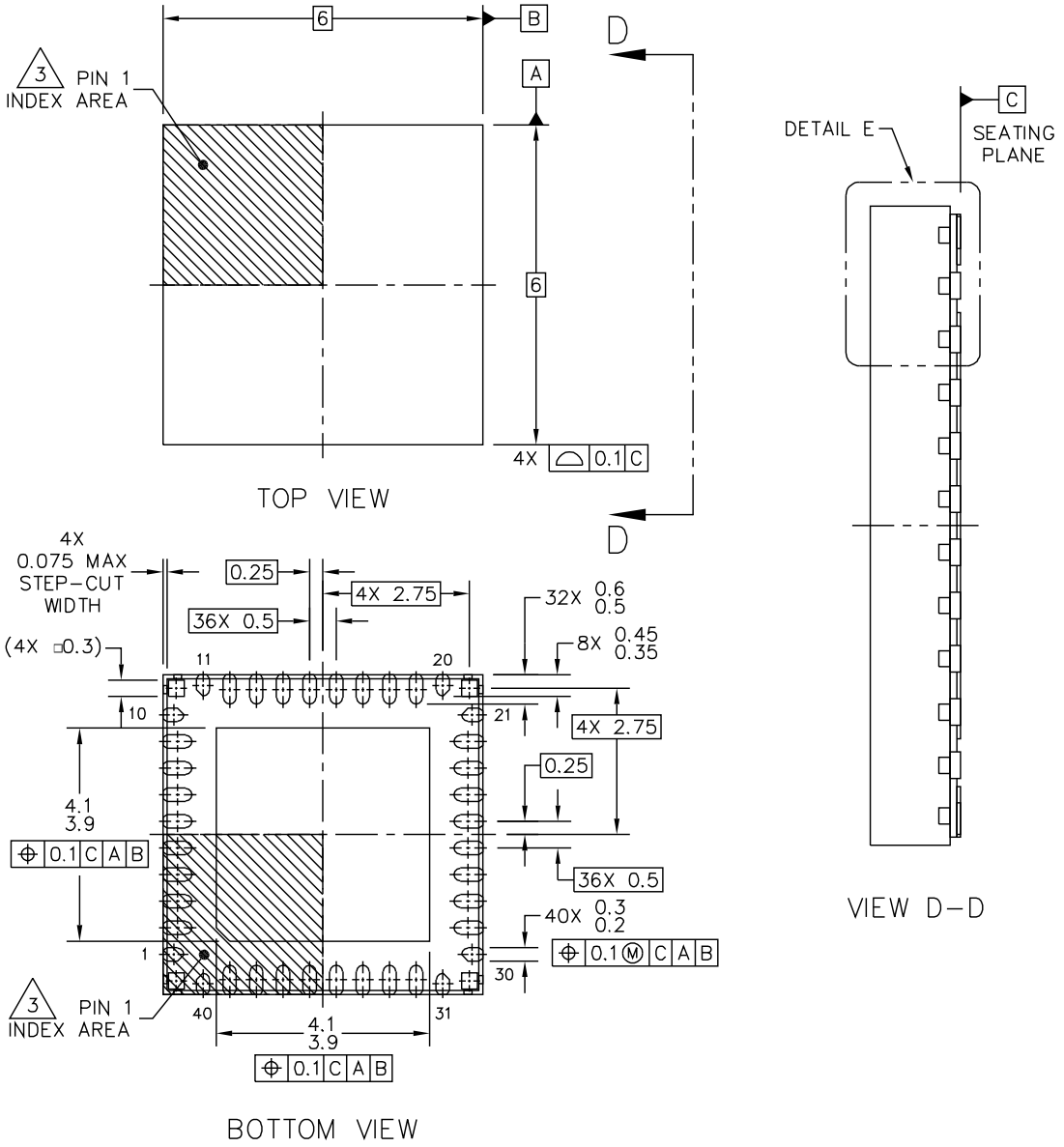
Terminal position code	Q (quad)
Package type descriptive code	HVQFN40
Package type industry code	HVQFN40
Package style descriptive code	HVQFN (thermal enhanced very thin quad flatpack; no leads)
Package body material type	P (plastic)
Mounting method type	S (surface mount)
Issue date	11-10-2017
Manufacturer package code	98ASA01113D

