



# SOT1510-1

HLQFP64, plastic, thermal enhanced low profile quad flat package; 64 terminals; 0.5 mm pitch; 10 mm x 10 mm x 1.4 mm body; 4.9 mm x 4.9 mm exposed pad

7 August 2018

Package information

## 1 Package summary

<b>Terminal position code</b>	Q (quad)
<b>Package type descriptive code</b>	HLQFP64
<b>Package style descriptive code</b>	HLQFP (thermal enhanced low profile quad flat package)
<b>Package body material type</b>	P (plastic)
<b>JEDEC package outline code</b>	MS-026 BCD
<b>Mounting method type</b>	S (surface mount)
<b>Issue date</b>	07-08-2018
<b>Manufacturer package code</b>	98ASA00237D

Table 1. Package summary

Parameter	Min	Nom	Max	Unit
package length	-	10	-	mm
package width	-	10	-	mm
package height	-	1.4	-	mm
nominal pitch	-	0.5	-	mm
actual quantity of termination	-	64	-	



HLQFP64, plastic, thermal enhanced low profile quad flat package; 64 terminals; 0.5 mm pitch; 10 mm x 10 mm x 1.4 mm body; 4.9 mm x 4.9 mm exposed pad

2 Package outline

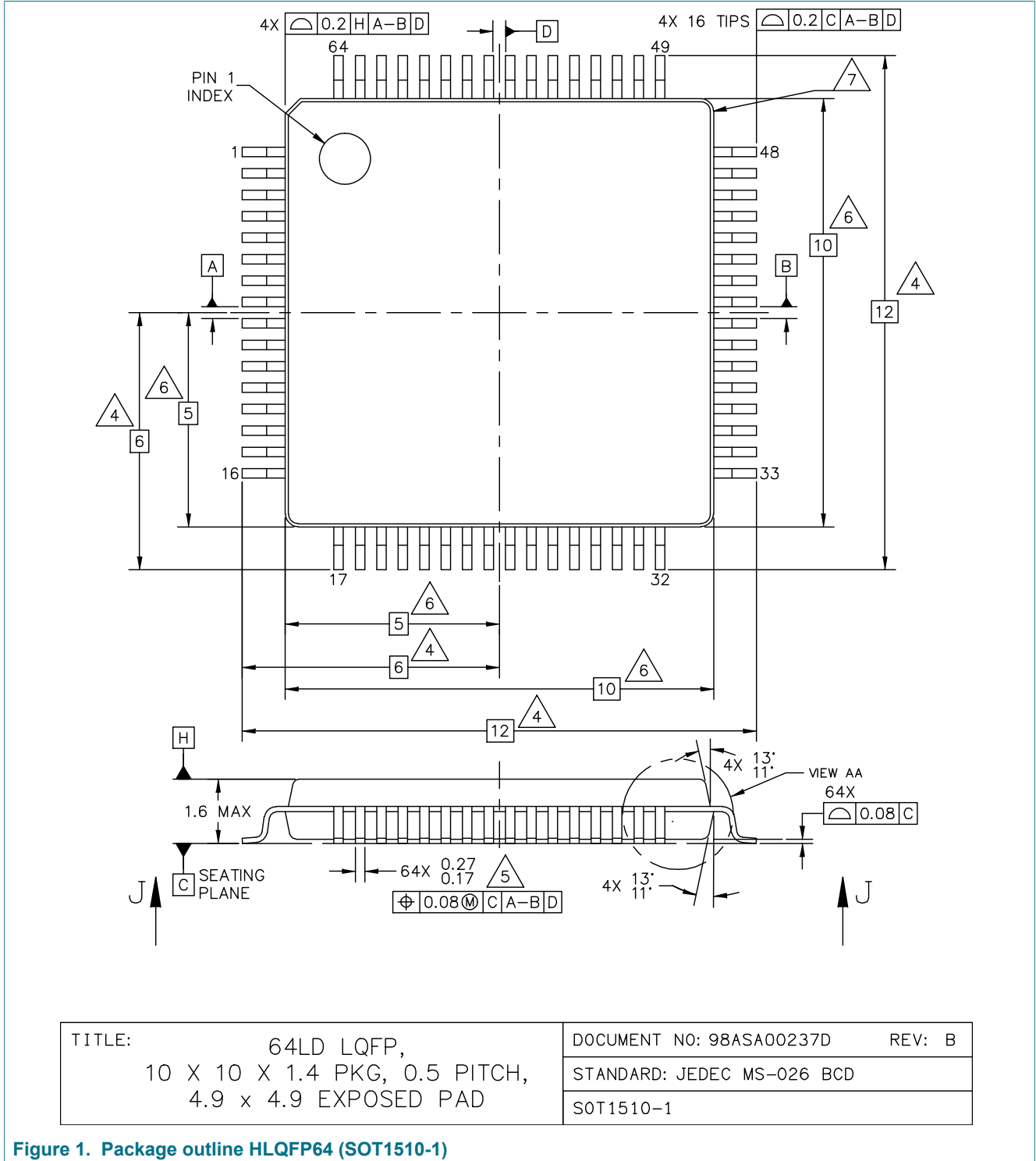


Figure 1. Package outline HLQFP64 (SOT1510-1)

HLQFP64, plastic, thermal enhanced low profile quad flat package; 64 terminals; 0.5 mm pitch; 10 mm x 10 mm x 1.4 mm body; 4.9 mm x 4.9 mm exposed pad

