

Manual Update Sheet

TMS320F2823x/TMS320F2833x MicroStar BGA Discontinued and Redesigned



ABSTRACT

This document should be used in conjunction with the device data sheet and describes the updated package designator for the indicated devices.

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Trademarks

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1 Package Redesign Details

Explanation

The devices in the MicroStar BGA™ packaging were redesigned using a laminate nfBGA package. This nfBGA package offers datasheet-equivalent electrical performance. It is also footprint equivalent to the MicroStar BGA. For more details, please refer to this [nfBGA Packaging Application Report](#).

When referencing the device data sheet, use the new package designator in place of the discontinued package designator throughout the document.

The orderable addendum at the end of the device data sheet will reflect the new package designator.

See the following page or the end of the device data sheet for the updated nfBGA package drawing.

Table 1-1. Package Designator

| Old Package Designator | New Package Designator |
|------------------------|------------------------|
| ZHH | ZAY |

Reason for Discontinuance

Due to an equipment End-Of-Life notice from our substrate supplier, we are phasing out certain MicroStar BGA and MicroStar Junior™ BGA packaging devices and offering a Last Time Buy.

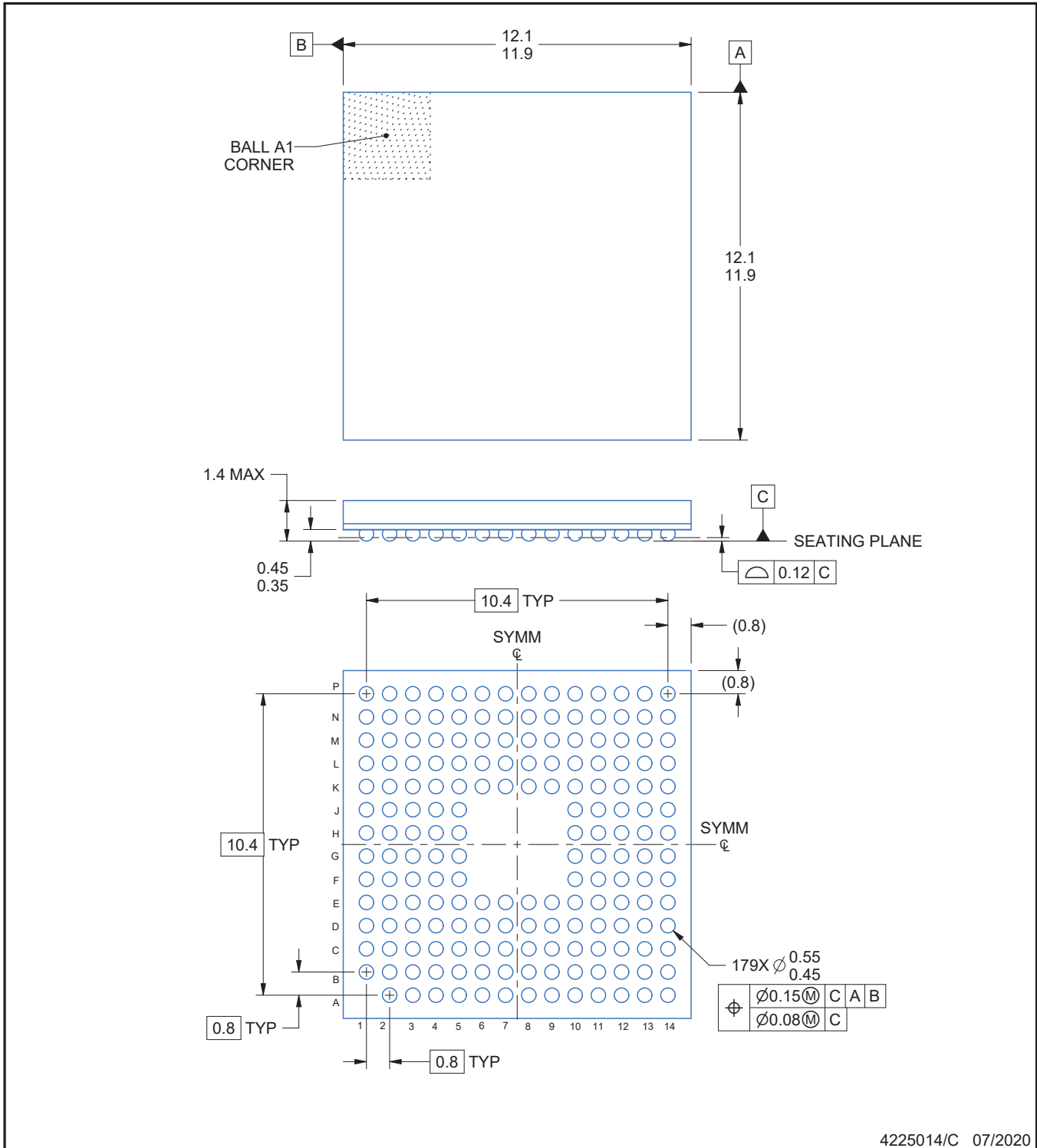
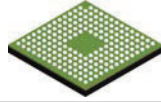
These devices have now been converted to an nfBGA package.

