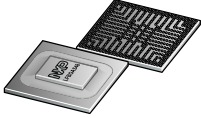


# SOT2047-1

LFBGA548, low profile, fine-pitch, ball grid array package, 548 terminals, 0.5 mm pitch, 15 mm x 15 mm x 1.331 mm body

19 June 2023

Package information



## 1 Package summary

<b>Terminal position code</b>	B (bottom)
<b>Package type descriptive code</b>	LFBGA548
<b>Package style descriptive code</b>	LFBGA (low profile fine-pitch ball grid array)
<b>Package body material type</b>	P (plastic)
<b>Mounting method type</b>	S (surface mount)
<b>Issue date</b>	11-05-2023
<b>Manufacturer package code</b>	98ASA01539D

Table 1. Package summary

Parameter	Min	Nom	Max	Unit
package length	14.85	15	15.15	mm
package width	14.85	15	15.15	mm
seated height	1.181	1.331	1.481	mm
nominal pitch	-	0.5	-	mm
actual quantity of termination	-	548	-	



LFBGA548, low profile, fine-pitch, ball grid array package, 548 terminals, 0.5 mm pitch, 15 mm x 15 mm x 1.331 mm body

2 Package outline

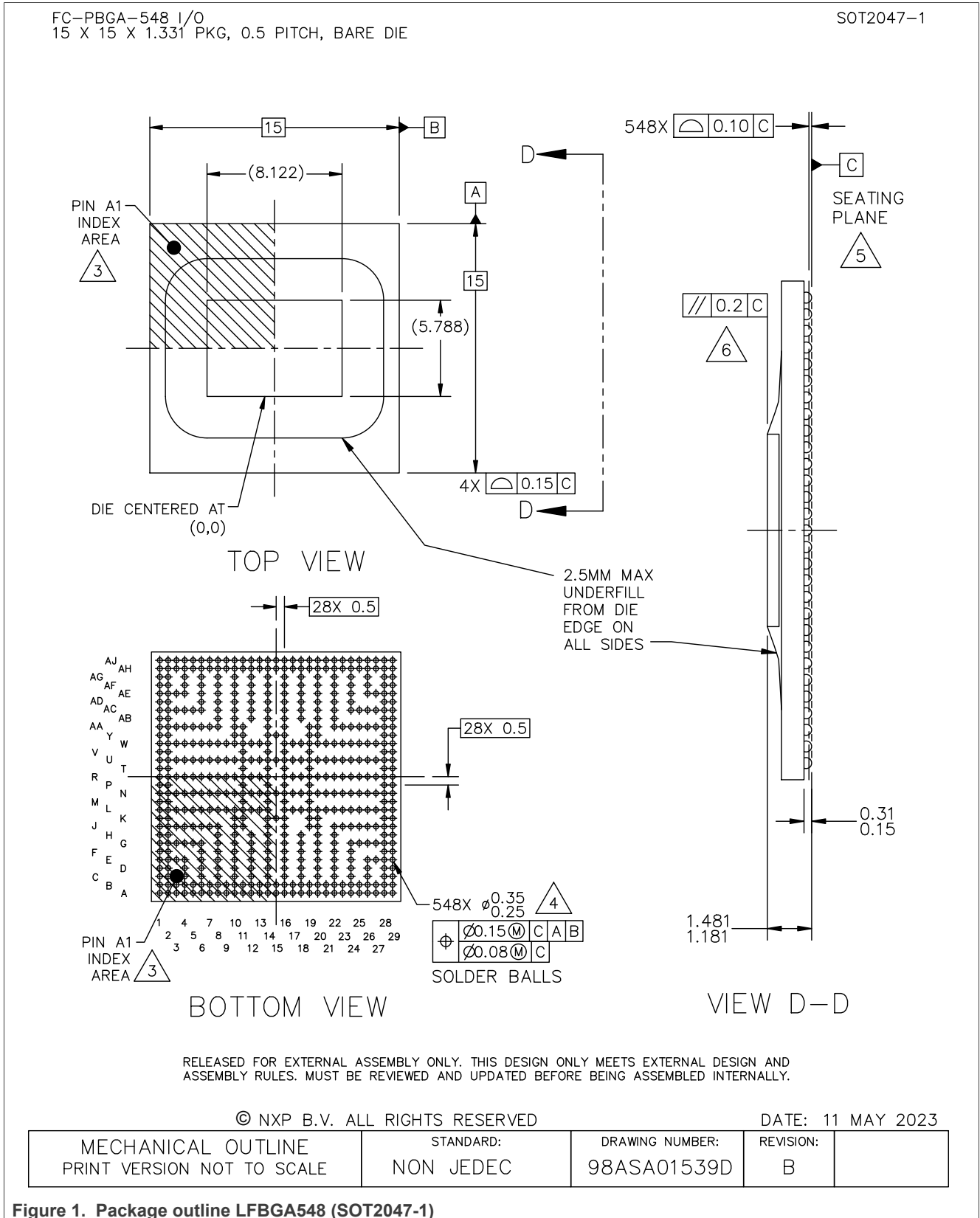


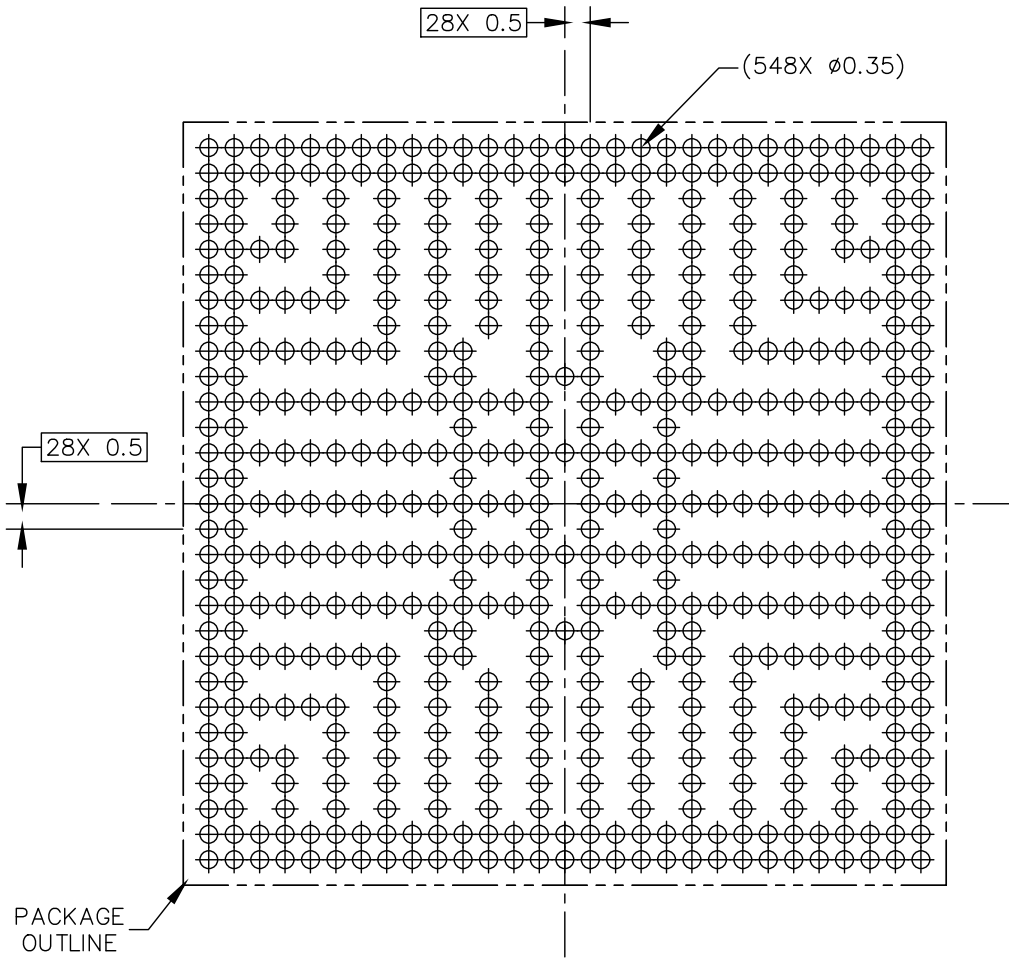
Figure 1. Package outline LFBGA548 (SOT2047-1)

LFBGA548, low profile, fine-pitch, ball grid array package, 548 terminals, 0.5 mm pitch, 15 mm x 15 mm x 1.331 mm body