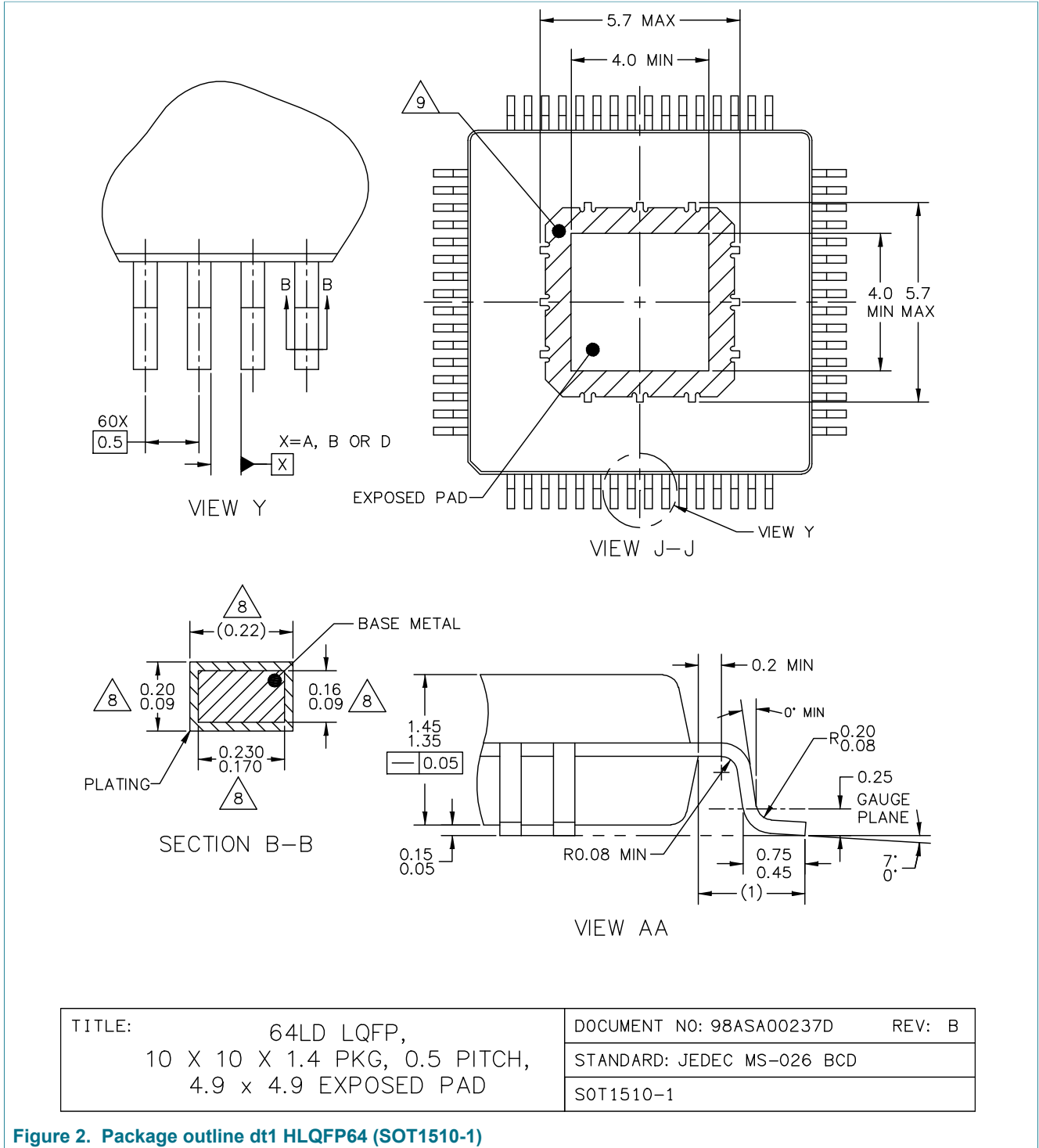


Figure 2. Package outline dt1 HLQFP64 (SOT1510-1)

HLQFP64, plastic, thermal enhanced low profile quad flat package; 64 terminals; 0.5 mm pitch; 10 mm x 10 mm x 1.4 mm body; 4.9 mm x 4.9 mm exposed pad

NOTES:

