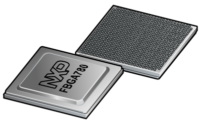


SOT2027-1

FBGA780, fine-pitch ball grid array package, 780 terminals, 0.65 mm pitch, 19 mm x 19 mm x 2.16 mm body

3 October 2022 Package information

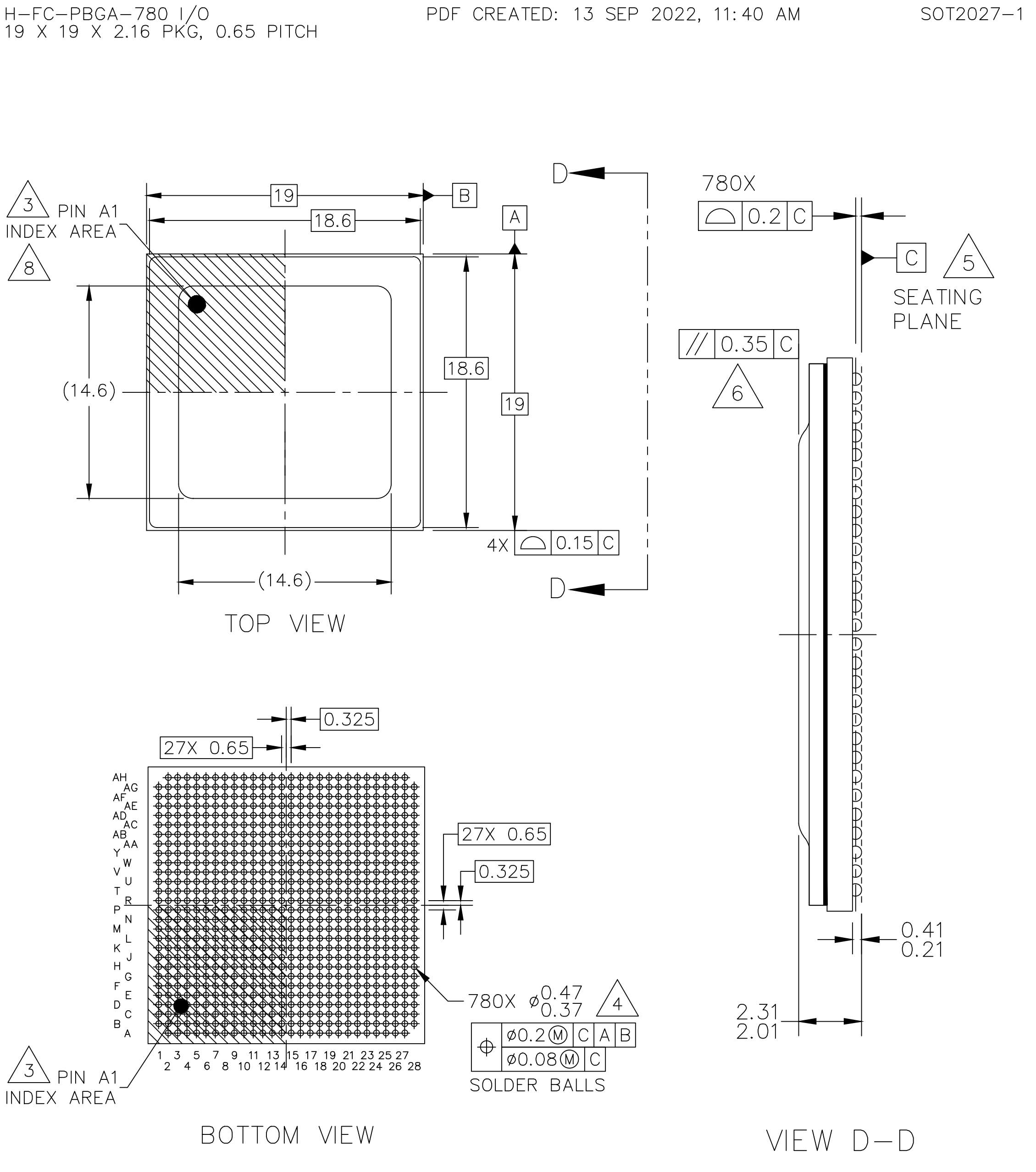
1 Package summary

Terminal position code	B (bottom)
Package type descriptive code	FBGA780
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	98ASA01441D