3 Soldering

FC-PBGA-548 I/O  
15 X 15 X 1.331 PKG, 0.5 PITCH, BARE DIE

SOT2047-1



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: 11 MAY 2023

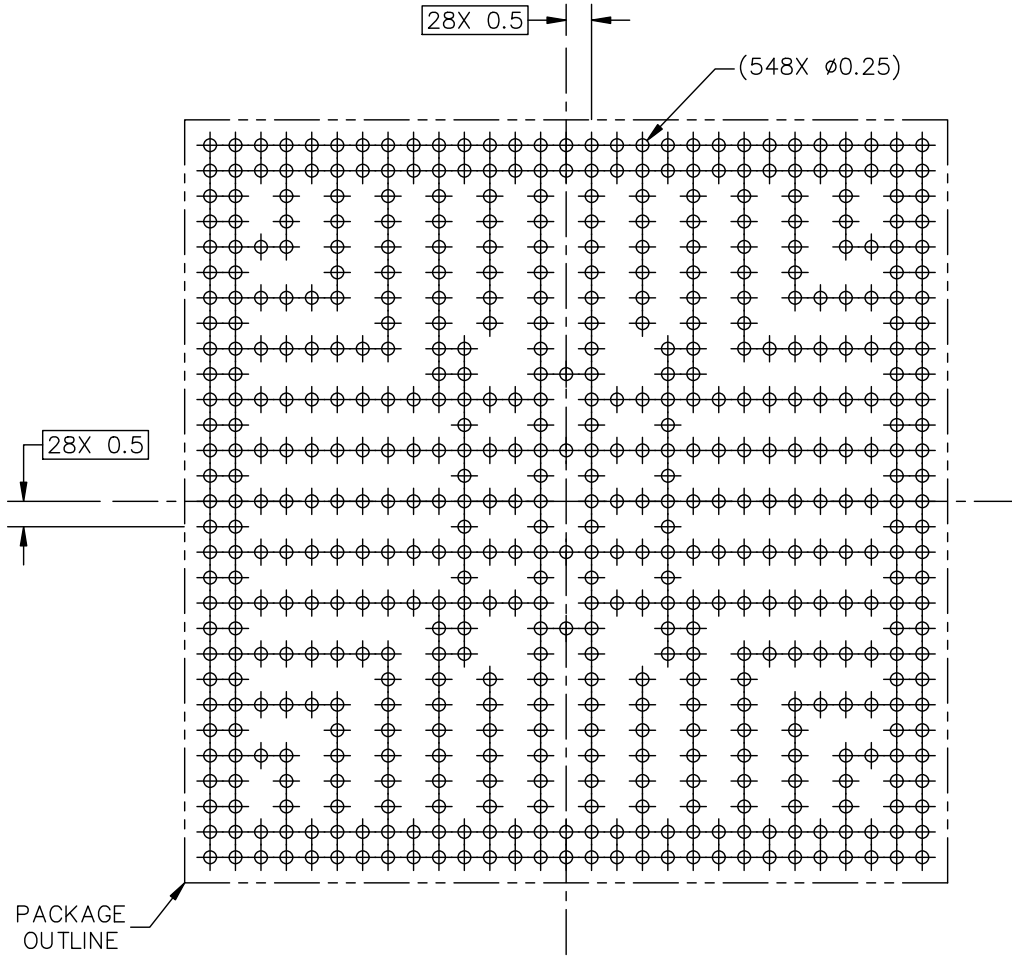
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01539D	REVISION: B	
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Figure 2. Reflow soldering footprint part1 for LFBGA548 (SOT2047-1)

LFBGA548, low profile, fine-pitch, ball grid array package, 548 terminals, 0.5 mm pitch, 15 mm x 15 mm x 1.331 mm body