Devices Affected

The following table describes the devices affected, the old and new package designators, and references to the device data sheet.

Table 1-2. Devices and Nomenclature

| Device | Discontinued MicroStar BGA Device | Redesigned Laminate nfBGA Device | Device Data Sheet |
|--------------|--|--------------------------------------|-------------------------|
| TMS320F2823x | TMS320F28232ZHHHA TMS320F28234ZHHHA | TMS320F28232ZAYA TMS320F28234ZAYA | SPRS439 |
| TMS320F2833x | TMS320F28334ZHHHA TMS320F28335ZHHHA | TMS320F28334ZAYA TMS320F28335ZAYA | SPRS439 |



4225014/C 07/2020

NOTES:

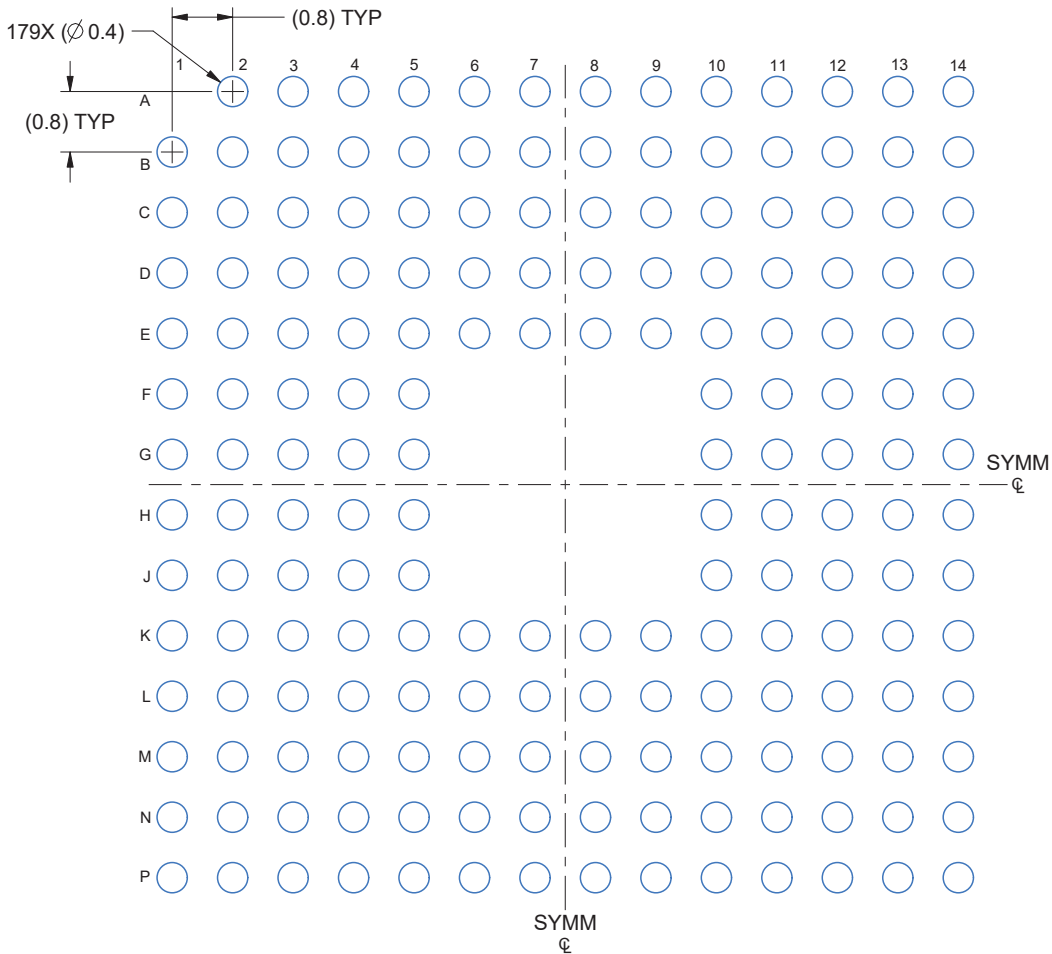
1. All linear dimensions are in millimeters. Any dimensions in parenthesis are for reference only. Dimensioning and tolerancing per ASME Y14.5M.
2. This drawing is subject to change without notice.