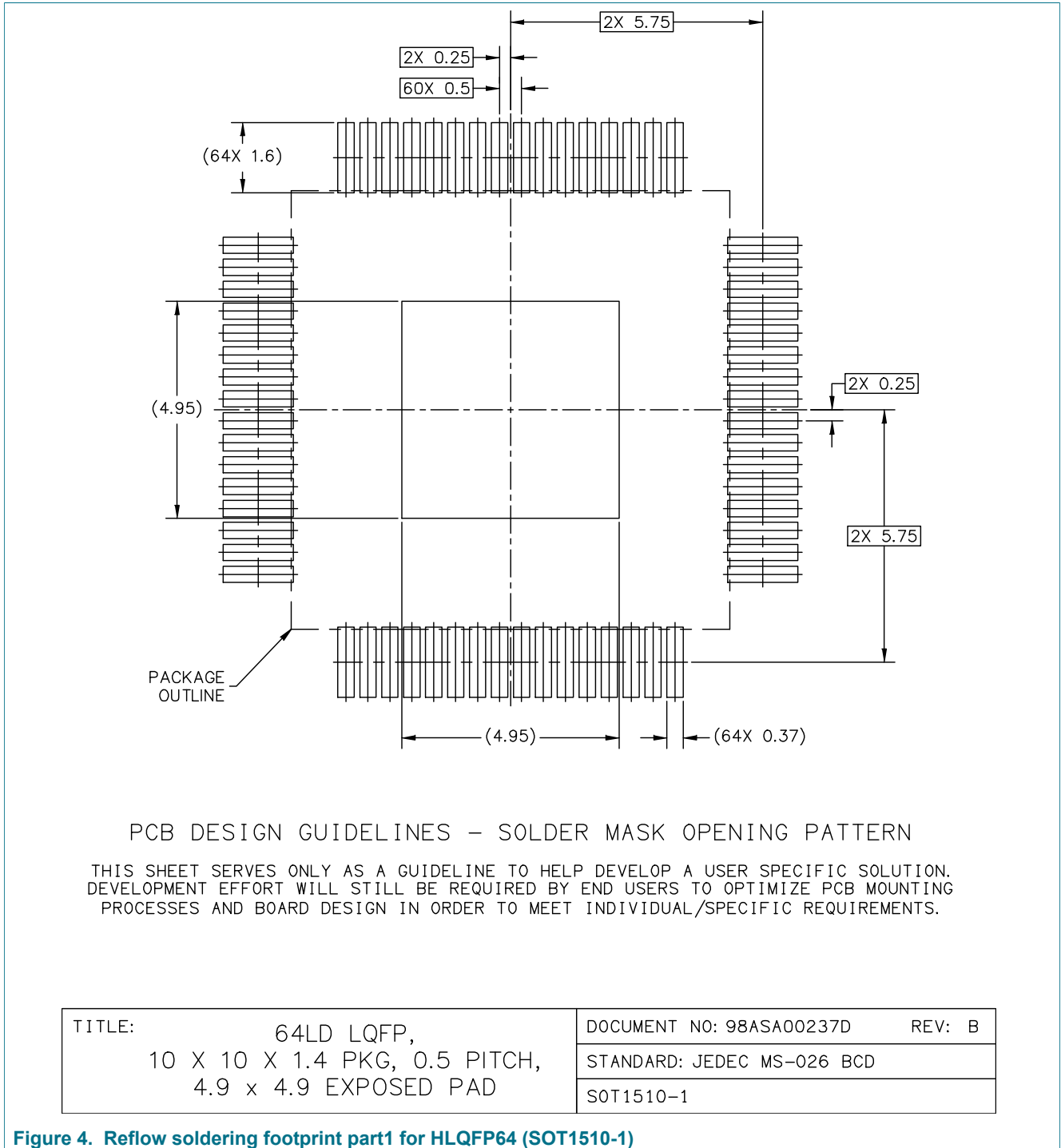
1. DIMENSIONS ARE IN MILLIMETERS.
2. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
3. DATUMS A, B AND D TO BE DETERMINED AT DATUM PLANE H.
4. DIMENSION TO BE DETERMINED AT SEATING PLANE C.
5. THIS DIMENSION DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL NOT CAUSE THE LEAD WIDTH TO EXCEED THE UPPER LIMIT BY MORE THAN 0.08 MM AT MAXIMUM MATERIAL CONDITION. DAMBAR CANNOT BE LOCATED ON THE LOWER RADIUS OR THE FOOT. MINIMUM SPACE BETWEEN PROTRUSION AND ADJACENT LEAD SHALL NOT BE LESS THAN 0.07 MM.
6. THIS DIMENSION DOES NOT INCLUDE MOLD PROTRUSION. ALLOWABLE PROTRUSION IS 0.25 MM PER SIDE. THIS DIMENSION IS MAXIMUM PLASTIC BODY SIZE DIMENSION INCLUDING MOLD MISMATCH.
7. EXACT SHAPE OF EACH CORNER IS OPTIONAL.
