

SOT1992-1(DD)

HLSON16, thermal enhanced low profile small outline; no leads, 16 terminals,
0.5 mm pitch, 4.5 mm x 3.5 mm x 1.45 mm body

23 October 2025

Package information



1 Package summary

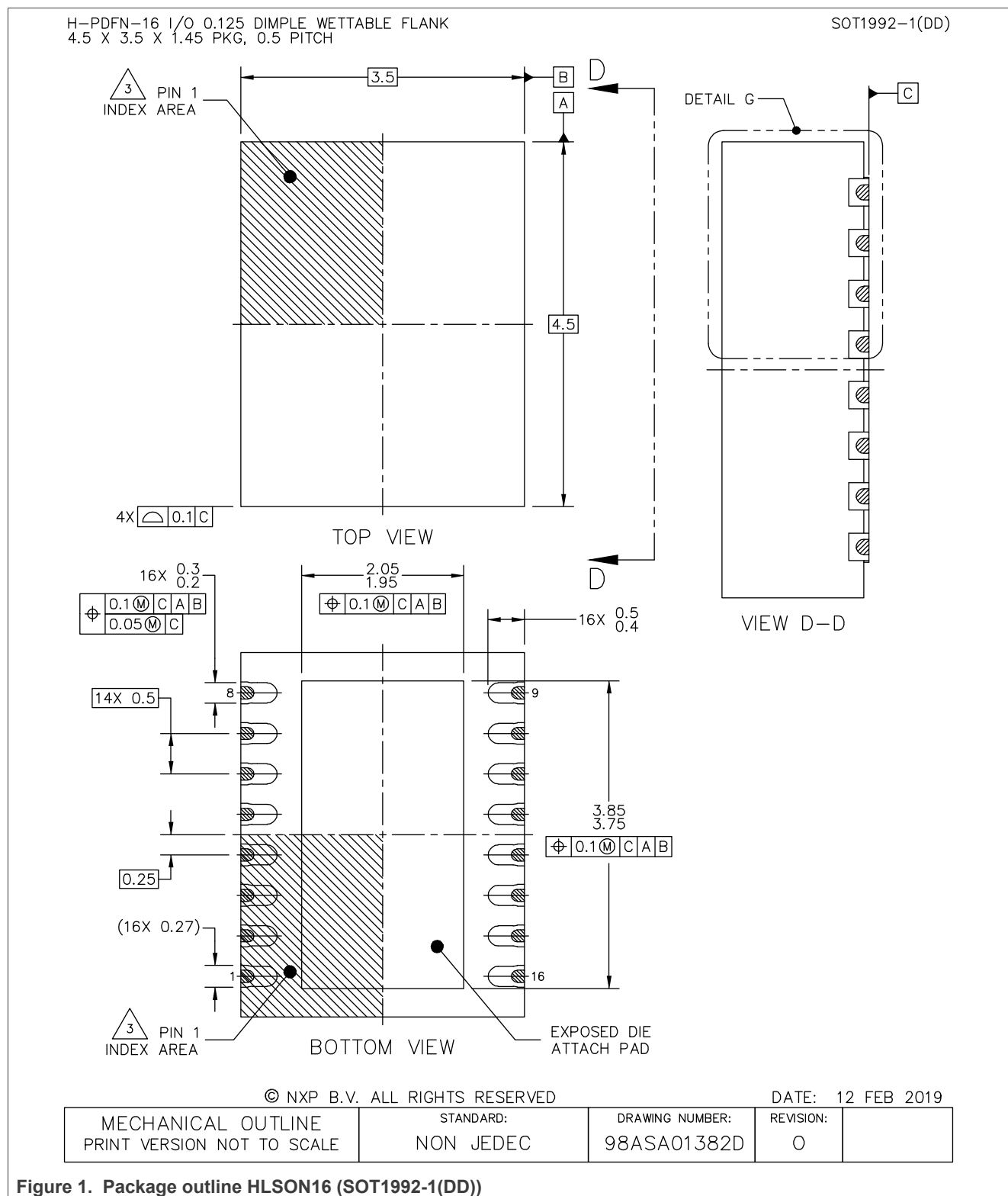
Terminal position code	Q (quad)
Package type descriptive code	HLSON16
Package style descriptive code	HLSON (thermal enhanced low profile small outline; no leads)
Package body material type	P (plastic)
Mounting method type	S (surface mount)
Issue date	12-02-2019
Manufacturer package code	98ASA01382D

Table 1. Package summary

Parameter	Min	Nom	Max	Unit
package length	-	4.5	-	mm
package width	-	3.5	-	mm
seated height	-	1.45	-	mm
nominal pitch	-	0.5	-	mm
actual quantity of termination	-	16	-	

HLSON16, thermal enhanced low profile small outline; no leads, 16 terminals, 0.5 mm pitch, 4.5 mm x 3.5 mm x 1.45 mm body