EXAMPLE BOARD LAYOUT

ZAY0179A

NFBGA - 1.4 mm max height

PLASTIC BALL GRID ARRAY



LAND PATTERN EXAMPLE

EXPOSED METAL SHOWN
SCALE: 10X



SOLDER MASK DETAILS

NOT TO SCALE

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NOTES: (continued)

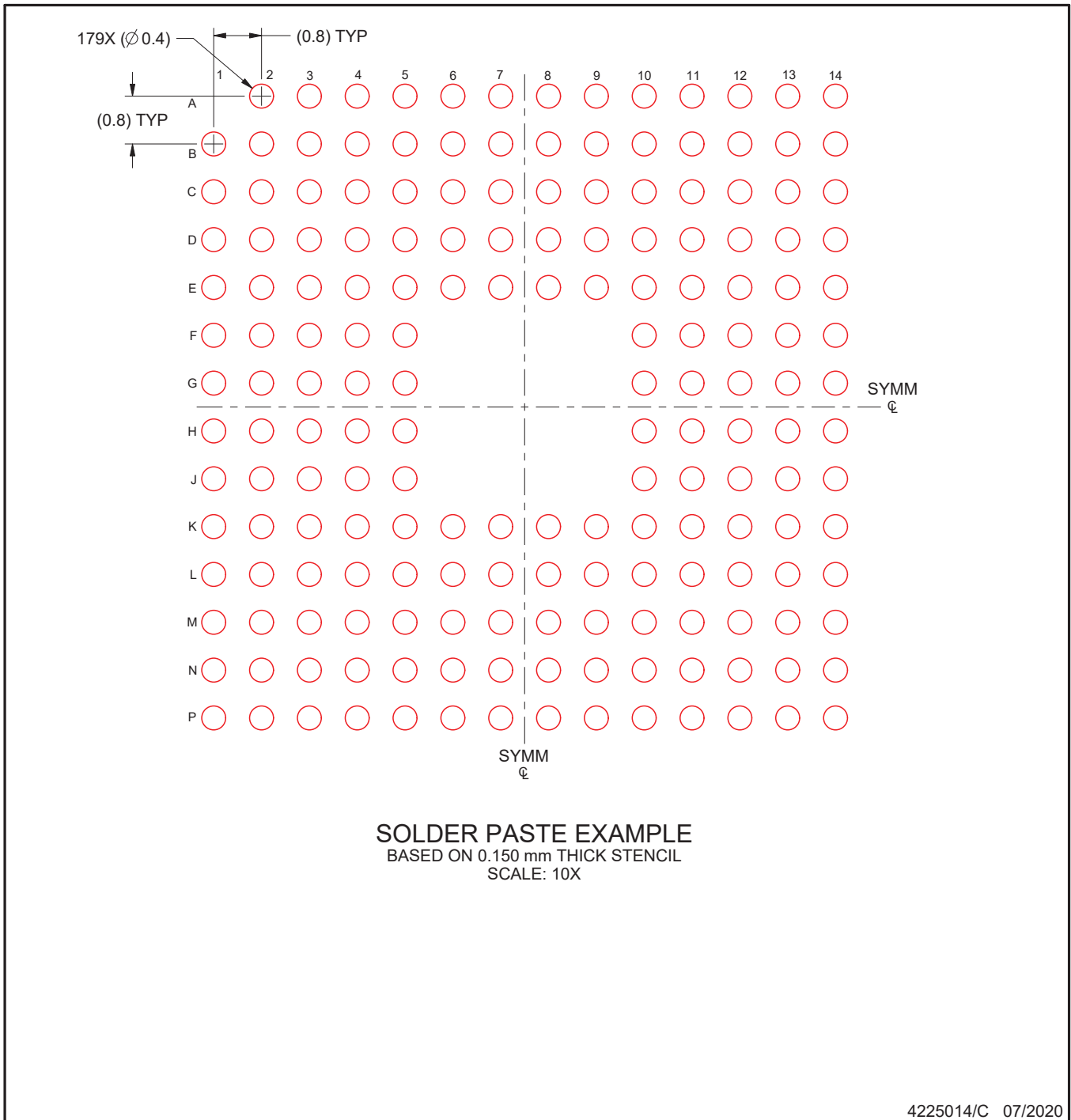
- Final dimensions may vary due to manufacturing tolerance considerations and also routing constraints. For information, see Texas Instruments literature number SPRAA99 (www.ti.com/lit/spraa99).

EXAMPLE STENCIL DESIGN

ZAY0179A

NFBGA - 1.4 mm max height

PLASTIC BALL GRID ARRAY



NOTES: (continued)

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

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