

SOT2061-1

TFBGA486, thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.91 mm body

14 May 2021

Package information

1 Package summary

Terminal position code	B (bottom)
Package type descriptive code	TFLGA486
Package style descriptive code	TFBGA (thin fine-pitch ball grid array)
Package body material type	P (plastic)
Mounting method type	S (surface mount)
Issue date	07-04-2021
Manufacturer package code	98ASA01612D

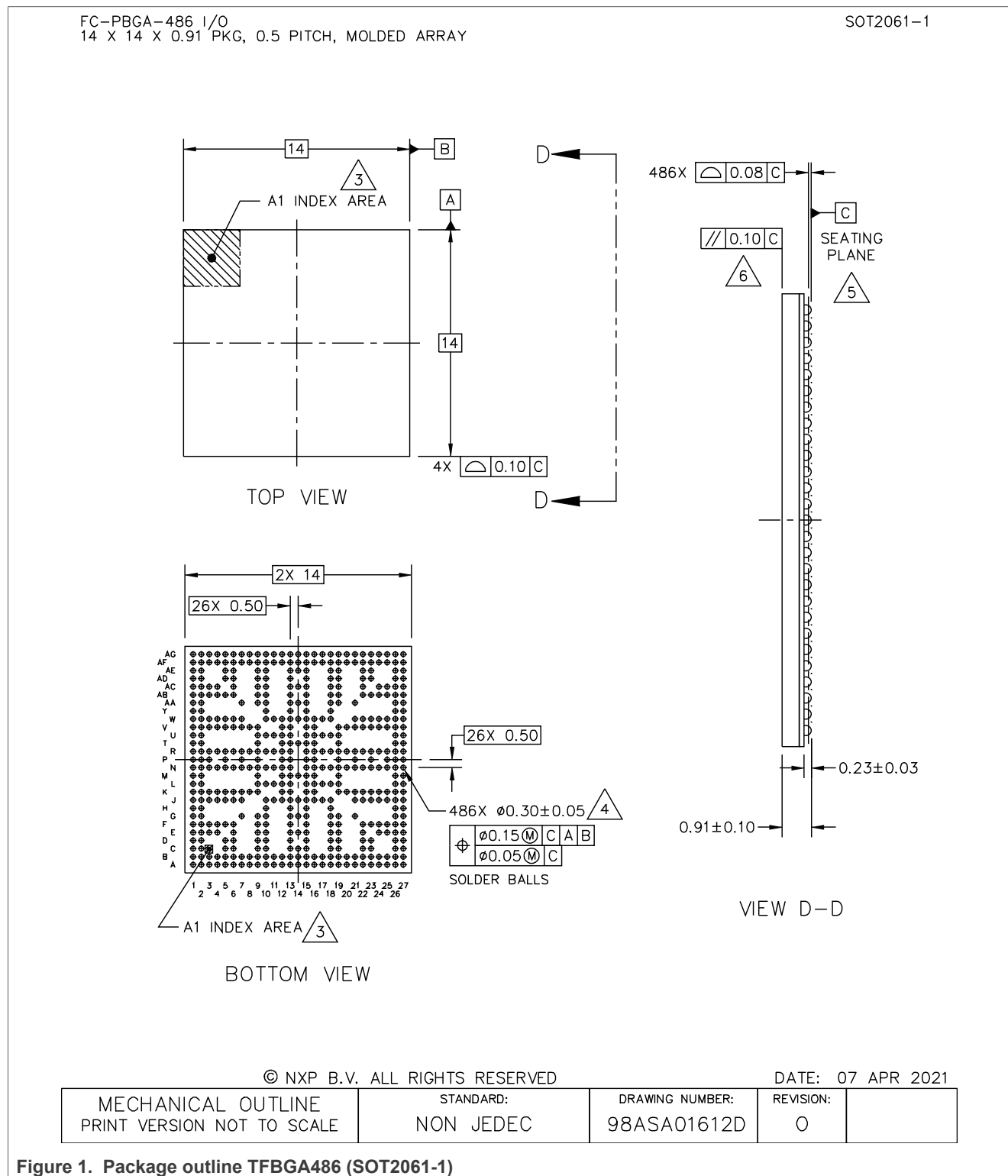
Table 1. Package summary

Parameter	Min	Nom	Max	Unit
package length	13.9	14	14.1	mm
package width	13.9	14	14.1	mm
package height	0.81	0.91	1.01	mm
nominal pitch	-	0.5	-	mm
actual quantity of termination	-	486	-	



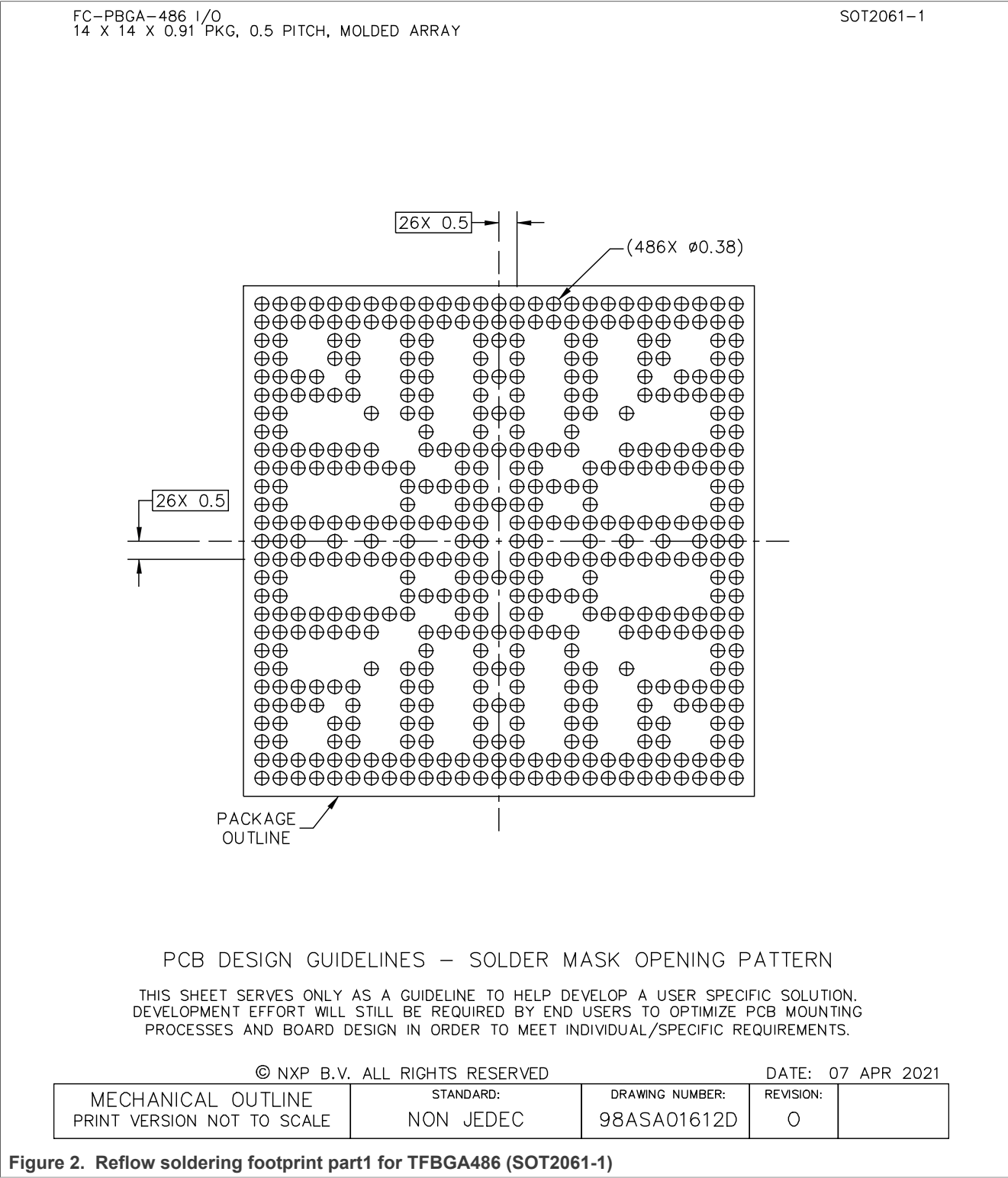
TFBGA486, thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.91 mm body

