

SOT1655-5

FBGA525, plastic, fine-pitch ball grid array package; 525 bumps; 0.8 mm pitch; 19 mm x 19 mm x 1.97 mm body

9 November 2022

Package information

1 Package summary

Terminal position code	B (bottom)
Package type descriptive code	FBGA525
Package type industry code	FBGA525
Package style descriptive code	FBGA (fine-pitch ball grid array)
Package body material type	P (plastic)
Mounting method type	S (surface mount)
Issue date	13-09-2022
Manufacturer package code	98ASA01463D

Table 1. Package summary

Parameter	Min	Nom	Max	Unit
package length	18.85	19	19.15	mm
package width	18.85	19	19.15	mm
seated height	-	1.97	2.12	mm
nominal pitch	-	0.8	-	mm
actual quantity of termination	-	525	-	



FBGA525, plastic, fine-pitch ball grid array package; 525 bumps; 0.8 mm pitch; 19 mm x 19 mm x 1.97 mm body

2 Package outline

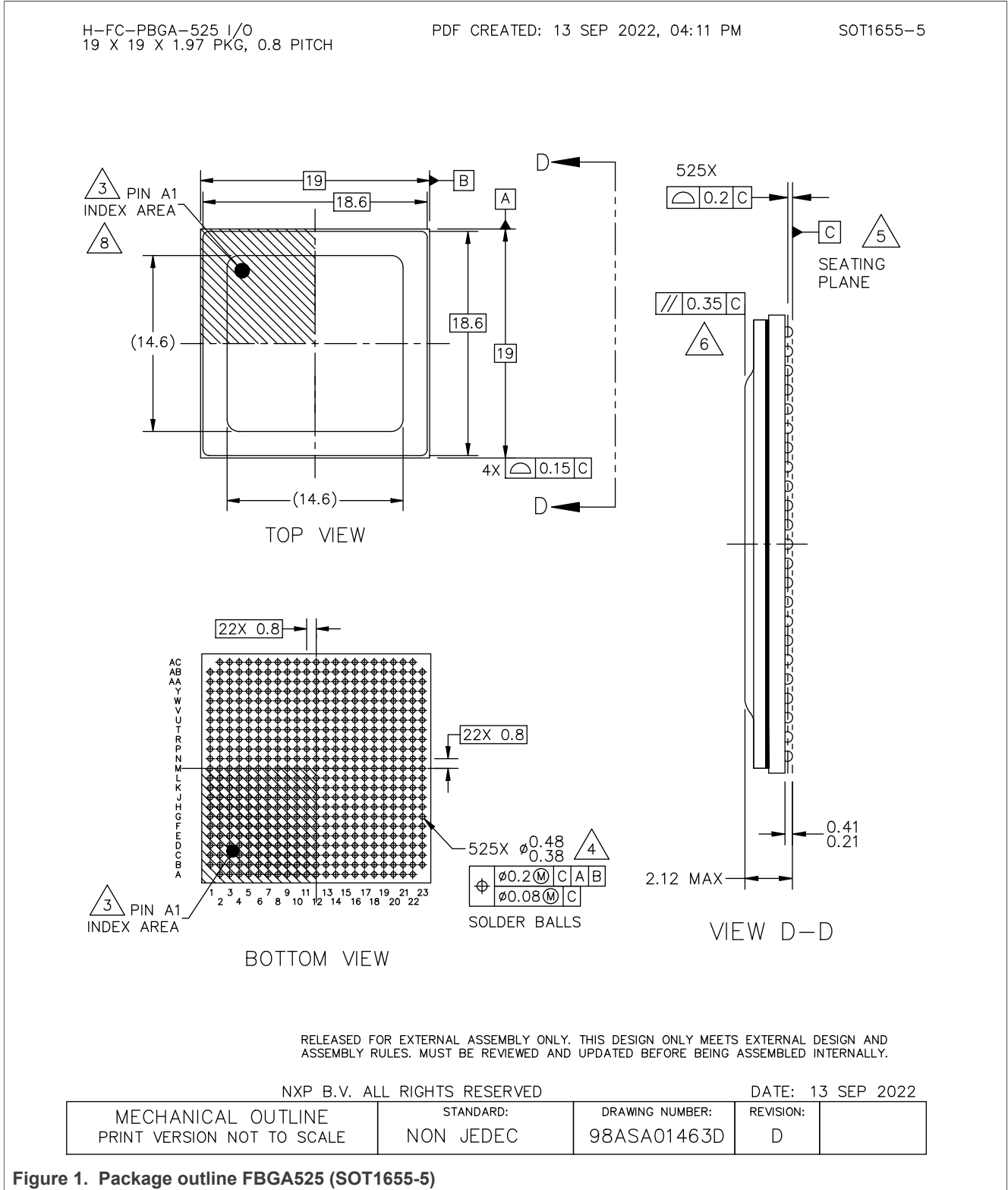


Figure 1. Package outline FBGA525 (SOT1655-5)

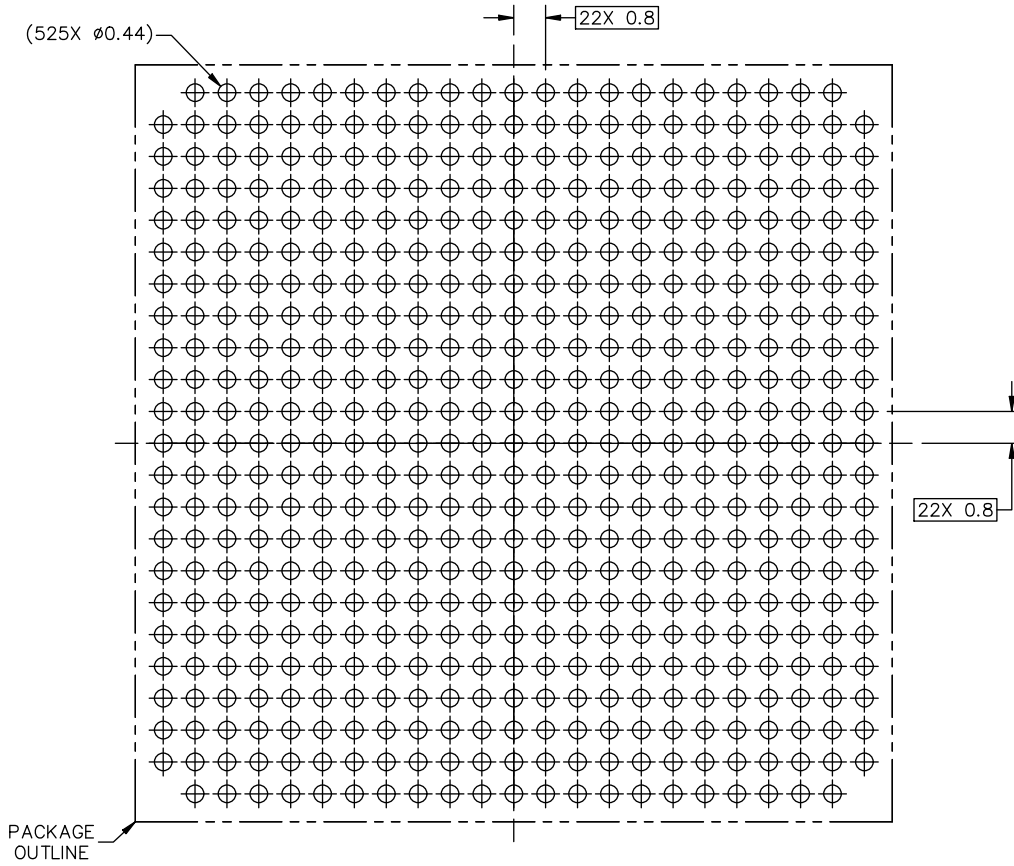
FBGA525, plastic, fine-pitch ball grid array package; 525 bumps; 0.8 mm pitch; 19 mm x 19 mm x 1.97 mm body