Table 1. Package summary

Parameter	Min	Nom	Max	Unit
package length	-	19	-	mm
package width	-	19	-	mm
seated height	2.01	2.16	2.31	mm
nominal pitch	-	0.65	-	mm
actual quantity of termination	-	780	-	

2 Package outline



RELEASED FOR EXTERNAL ASSEMBLY ONLY. THIS DESIGN ONLY MEETS EXTERNAL DESIGN AND ASSEMBLY RULES. MUST BE REVIEWED AND UPDATED BEFORE BEING ASSEMBLED INTERNALLY.

DATE: 13 SEP 2022

	STANDARD:	DRAWING NUMBER:	REVISION:	
MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	NON JEDEC	98ASA01441D	A	

Figure 1. Package outline FBGA780 (SOT2027-1)

3 Soldering

H-FC-PBGA-780 I/O
19 X 19 X 2.16 PKG, 0.65 PITCH

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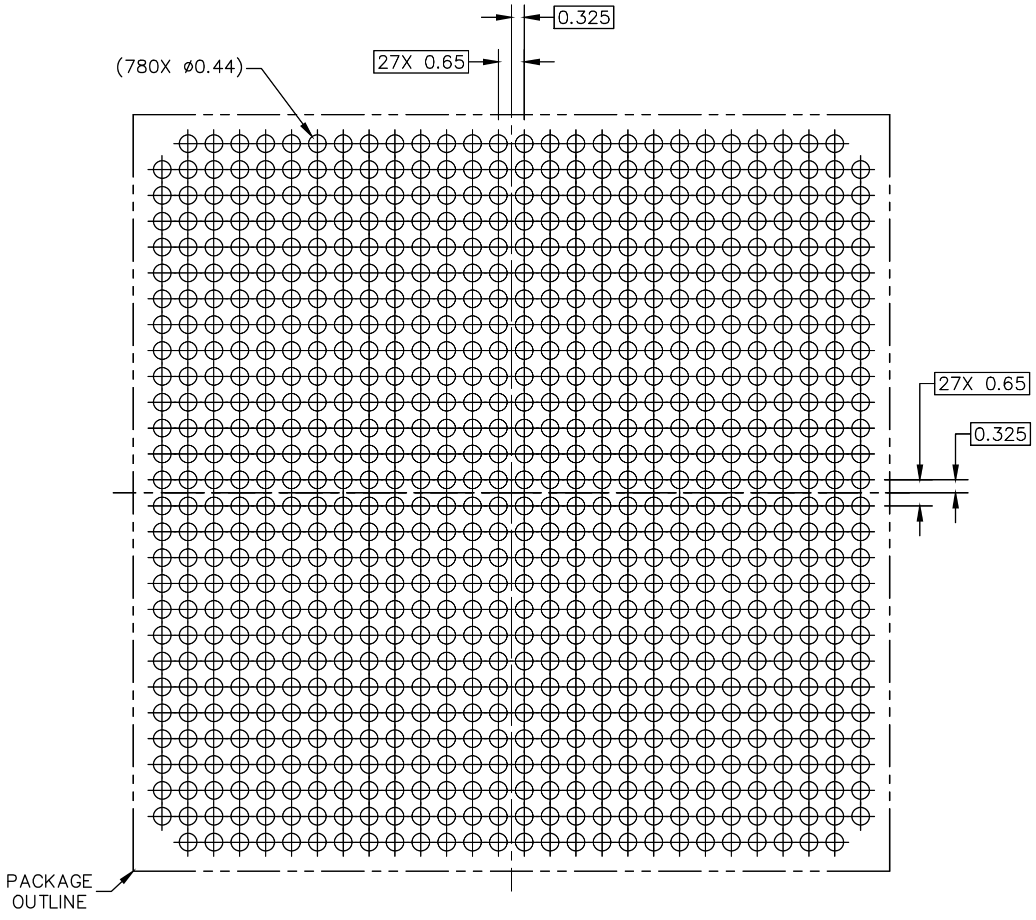
SOT2027