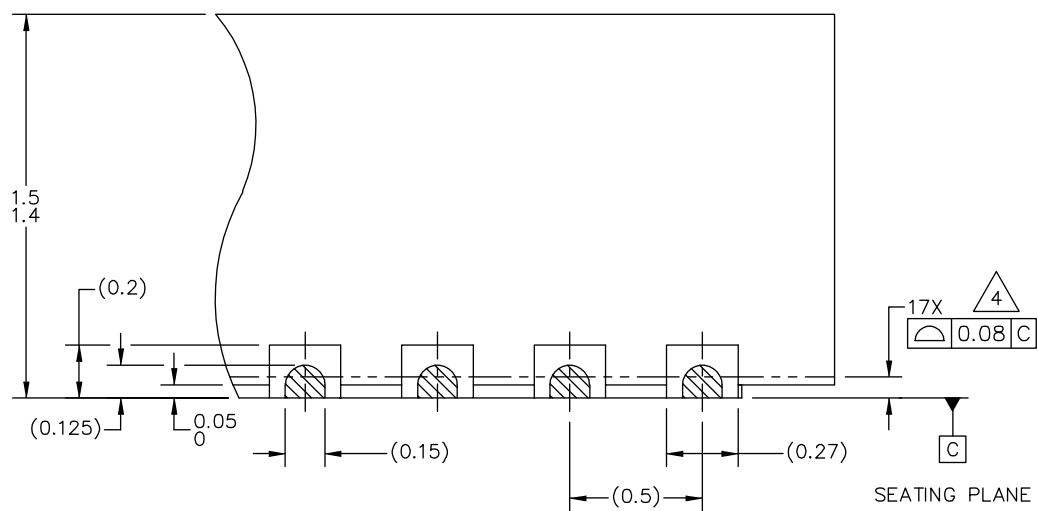
2 Package outline



HLSON16, thermal enhanced low profile small outline; no leads, 16 terminals, 0.5 mm pitch, 4.5 mm x 3.5 mm x 1.45 mm body

H-PDFN-16 I/O 0.125 DIMPLE WETTABLE FLANK
4.5 X 3.5 X 1.45 PKG, 0.5 PITCH

SOT1992-1(DD)