3 Soldering

H-FC-PBGA-525 I/O
19 X 19 X 1.97 PKG, 0.8 PITCH

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PCB DESIGN GUIDELINES – SOLDER MASK OPENING PATTERN

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MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01463D	REVISION: D	
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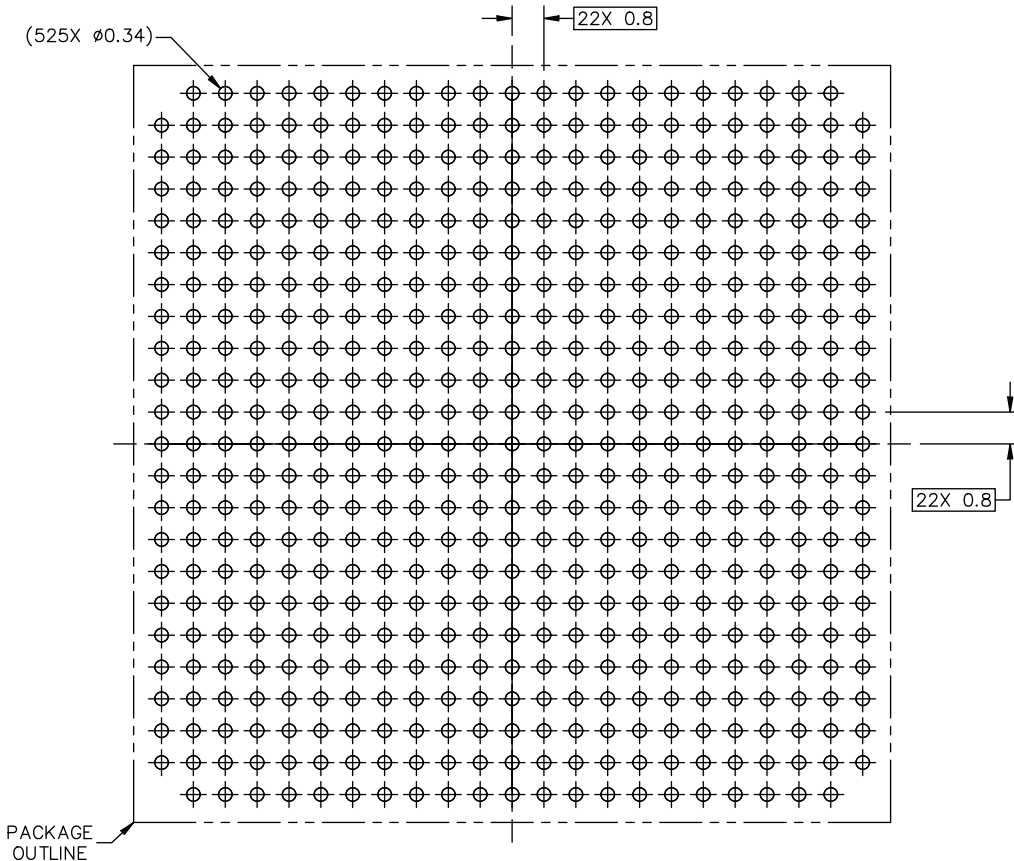
Figure 2. Reflow soldering footprint part1 for FBGA525 (SOT1655-5)

FBGA525, plastic, fine-pitch ball grid array package; 525 bumps; 0.8 mm pitch; 19 mm x 19 mm x 1.97 mm body