8. THESE DIMENSIONS APPLY TO THE FLAT SECTION OF THE LEAD BETWEEN 0.1 MM AND 0.25 MM FROM THE LEAD TIP.
9. HATCHED AREA REPRESENTS POSSIBLE MOLD FLASH ON EXPOSED PAD.
10. KEEP OUT ZONE REPRESENTS AREA ON PCB THAT MUST NOT HAVE ANY EXPOSED METAL (EG. TRACE/VIA) FOR PCB ROUTING DUE TO THE POSSIBILITY OF SHORTING TO TIE BAR/EXPOSED PAD.

TITLE: 64LD LQFP, 10 X 10 X 1.4 PKG, 0.5 PITCH, 4.9 x 4.9 EXPOSED PAD	DOCUMENT NO: 98ASA00237D	REV: B
	STANDARD: JEDEC MS-026 BCD	
	SOT1510-1	

Figure 3. Package outline note HLQFP64 (SOT1510-1)

HLQFP64, plastic, thermal enhanced low profile quad flat package; 64 terminals; 0.5 mm pitch; 10 mm x 10 mm x 1.4 mm body; 4.9 mm x 4.9 mm exposed pad

### 3 Soldering



HLQFP64, plastic, thermal enhanced low profile quad flat package; 64 terminals; 0.5 mm pitch; 10 mm x 10 mm x 1.4 mm body; 4.9 mm x 4.9 mm exposed pad