Table 1. Package summary

Symbol	Parameter		Min	Typ	Nom	Max	Unit
D	package length		-	-	6	-	mm
E	package width		-	-	6	-	mm
A	seated height		-	-	0.85	-	mm
e	nominal pitch		-	-	0.5	-	mm
n_2	actual quantity of termination		-	-	40	-	A/A

HVQFN40, plastic thermal enhanced very thin quad flatpack; no leads, 40 terminals, 0.5 mm pitch, 6 mm x 6 mm x 0.85 mm body

2. Package outline



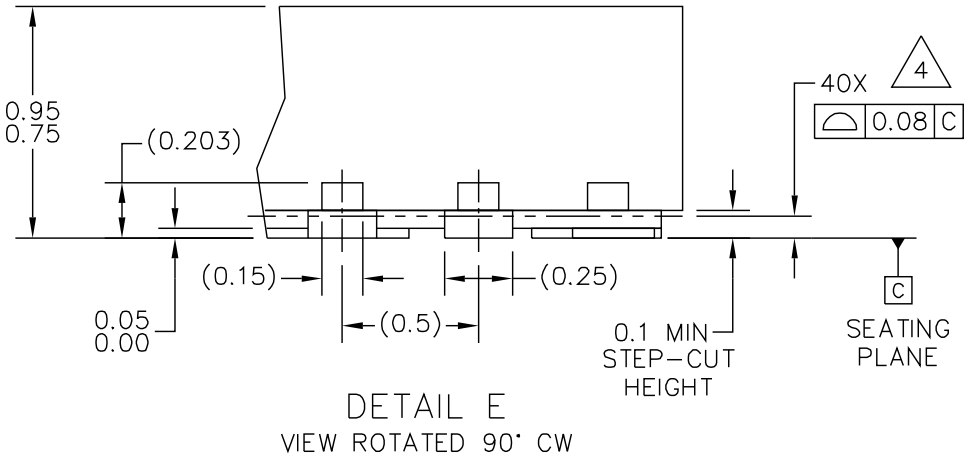
RELEASED FOR EXTERNAL ASSEMBLY ONLY. THIS DESIGN ONLY MEETS EXTERNAL DESIGN AND ASSEMBLY RULES. MUST BE REVIEWED AND UPDATED BEFORE BEING ASSEMBLED INTERNALLY.

DATE: 11 OCT 2017

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: SOT618–14	REVISION: 0	

Fig. 1. Package outline HVQFN40 (SOT618-14)

HVQFN40, plastic thermal enhanced very thin quad flatpack; no leads, 40 terminals, 0.5 mm pitch, 6 mm x 6 mm x 0.85 mm body