H-FC-PBGA-525 I/O
19 X 19 X 1.97 PKG, 0.8 PITCH

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PCB DESIGN GUIDELINES – I/O PADS AND SOLDERABLE AREA

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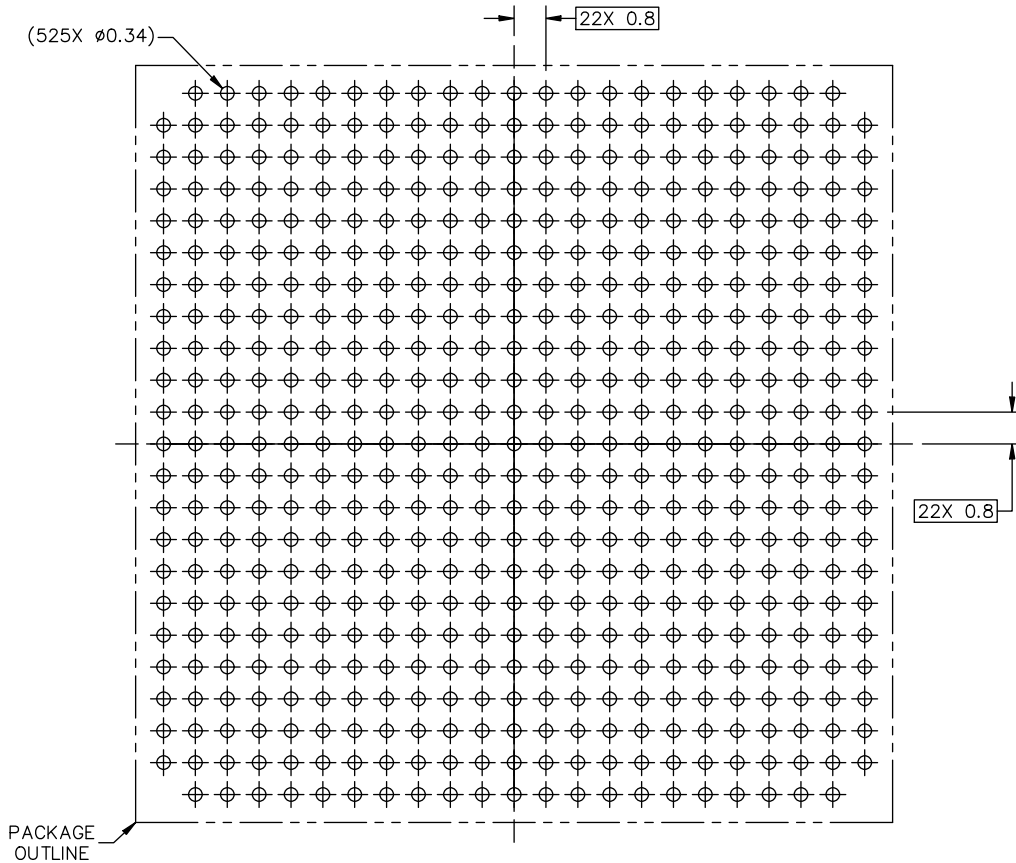
Figure 3. Reflow soldering footprint part2 for FBGA525 (SOT1655-5)

FBGA525, plastic, fine-pitch ball grid array package; 525 bumps; 0.8 mm pitch; 19 mm x 19 mm x 1.97 mm body

H-FC-PBGA-525 1/0
19 X 19 X 1.97 PKG, 0.8 PITCH

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RECOMMENDED STENCIL THICKNESS 0.125MM

PCB DESIGN GUIDELINES – SOLDER PASTE STENCIL

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Figure 4. Reflow soldering footprint part3 for FBGA525 (SOT1655-5)

FBGA525, plastic, fine-pitch ball grid array package; 525 bumps; 0.8 mm pitch; 19 mm x 19 mm x 1.97 mm body

H-FC-PBGA-525 I/O
19 X 19 X 1.97 PKG, 0.8 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.
7. LID OVERHANG ON SUBSTRATE NOT ALLOWED.
8. VENT AREA BETWEEN LID AND SUBSTRATE, SIZE MAY VARY.

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Figure 5. Package outline note FBGA525 (SOT1655-5)

4 Legal information

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