FC-PBGA-548 I/O  
15 X 15 X 1.331 PKG, 0.5 PITCH, BARE DIE

SOT2047-1



PCB DESIGN GUIDELINES – I/O PADS AND SOLDERABLE AREA

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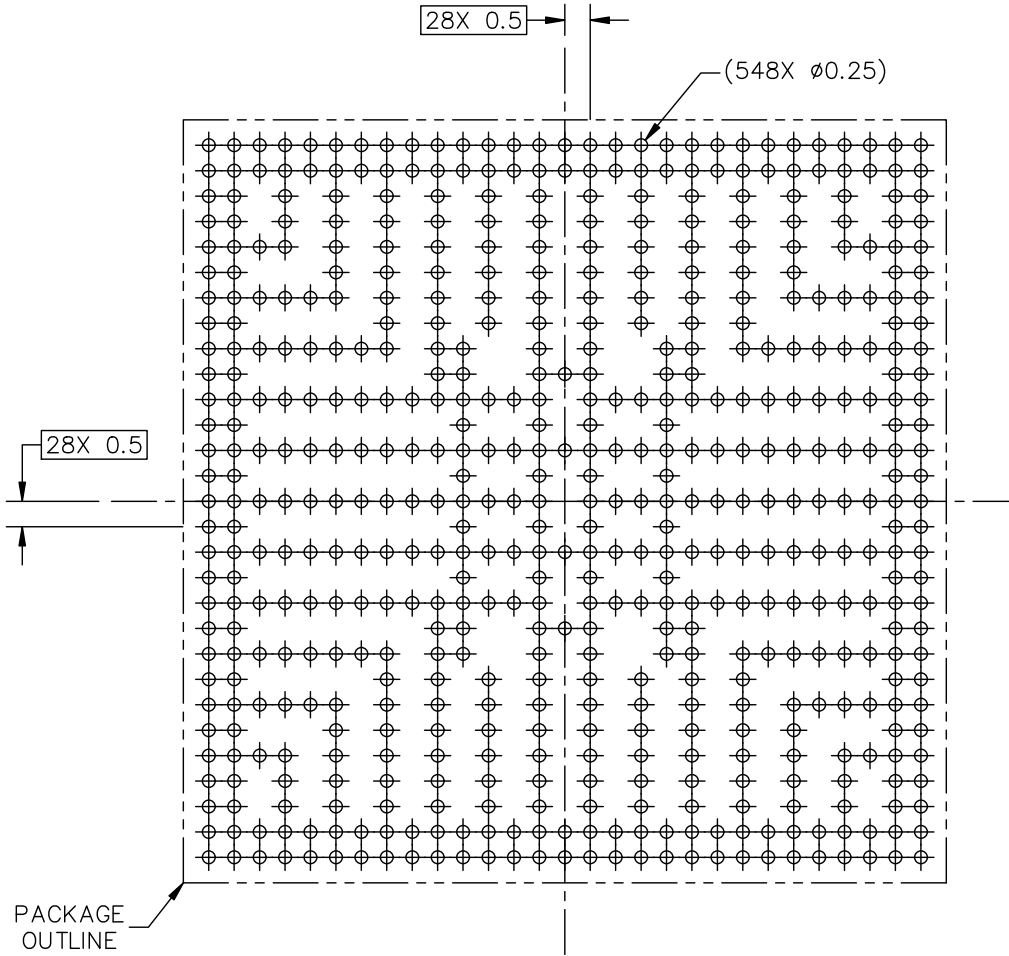
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01539D	REVISION: B	
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Figure 3. Reflow soldering footprint part2 for LFBGA548 (SOT2047-1)

LFBGA548, low profile, fine-pitch, ball grid array package, 548 terminals, 0.5 mm pitch, 15 mm x 15 mm x 1.331 mm body

FC-PBGA-548 I/O  
15 X 15 X 1.331 PKG, 0.5 PITCH, BARE DIE

SOT2047-1



RECOMMENDED STENCIL THICKNESS 0.1MM

PCB DESIGN GUIDELINES – SOLDER PASTE STENCIL

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DATE: 11 MAY 2023

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01539D	REVISION: B
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Figure 4. Reflow soldering footprint part3 for LFBGA548 (SOT2047-1)

LFBGA548, low profile, fine-pitch, ball grid array package, 548 terminals, 0.5 mm pitch, 15 mm x 15 mm x 1.331 mm body

FC-PBGA-548 I/O  
15 X 15 X 1.331 PKG, 0.5 PITCH, BARE DIE

SOT2047-1

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.

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DATE: 11 MAY 2023

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01539D	REVISION: B	
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Figure 5. Package outline note LFBGA548 (SOT2047-1)

## 4 Legal information

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LFBGA548, low profile, fine-pitch, ball grid array package, 548 terminals, 0.5 mm pitch, 15 mm x 15 mm x 1.331 mm body

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