PCB DESIGN GUIDELINES – SOLDER MASK OPENING PATTERN

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DATE: 13 SEP 2022

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01441D	REVISION: A	

Figure 2. Reflow soldering footprint part1 for FBGA780 (SOT2027-1)

H-FC-PBGA-780 I/O
19 X 19 X 2.16 PKG, 0.65 PITCH

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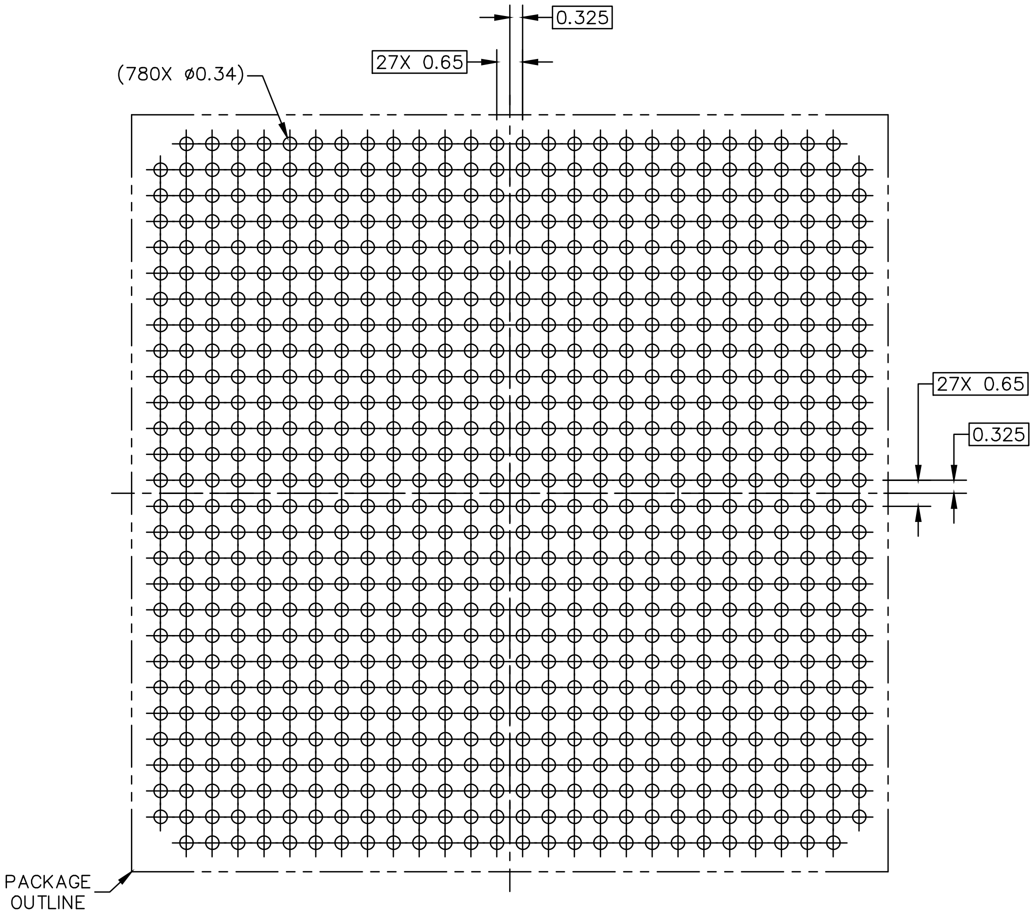
SOT2027-1



PCB DESIGN GUIDELINES – I/O PADS AND SOLDERABLE AREA

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DATE: 13 SEP 2022

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01441D	REVISION: A	

Figure 3. Reflow soldering footprint part2 for FBGA780 (SOT2027-1)