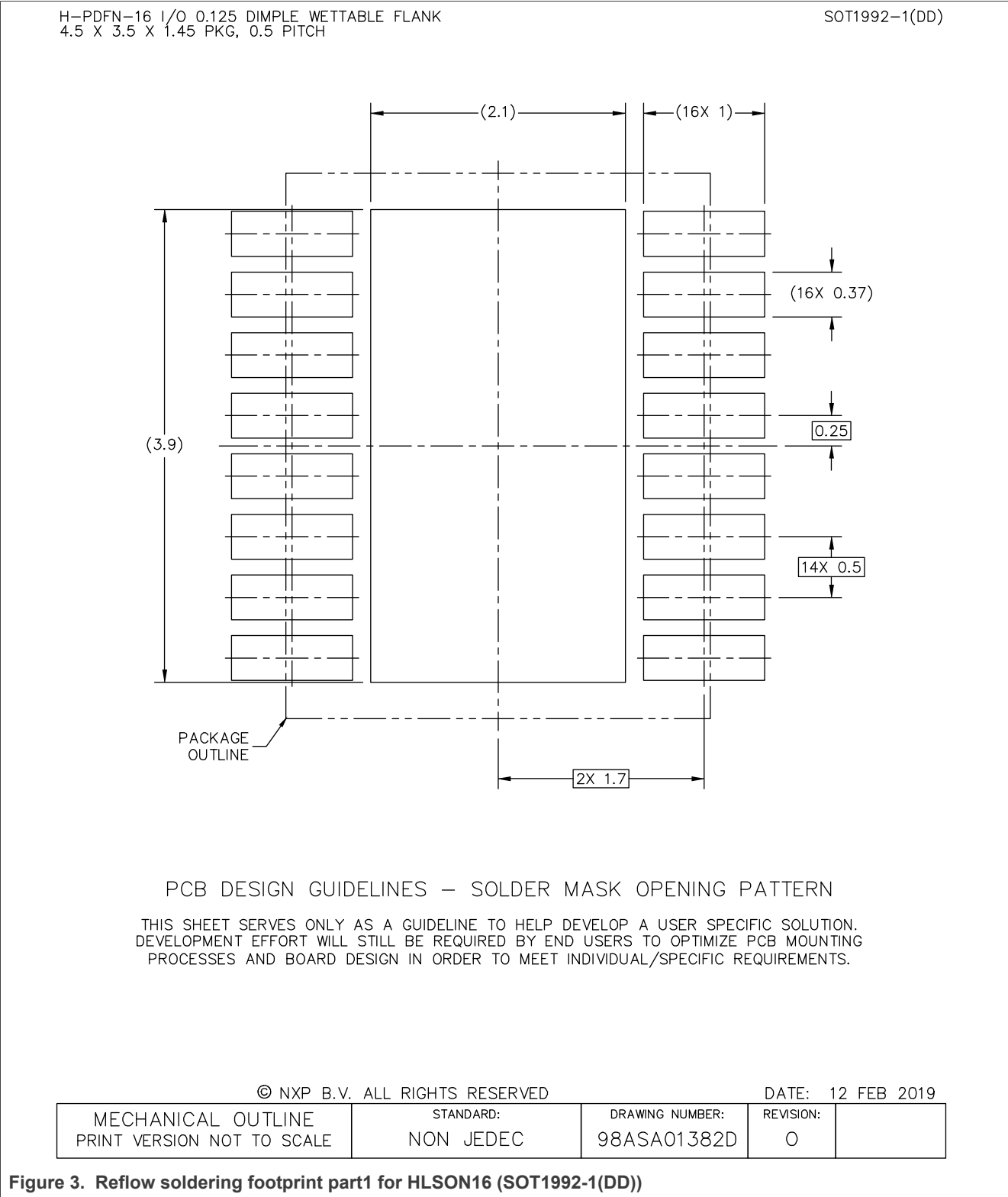
DETAIL G
VIEW ROTATED 90° CW

© NXP B.V. ALL RIGHTS RESERVED		DATE: 12 FEB 2019	
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01382D	REVISION: O

Figure 2. Package outline detail HLSON16 (SOT1992-1(DD))

HLSON16, thermal enhanced low profile small outline; no leads, 16 terminals, 0.5 mm pitch, 4.5 mm x 3.5 mm x 1.45 mm body

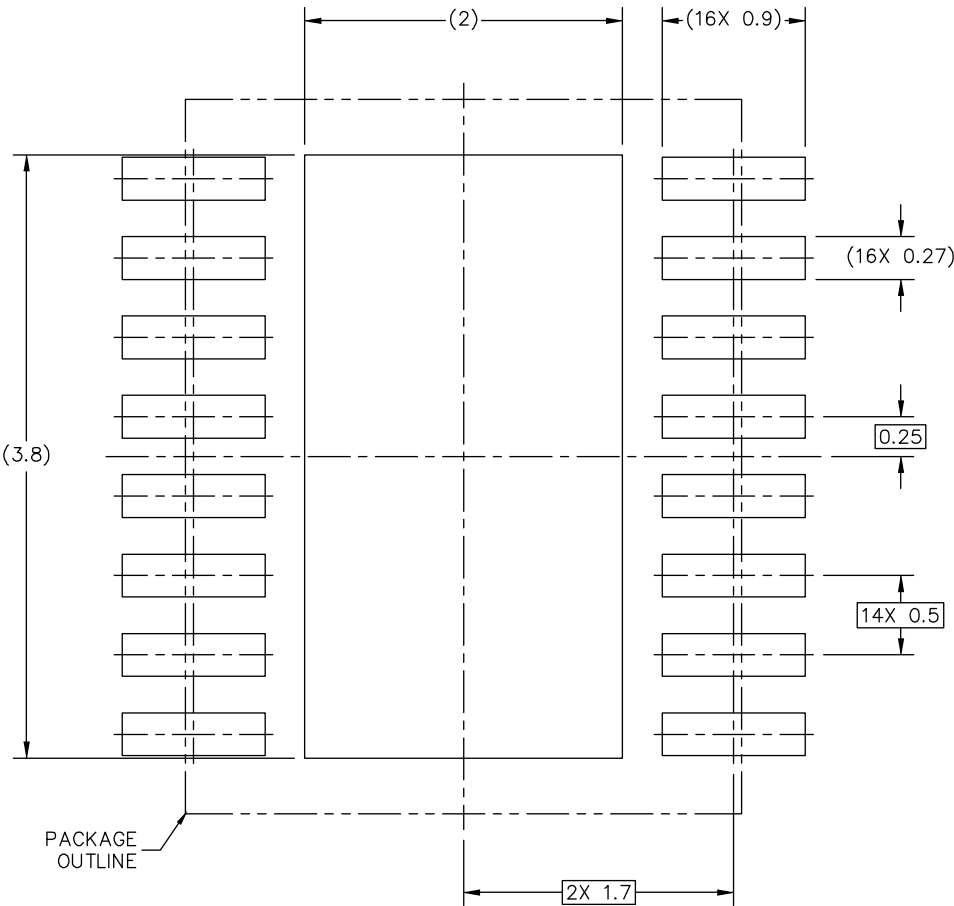
3 Soldering



HLSON16, thermal enhanced low profile small outline; no leads, 16 terminals, 0.5 mm pitch, 4.5 mm x 3.5 mm x 1.45 mm body