 DATE: 11 OCT 2017

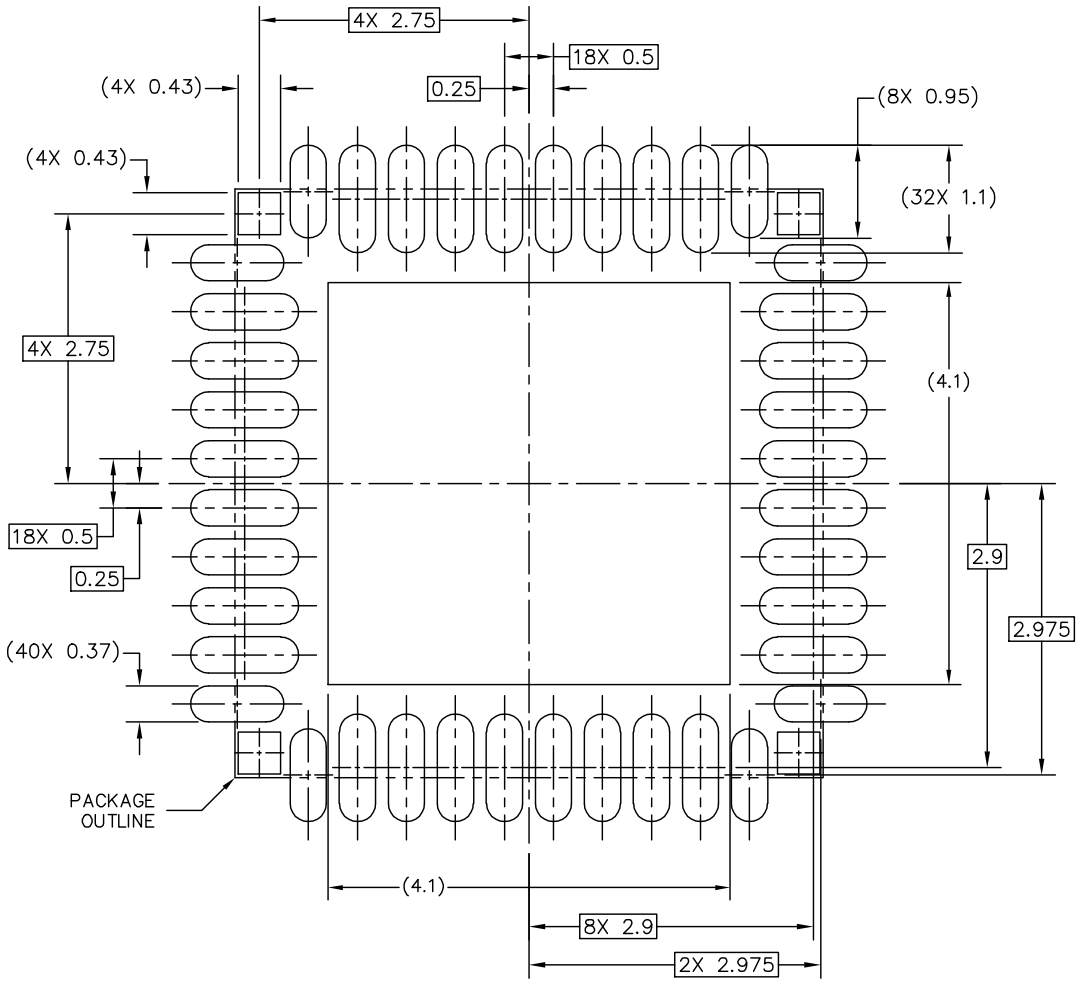
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: SOT618-14	REVISION: 0	

Fig. 2. Package outline dt1 HVQFN40 (SOT618-14)

HVQFN40, plastic thermal enhanced very thin quad flatpack; no leads, 40 terminals, 0.5 mm pitch, 6 mm x 6 mm x 0.85 mm body

Fig. 3. Package outline note HVQFN40 (SOT618-14)