2 Package outline



TFBGA486, thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.91 mm body

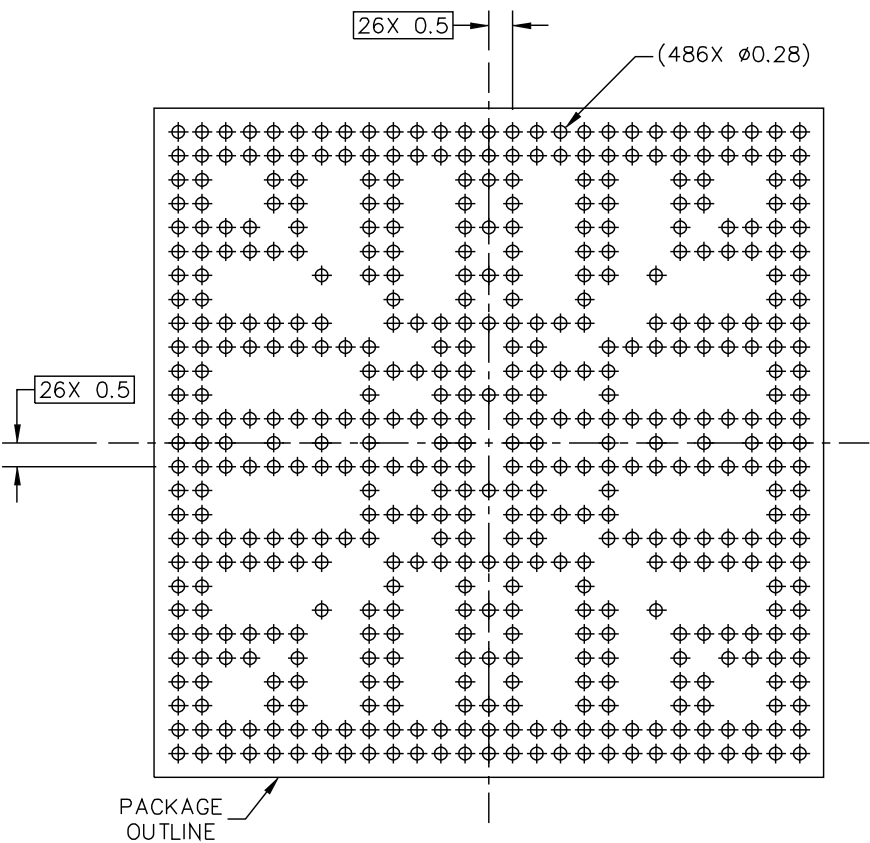
3 Soldering



TFBGA486, thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.91 mm body

FC-PBGA-486 I/O
14 X 14 X 0.91 PKG, 0.5 PITCH, MOLDED ARRAY

SOT2061-1



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: 07 APR 2021

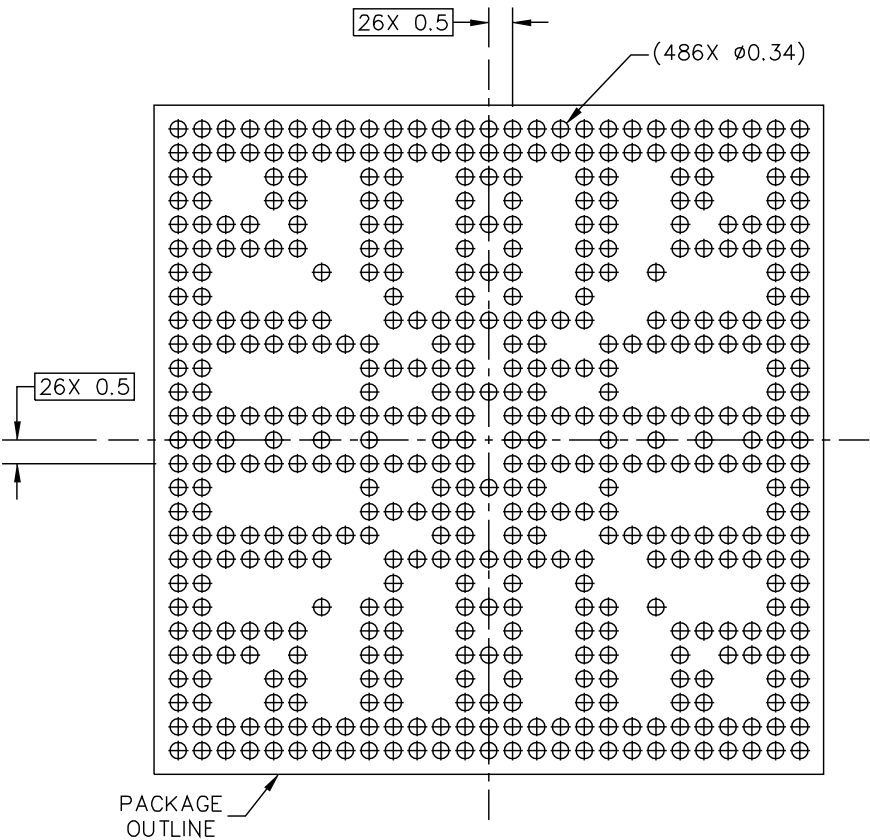
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01612D	REVISION: 0	
--	------------------------	--------------------------------	----------------	--

Figure 3. Reflow soldering footprint part2 for TFBGA486 (SOT2061-1)

TFBGA486, thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.91 mm body

FC-PBGA-486 I/O
14 X 14 X 0.91 PKG, 0.5 PITCH, MOLDED ARRAY

SOT2061-1



RECOMMENDED STENCIL THICKNESS 0.125 MM

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: 07 APR 2021

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01612D	REVISION: 0	
--	------------------------	--------------------------------	----------------	--

Figure 4. Reflow soldering footprint part3 for TFBGA486 (SOT2061-1)

TFBGA486, thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.91 mm body

FC-PBGA-486 I/O
14 X 14 X 0.91 PKG, 0.5 PITCH, MOLDED ARRAY

SOT2061-1

NOTES:

- 1. ALL DIMENSIONS IN MILLIMETERS.
- 2. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 3. PIN A1 FEATURE SHAPE, SIZE AND LOCATION MAY VARY.
- 4. MAXIMUM SOLDER BALL DIAMETER MEASURED PARALLEL TO DATUM C.
- 5. DATUM C THE SEATING PLANE, IS DETERMINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
- 6. PARALLELISM MEASUREMENT SHALL EXCLUDE ANY EFFECT OF MARK ON TOP SURFACE OF PACKAGE.

© NXP B.V. ALL RIGHTS RESERVED

DATE: 07 APR 2021

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01612D	REVISION: 0	
--	------------------------	--------------------------------	----------------	--

Figure 5. Package outline note TFBGA486 (SOT2061-1)

TFBGA486, thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.91 mm body

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.

TFBGA486, thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.91 mm body

Contents

1	Package summary	1
2	Package outline	2
3	Soldering	3
4	Legal information	7