H-PDFN-16 I/O 0.125 DIMPLE WETTABLE FLANK
4.5 X 3.5 X 1.45 PKG, 0.5 PITCH

SOT1992-1(DD)



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: 12 FEB 2019

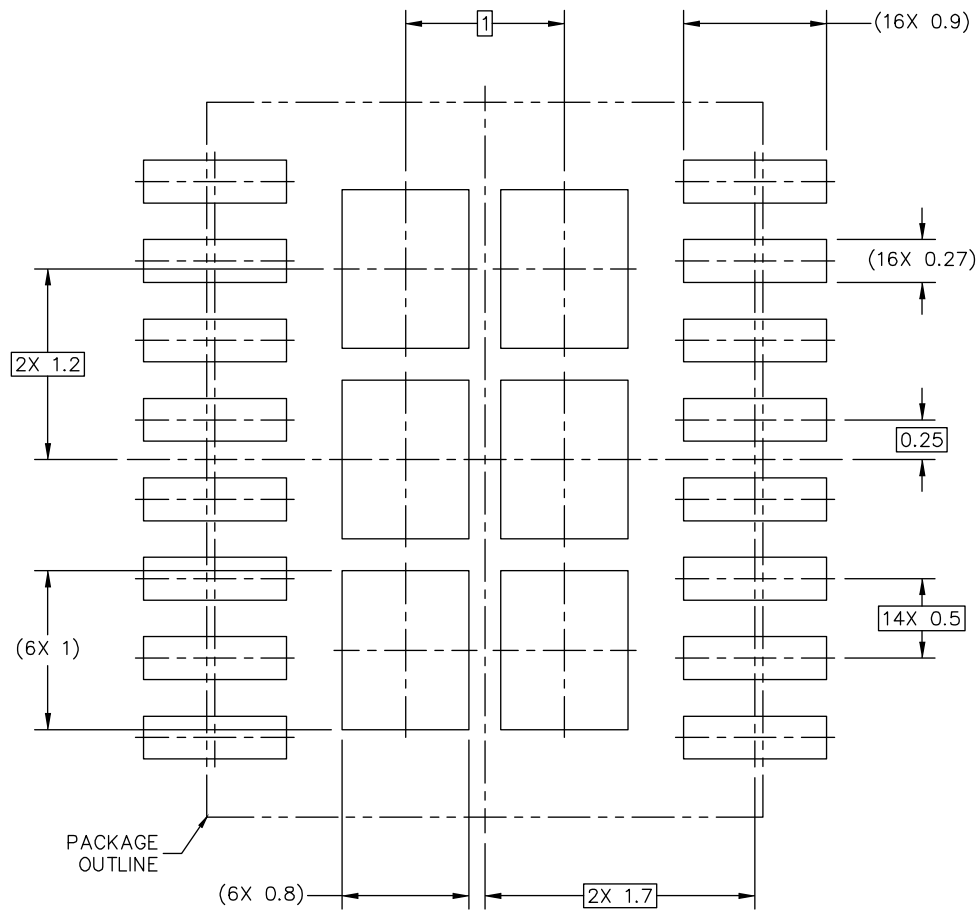
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01382D	REVISION: 0	
--	------------------------	--------------------------------	----------------	--

Figure 4. Reflow soldering footprint part2 for HLSON16 (SOT1992-1(DD))

HLSON16, thermal enhanced low profile small outline; no leads, 16 terminals, 0.5 mm pitch, 4.5 mm x 3.5 mm x 1.45 mm body

H-PDFN-16 I/O 0.125 DIMPLE WETTABLE FLANK
4.5 X 3.5 X 1.45 PKG, 0.5 PITCH

SOT1992-1(DD)



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: 12 FEB 2019	
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01382D	REVISION: 0	

Figure 5. Reflow soldering footprint part3 for HLSON16 (SOT1992-1(DD))

HLSON16, thermal enhanced low profile small outline; no leads, 16 terminals, 0.5 mm pitch, 4.5 mm x 3.5 mm x 1.45 mm body

H-PDFN-16 I/O 0.125 DIMPLE WETTABLE FLANK
4.5 X 3.5 X 1.45 PKG, 0.5 PITCH

SOT1992-1(DD)

- 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.
 - 5. MIN. METAL GAP SHOULD BE 0.2 MM.

© NXP B.V. ALL RIGHTS RESERVED		DATE: 12 FEB 2019		
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01382D	REVISION: 0	

Figure 6. Package outline note HLSON16 (SOT1992-1(DD))

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.

HLSON16, thermal enhanced low profile small outline; no leads, 16 terminals, 0.5 mm pitch, 4.5 mm x 3.5 mm x 1.45 mm body

Contents

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