

FCBGA - 2.556 mm max height

The drawing consists of three views: a top view, a side view, and a pin grid view.

Top View: Shows a square footprint with overall dimensions of 18.1 mm by 18.1 mm. The mounting holes are spaced at 17.6 mm. A central square area is defined by dimensions of 13.6 mm by 11.6 mm. Features include a BALL A1 CORNER, PIN 1 ID (OPTIONAL), and a circular feature with a diameter of 0.1 mm and a circular runout tolerance of 0.1 C.

Side View: Shows the profile of the connector. The total height is 2.556 mm, with a mounting flange height of 2.328 mm. The central body has a height of 2.144 mm and a base height of 1.940 mm. The surface finish is specified as 0.2 C. The base is defined by a SEATING PLANE with a flatness tolerance of 0.2 C. The bottom surface has a thickness of 0.5 mm typical and 0.3 mm minimum.

Pin Grid View: Shows a 22x22 grid of pins. The overall width and height of the grid are 16.8 mm typical. The pin pitch is 0.8 mm typical. The grid is symmetrical (SYMM) about both horizontal and vertical centerlines. The pins are labeled with letters A through Y and numbers 1 through 22. The pin diameter is 0.25 mm (M) with a circular runout tolerance of 0.1 C. The pin height is 0.1 mm (M) with a circular runout tolerance of 0.1 C.

Notes:

- NOTE 3: 484X \varnothing 0.55 / 0.45

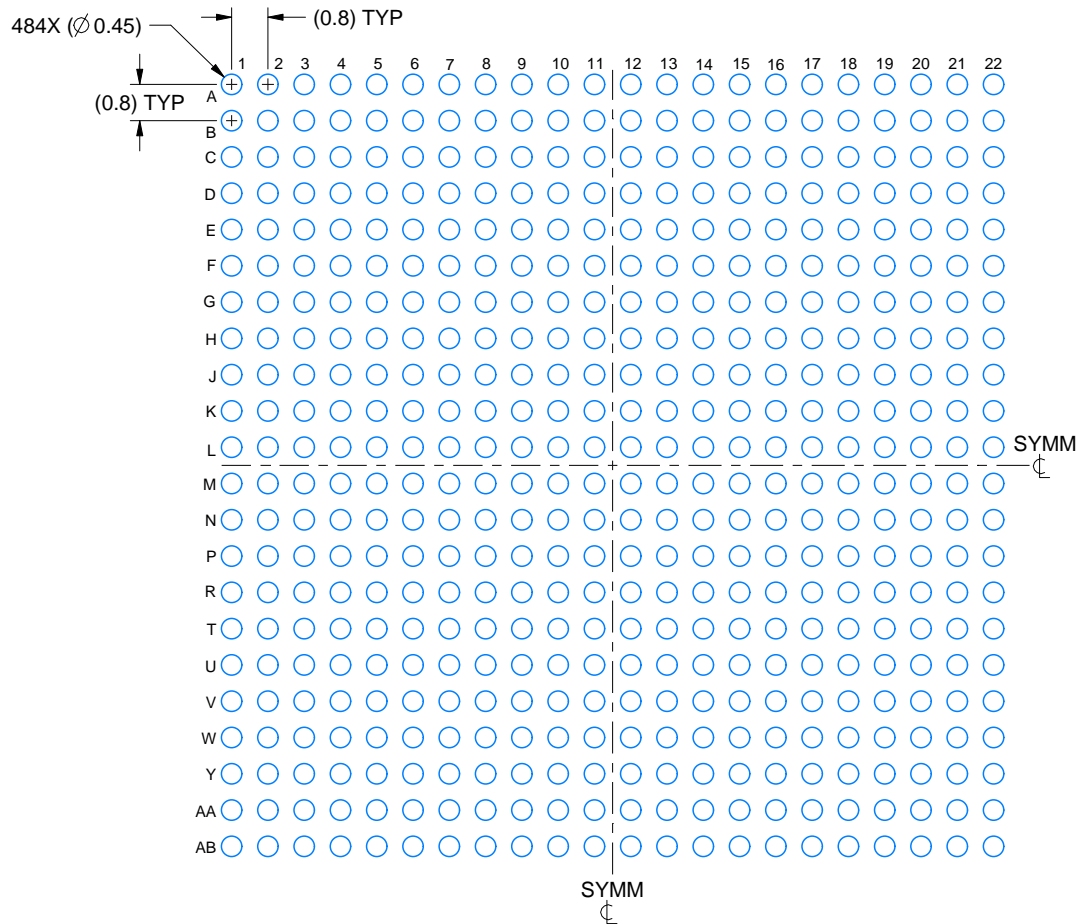
1. All linear dimensions are in millimeters. Any dimensions in parenthesis are for reference only. Dimensioning and tolerancing per ASME Y14.5M.
2. This drawing is subject to change without notice.
3. Ball diameter after reflow. Dimension is measured at the maximum solder ball diameter parallel to primary datum C.