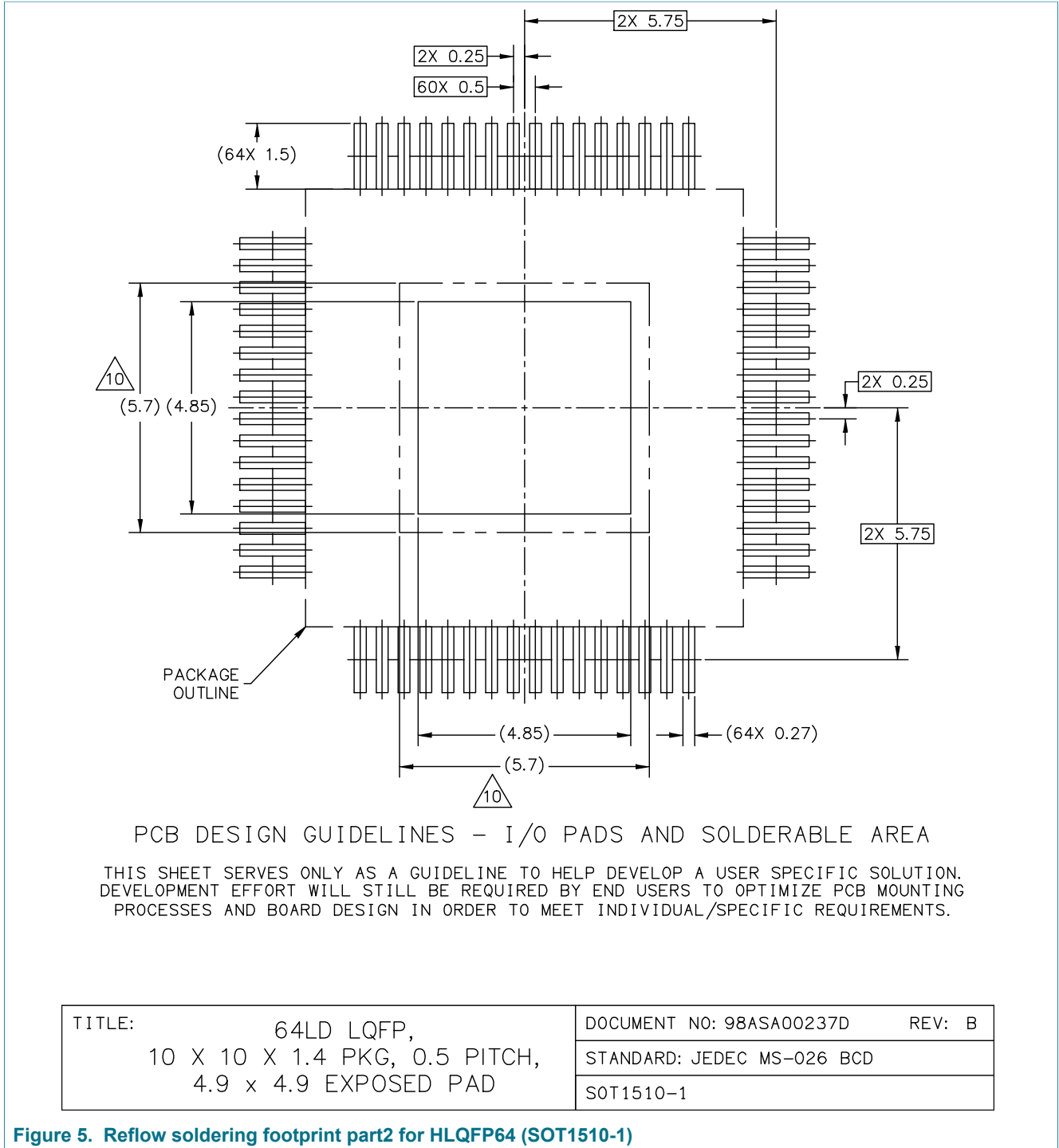


Figure 5. Reflow soldering footprint part2 for HLQFP64 (SOT1510-1)

HLQFP64, plastic, thermal enhanced low profile quad flat package; 64 terminals; 0.5 mm pitch; 10 mm x 10 mm x 1.4 mm body; 4.9 mm x 4.9 mm exposed pad

