

# SOT2140-1

VFBGA486, very thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.725 mm body

19 May 2021

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	04-05-2021
Manufacturer package code	98ASA01776D

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	-	0.725	0.825	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 0.725 mm body

2 Package outline

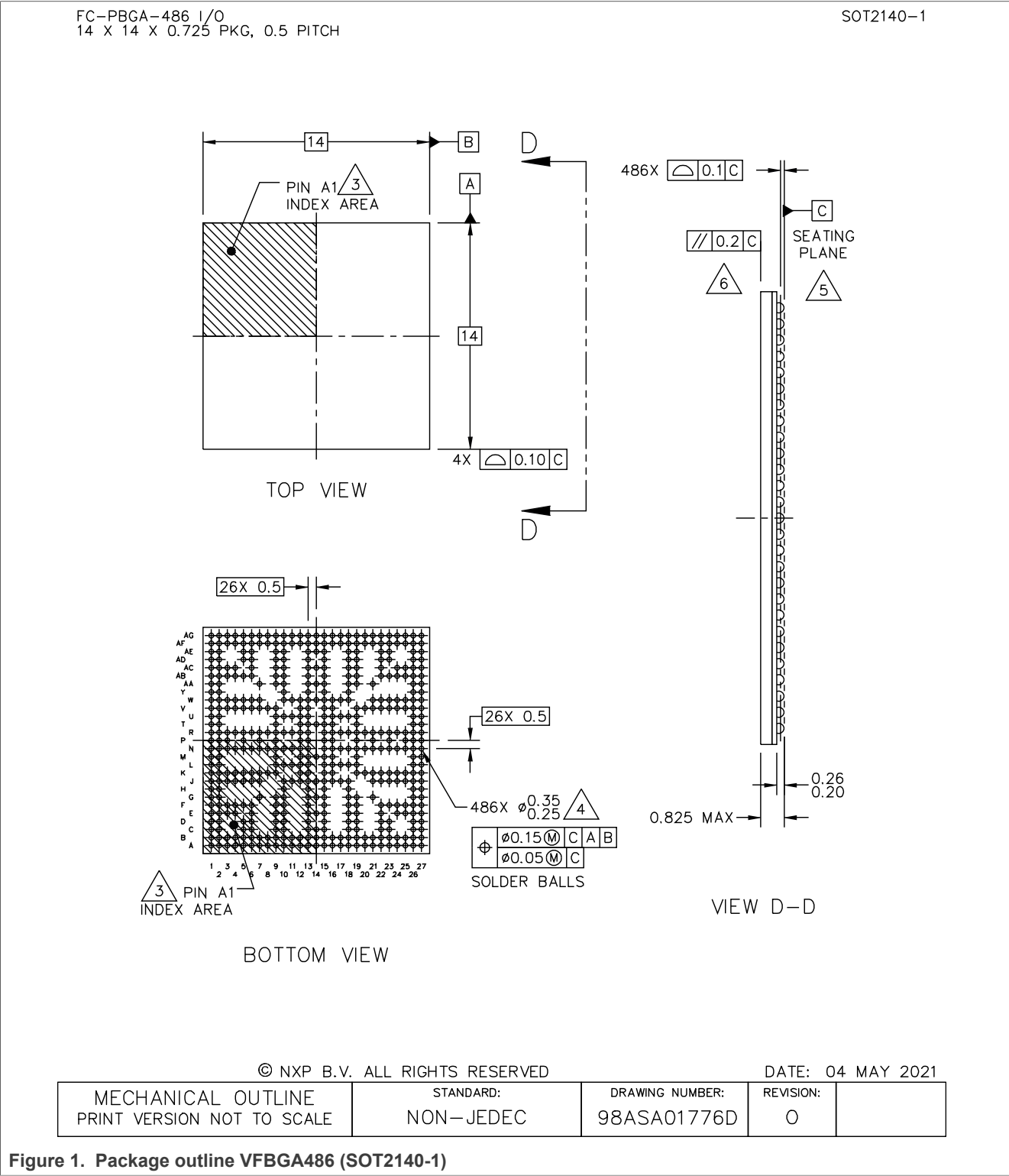
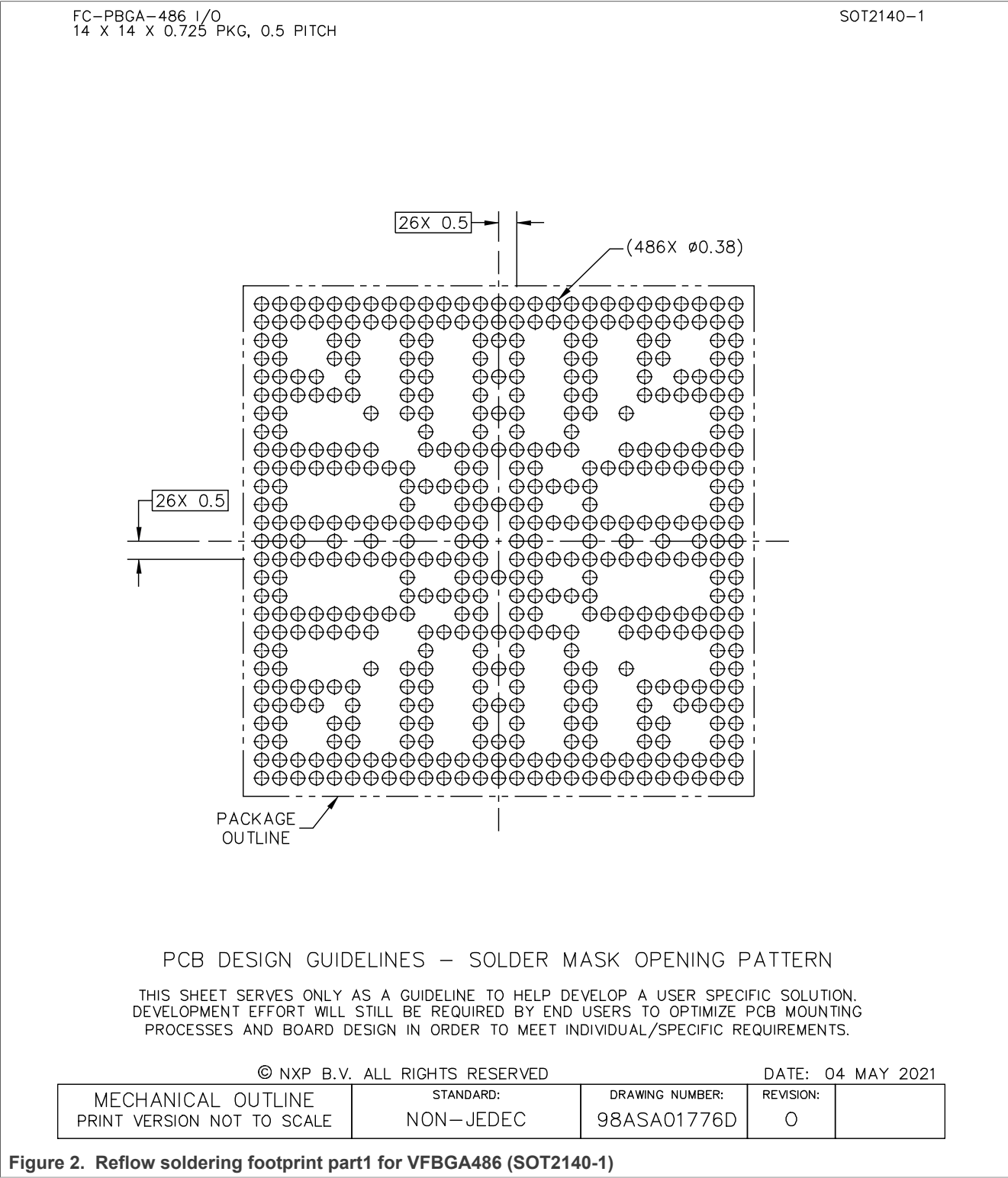