EXAMPLE BOARD LAYOUT

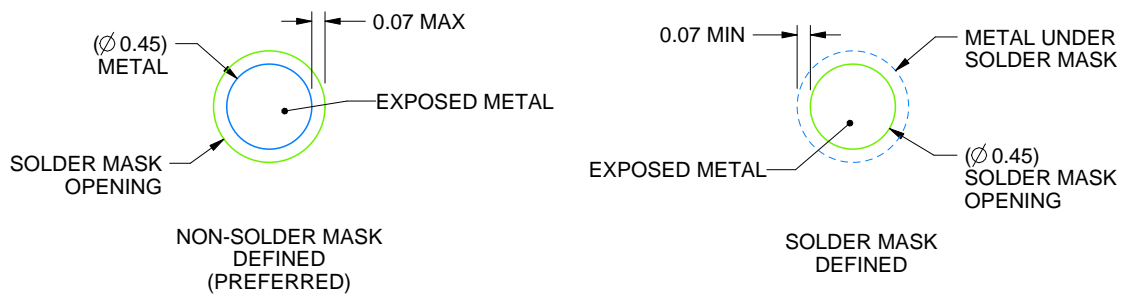
AMB0484A

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BALL GRID ARRAY



LAND PATTERN EXAMPLE
EXPOSED METAL SHOWN
SCALE:6X



SOLDER MASK DETAILS
NOT TO SCALE

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NOTES: (continued)

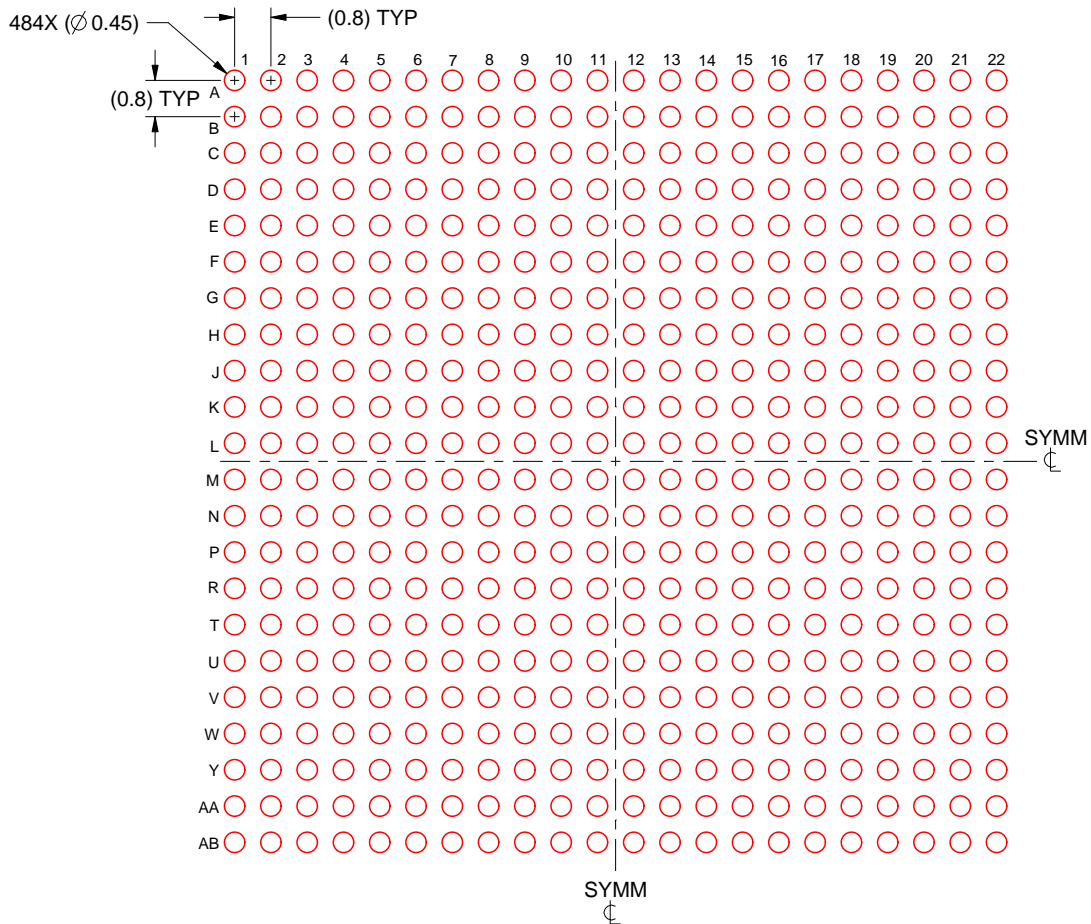
- Final dimensions may vary due to manufacturing tolerance considerations and also routing constraints.
For more information, see Texas Instruments literature number SPRU811 (www.ti.com/lit/spru811).

EXAMPLE STENCIL DESIGN

AMB0484A

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BALL GRID ARRAY



SOLDER PASTE EXAMPLE
BASED ON 0.15 mm THICK STENCIL
SCALE: 6X

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NOTES: (continued)

5. Laser cutting apertures with trapezoidal walls and rounded corners may offer better paste release.

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