

SOT2141-1

VFBGA486, very thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.775 mm body

28 February 2022

Package information

1 Package summary

Terminal position code	B (bottom)
Package type descriptive code	VFBGA486
Package style descriptive code	VFBGA (very thin fine-pitch ball grid array)
Package body material type	P (plastic)
Mounting method type	S (surface mount)
Issue date	03-12-2021
Manufacturer package code	98ASA01777D

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	-	0.775	0.875	mm
nominal pitch	-	0.5	-	mm
actual quantity of termination	-	486	-	



VFBGA486, very thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.775 mm body

2 Package outline

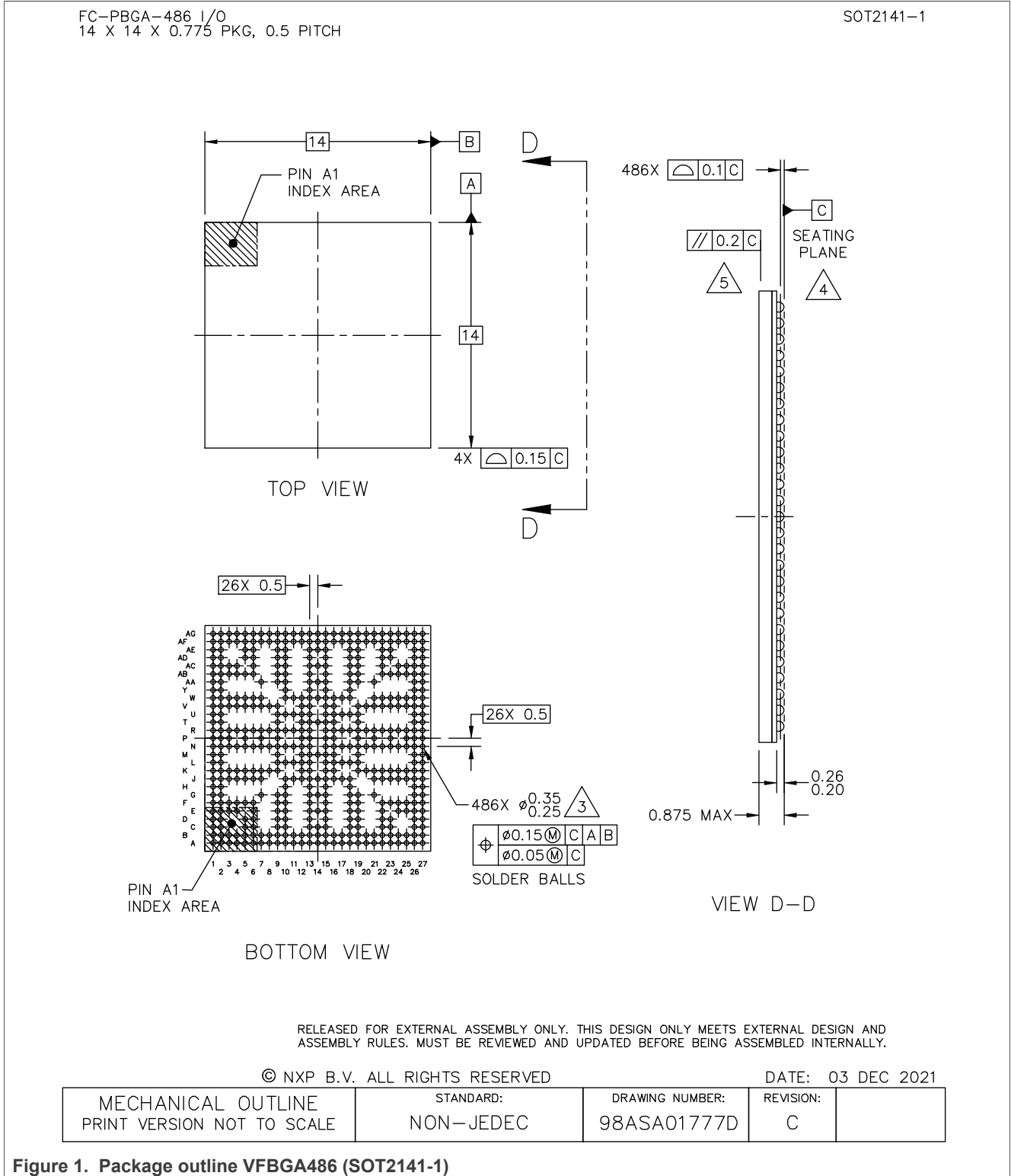


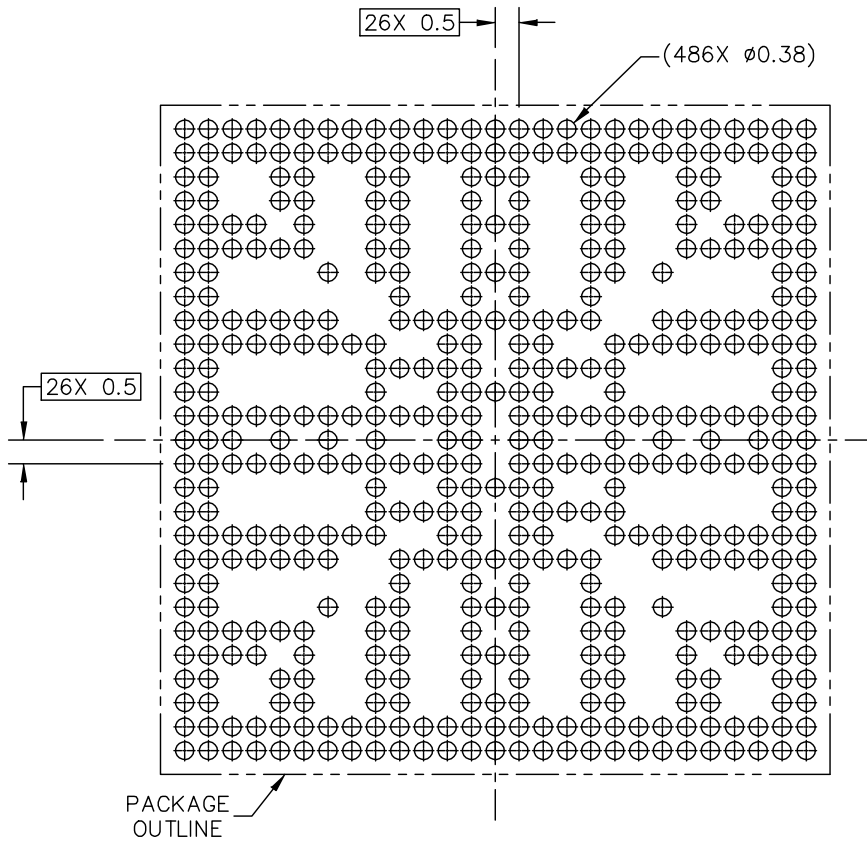
Figure 1. Package outline VFBGA486 (SOT2141-1)

VFBGA486, very thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.775 mm body

3 Soldering

FC-PBGA-486 I/O
14 X 14 X 0.775 PKG, 0.5 PITCH

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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.

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DATE: 27 OCT 2021

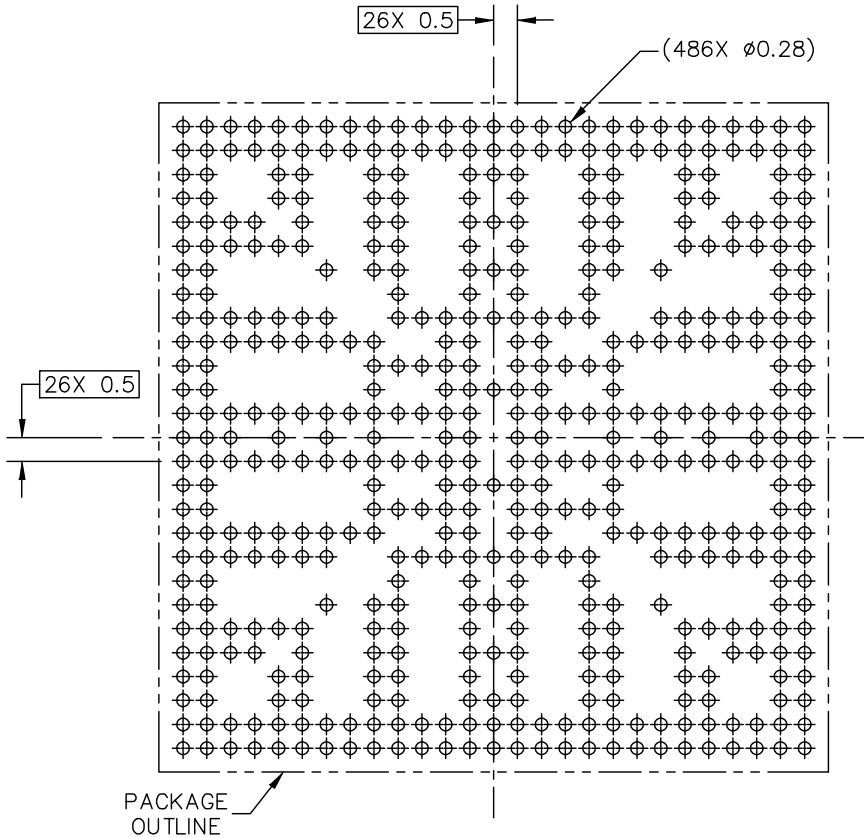
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON-JEDEC	DRAWING NUMBER: 98ASA01777D	REVISION: B
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Figure 2. Reflow soldering footprint part1 for VFBGA486 (SOT2141-1)