H-FC-PBGA-780 I/O
19 X 19 X 2.16 PKG, 0.65 PITCH

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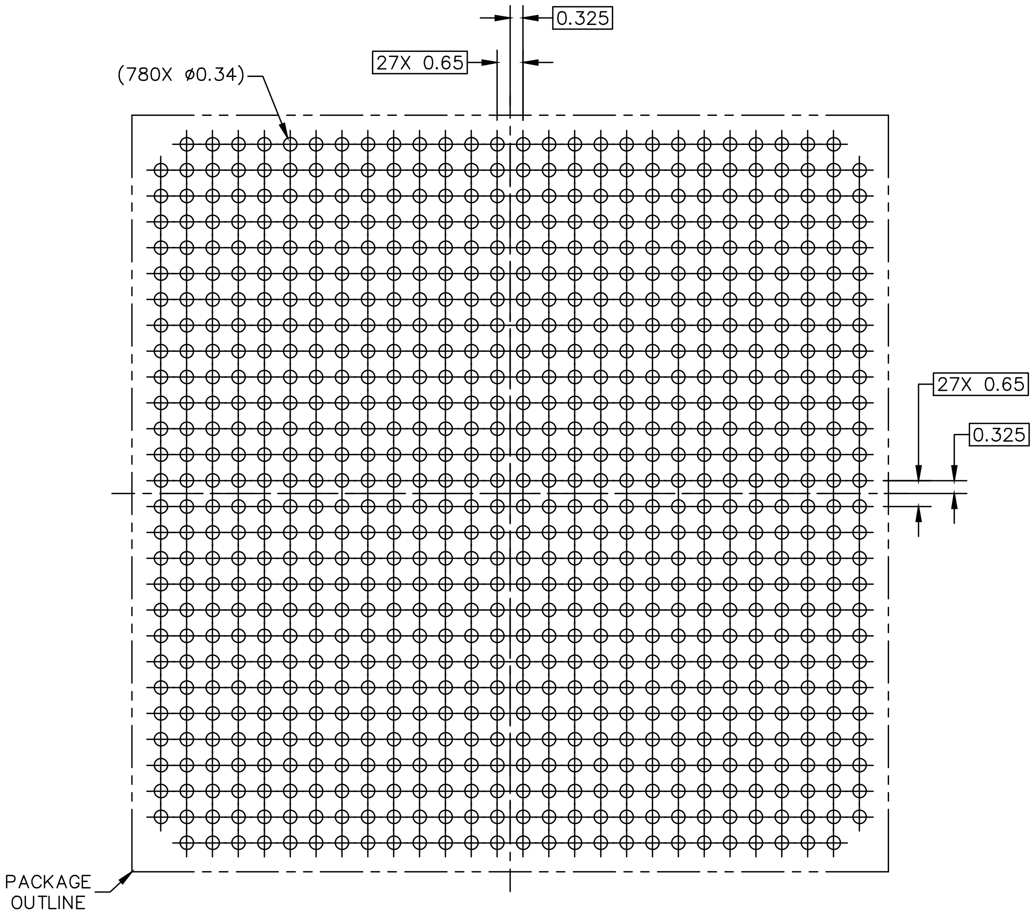
SOT2027-1



RECOMMENDED STENCIL THICKNESS 0.1MM OR 0.125MM

PCB DESIGN GUIDELINES – SOLDER PASTE STENCIL

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DATE: 13 SEP 2022

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01441D	REVISION: A	

Figure 4. Reflow soldering footprint part3 for FBGA780 (SOT2027-1)

H-FC-PBGA-780 I/O
19 X 19 X 2.16 PKG, 0.65 PITCH

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SOT2027-1

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.
7. LID OVERHANG ON SUBSTRATE NOT ALLOWED.
8. VENT AREA BETWEEN LID AND SUBSTRATE, SIZE MAY VARY.

DATE: 13 SEP 2022

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: 98ASA01441D	REVISION: A	

Figure 5. Package outline note FBGA780 (SOT2027-1)

4 Legal information

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Date of release: 3 October 2022