Figure 1. Package outline VFBGA486 (SOT2140-1)

VFBGA486, very thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.725 mm body

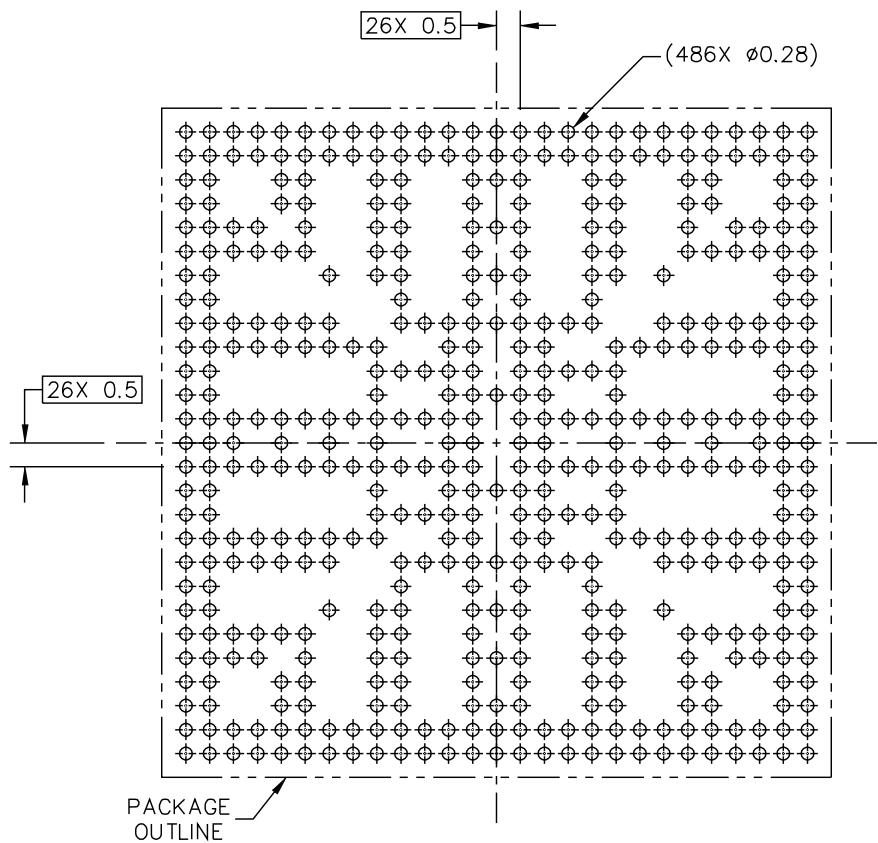
3 Soldering



VFBGA486, very thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.725 mm body

FC-PBGA-486 I/O  
14 X 14 X 0.725 PKG, 0.5 PITCH

SOT2140-1



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.

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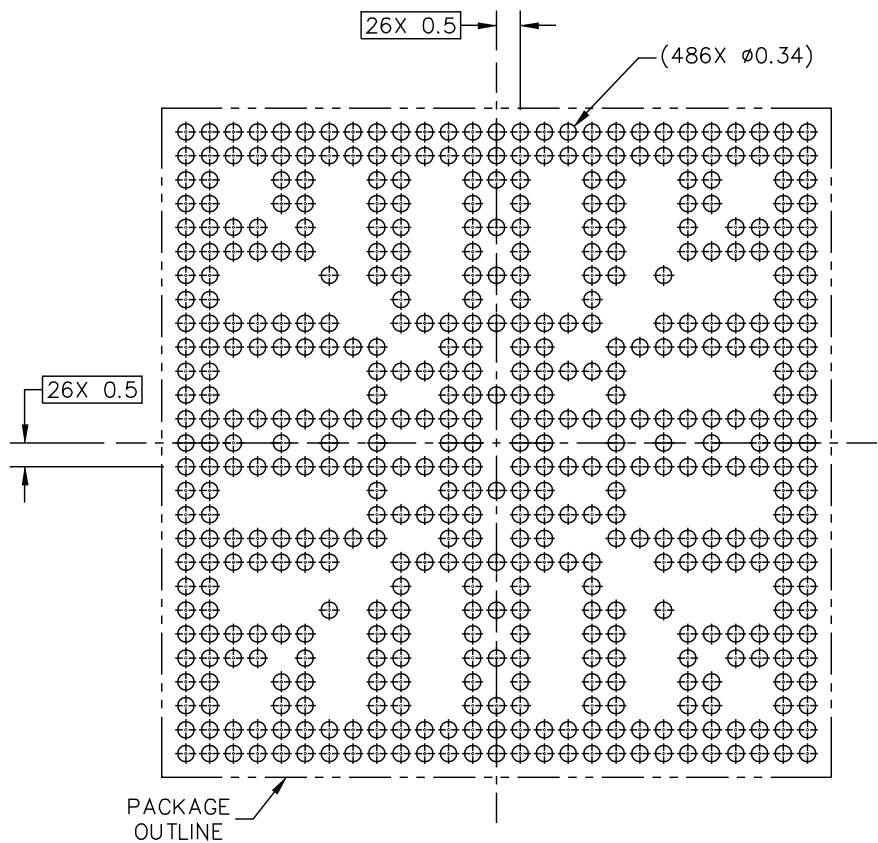
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON-JEDEC	DRAWING NUMBER: 98ASA01776D	REVISION: O	
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Figure 3. Reflow soldering footprint part2 for VFBGA486 (SOT2140-1)

VFBGA486, very thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.725 mm body

FC-PBGA-486 I/O  
14 X 14 X 0.725 PKG, 0.5 PITCH

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RECOMMENDED STENCIL THICKNESS 0.125 MM

PCB DESIGN GUIDELINES – SOLDER PASTE STENCIL

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Figure 4. Reflow soldering footprint part3 for VFBGA486 (SOT2140-1)

VFBGA486, very thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.725 mm body

FC-PBGA-486 I/O  
14 X 14 X 0.725 PKG, 0.5 PITCH

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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.

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Figure 5. Package outline note VFBGA486 (SOT2140-1)

VFBGA486, very thin fine-pitch ball grid array package, 486 terminals, 0.5 mm pitch, 14 mm x 14 mm x 0.725 mm body

## 4 Legal information

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