VFBGA486, very thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.775 mm body

FC-PBGA-486 I/O
14 X 14 X 0.775 PKG, 0.5 PITCH

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PCB DESIGN GUIDELINES – I/O PADS AND SOLDERABLE AREA

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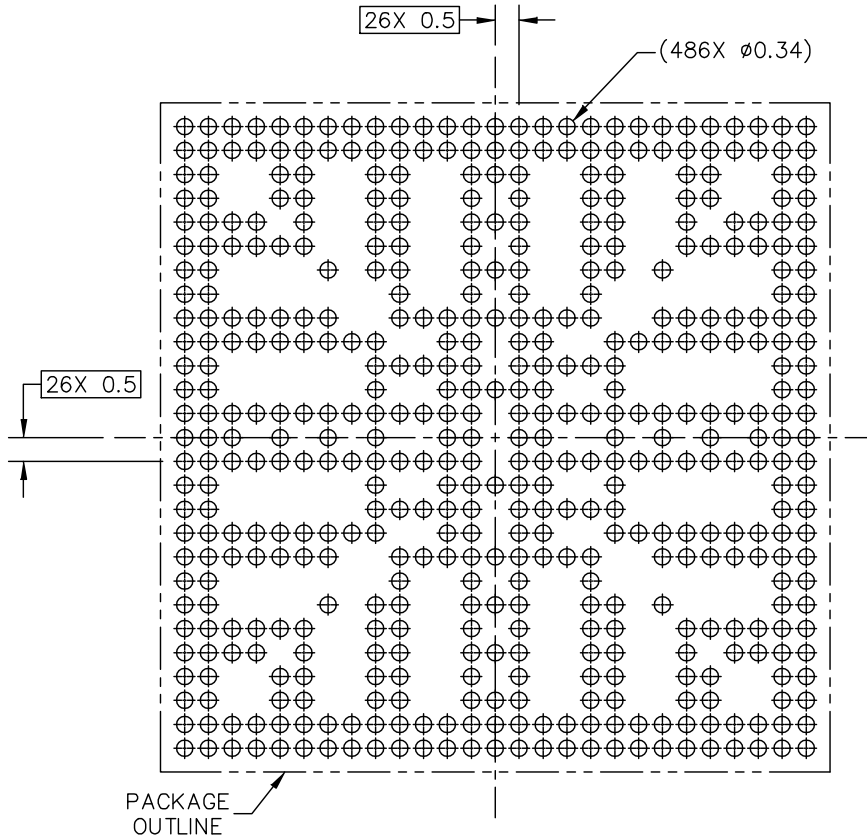
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON-JEDEC	DRAWING NUMBER: 98ASA01777D	REVISION: B
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Figure 3. Reflow soldering footprint part2 for VFBGA486 (SOT2141-1)

VFBGA486, very thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.775 mm body

FC-PBGA-486 I/O
14 X 14 X 0.775 PKG, 0.5 PITCH

SOT2141-1



RECOMMENDED STENCIL THICKNESS 0.125 MM

PCB DESIGN GUIDELINES – SOLDER PASTE STENCIL

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MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON-JEDEC	DRAWING NUMBER: 98ASA01777D	REVISION: B	
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Figure 4. Reflow soldering footprint part3 for VFBGA486 (SOT2141-1)

VFBGA486, very thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.775 mm body

FC-PBGA-486 I/O
14 X 14 X 0.775 PKG, 0.5 PITCH

SOT2041-1

NOTES:

1. ALL DIMENSIONS IN MILLIMETERS.
2. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
3. MAXIMUM SOLDER BALL DIAMETER MEASURED PARALLEL TO DATUM C.
4. DATUM C, THE SEATING PLANE, IS DETERMINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
5. PARALLELISM MEASUREMENT SHALL EXCLUDE ANY EFFECT OF MARK ON TOP SURFACE OF PACKAGE
6. ALL DIMENSIONS ARE SYMMETRIC ACROSS THE PACKAGE CENTER LINES, UNLESS DIMENSIONED OTHERWISE.

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DATE: 03 DEC 2021

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON-JEDEC	DRAWING NUMBER: 98ASA01777D	REVISION: C	
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Figure 5. Package outline note VFBGA486 (SOT2141-1)

VFBGA486, very thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.775 mm body

4 Legal information

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