3. Soldering



PCB DESIGN GUIDELINES – SOLDER MASK OPENING PATTERN

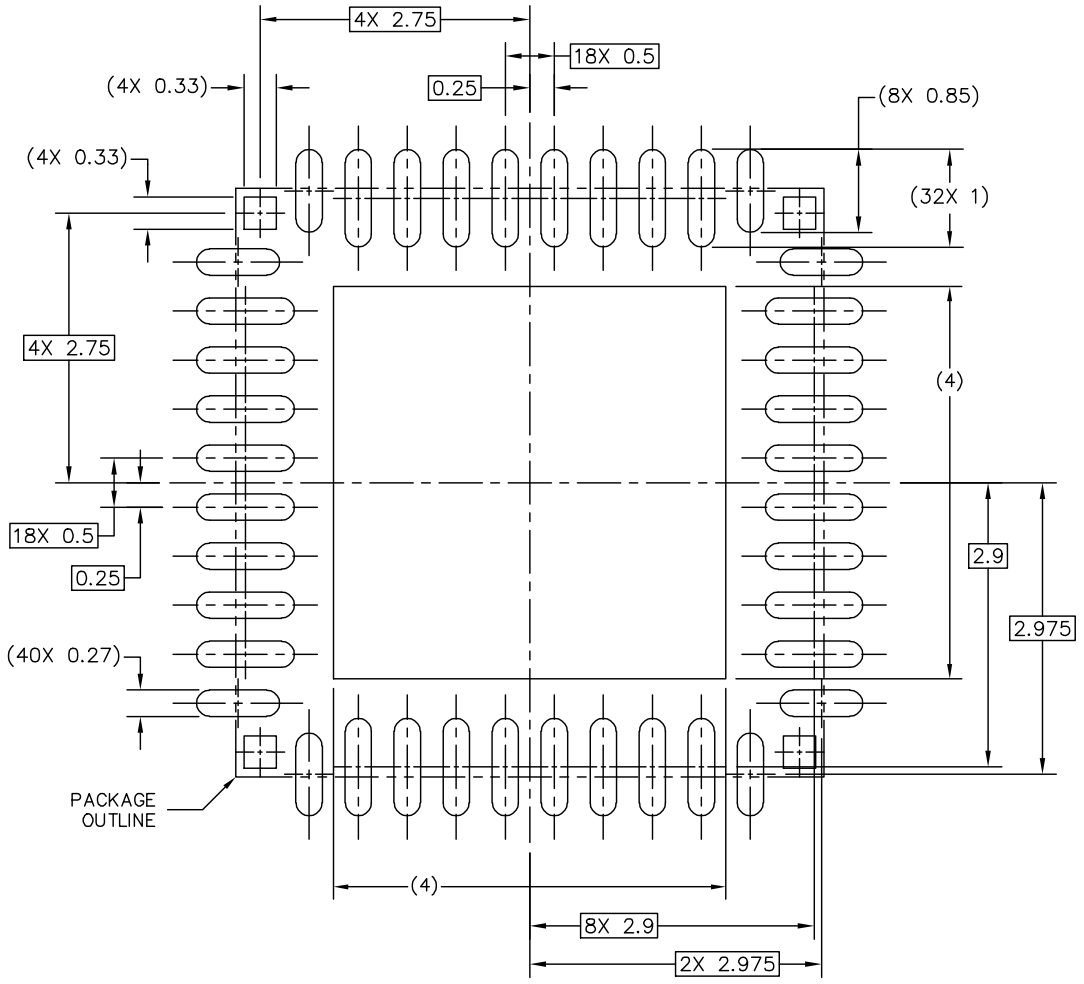
THIS SHEET SERVES ONLY AS A GUIDELINE TO HELP DEVELOP A USER SPECIFIC SOLUTION. DEVELOPMENT EFFORT WILL STILL BE REQUIRED BY END USERS TO OPTIMIZE PCB MOUNTING PROCESSES AND BOARD DESIGN IN ORDER TO MEET INDIVIDUAL/SPECIFIC REQUIREMENTS.

 DATE: 11 OCT 2017

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: SOT618-14	REVISION: O	

Fig. 4. Reflow soldering footprint for HVQFN40 (SOT618-14)

HVQFN40, plastic thermal enhanced very thin quad flatpack; no leads, 40 terminals, 0.5 mm pitch, 6 mm x 6 mm x 0.85 mm body