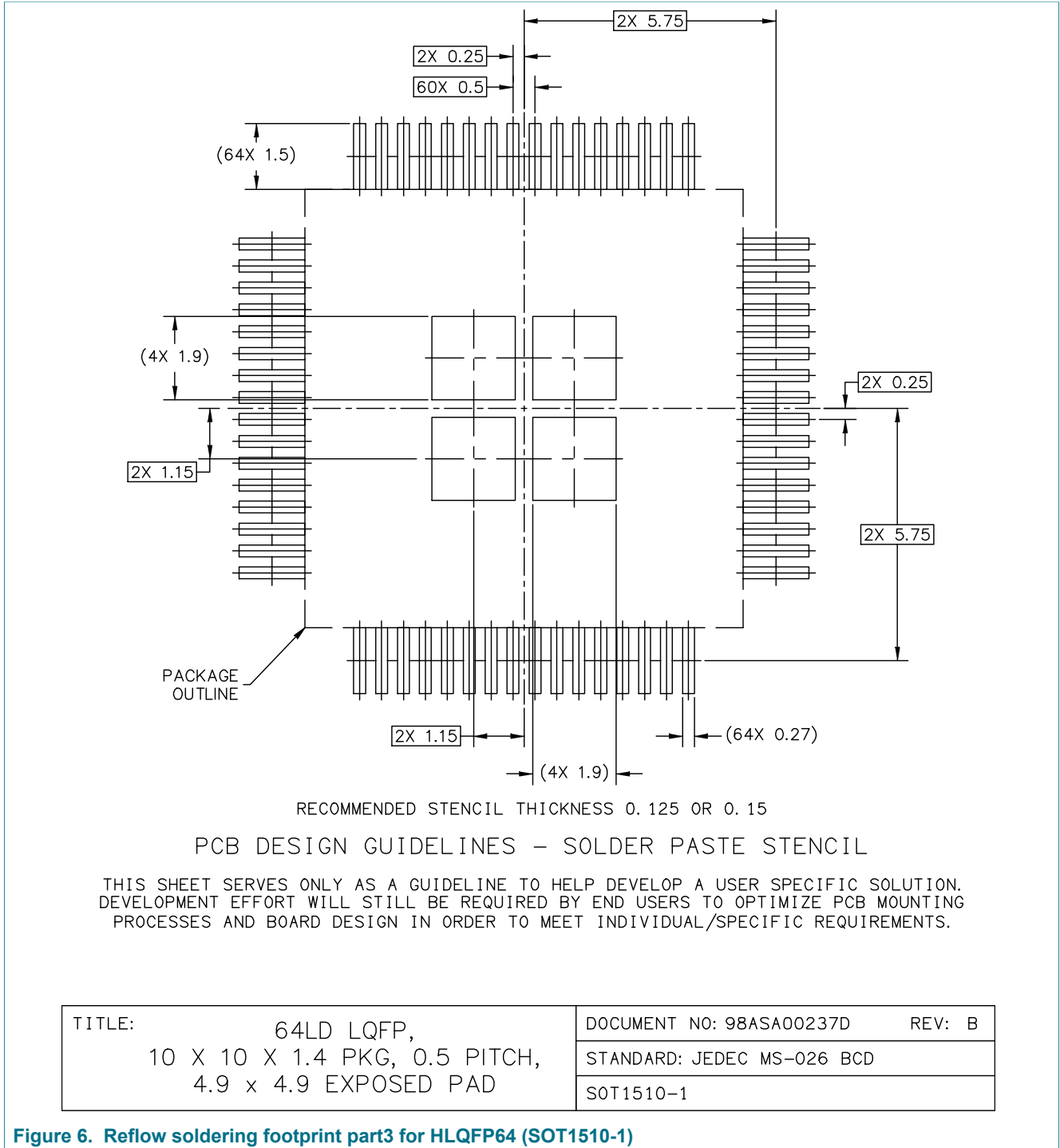


Figure 6. Reflow soldering footprint part3 for HLQFP64 (SOT1510-1)

HLQFP64, plastic, thermal enhanced low profile quad flat package; 64 terminals; 0.5 mm pitch; 10 mm x 10 mm x 1.4 mm body; 4.9 mm x 4.9 mm exposed pad

## 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.



HLQFP64, plastic, thermal enhanced low profile quad flat package; 64 terminals; 0.5 mm pitch; 10 mm x 10 mm x 1.4 mm body; 4.9 mm x 4.9 mm exposed pad

Contents

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