PCB DESIGN GUIDELINES – I/O PADS AND SOLDERABLE AREA

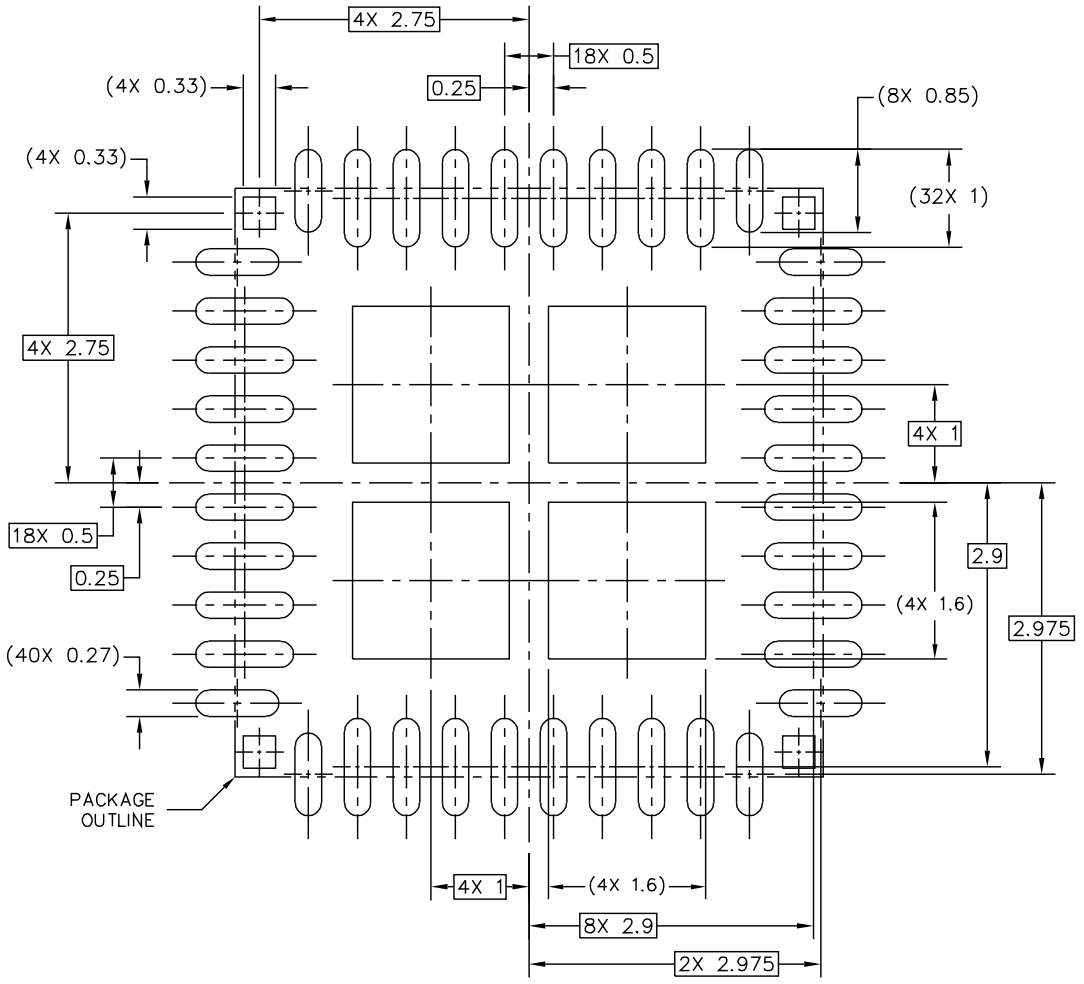
THIS SHEET SERVES ONLY AS A GUIDELINE TO HELP DEVELOP A USER SPECIFIC SOLUTION. DEVELOPMENT EFFORT WILL STILL BE REQUIRED BY END USERS TO OPTIMIZE PCB MOUNTING PROCESSES AND BOARD DESIGN IN ORDER TO MEET INDIVIDUAL/SPECIFIC REQUIREMENTS.

 DATE: 11 OCT 2017

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: SOT618-14	REVISION: 0	

Fig. 5. Reflow soldering footprint part2 for HVQFN40 (SOT618-14)

HVQFN40, plastic thermal enhanced very thin quad flatpack; no leads, 40 terminals, 0.5 mm pitch, 6 mm x 6 mm x 0.85 mm body



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.

 DATE: 11 OCT 2017

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: SOT618-14	REVISION: 0	

Fig. 6. Reflow soldering footprint part3 for HVQFN40 (SOT618-14)

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.

5. Contents

1. Package summary..... 1
2. Package outline..... 2
3. Soldering..... 5
4. Legal information..... 8

For more information, please visit: http://www.nxp.com
For sales office addresses, please send an email to: salesaddresses@nxp.com
Date of release: 15 January 2018