

Manual Update Sheet

TMS320VC5510A 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

MicroStar BGA™ and MicroStar Junior™ are trademarks of Texas Instruments.
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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
GGW	GBC
ZGW	ZAV

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.

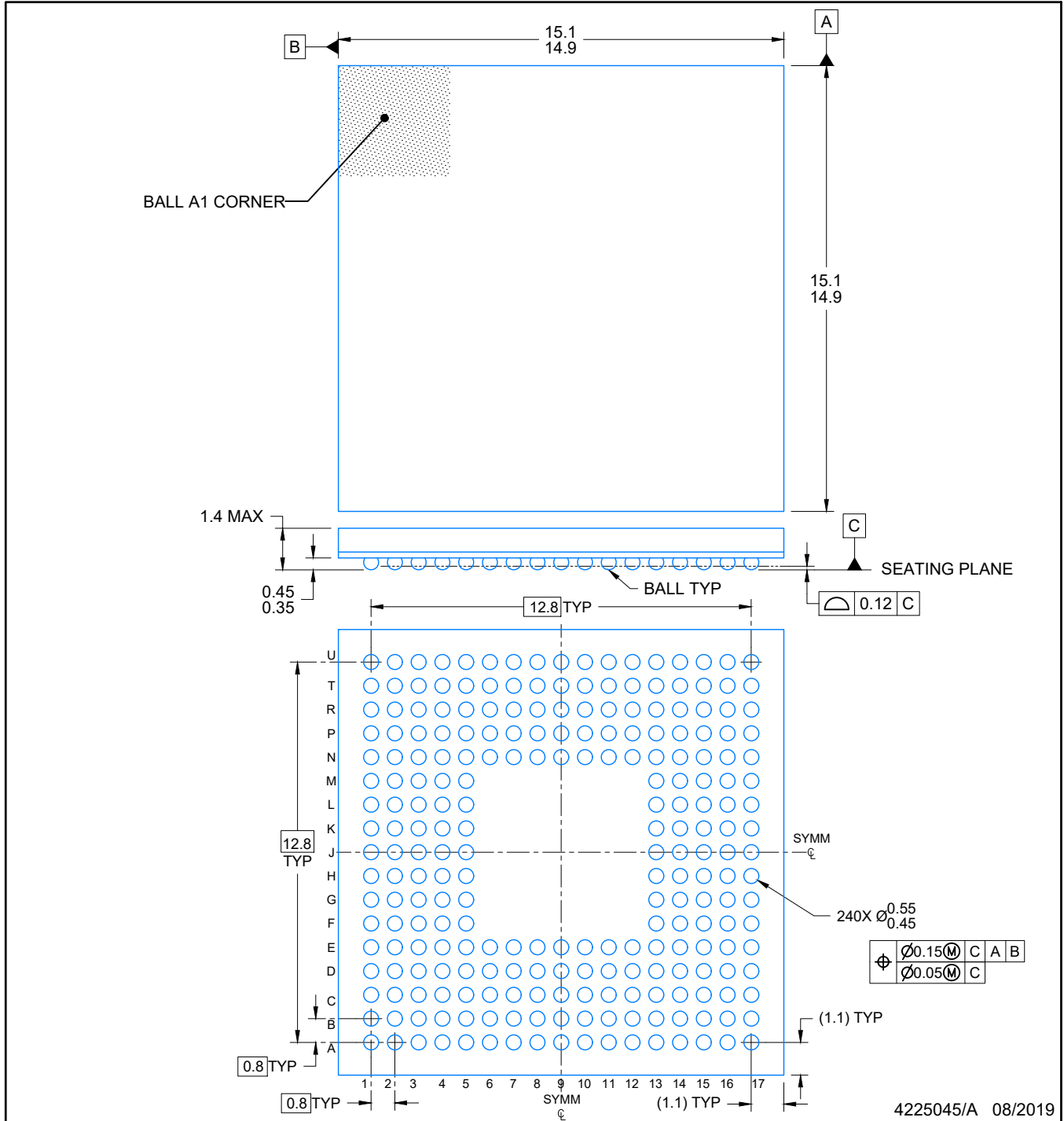
These devices have now been converted to an nfBGA package.

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

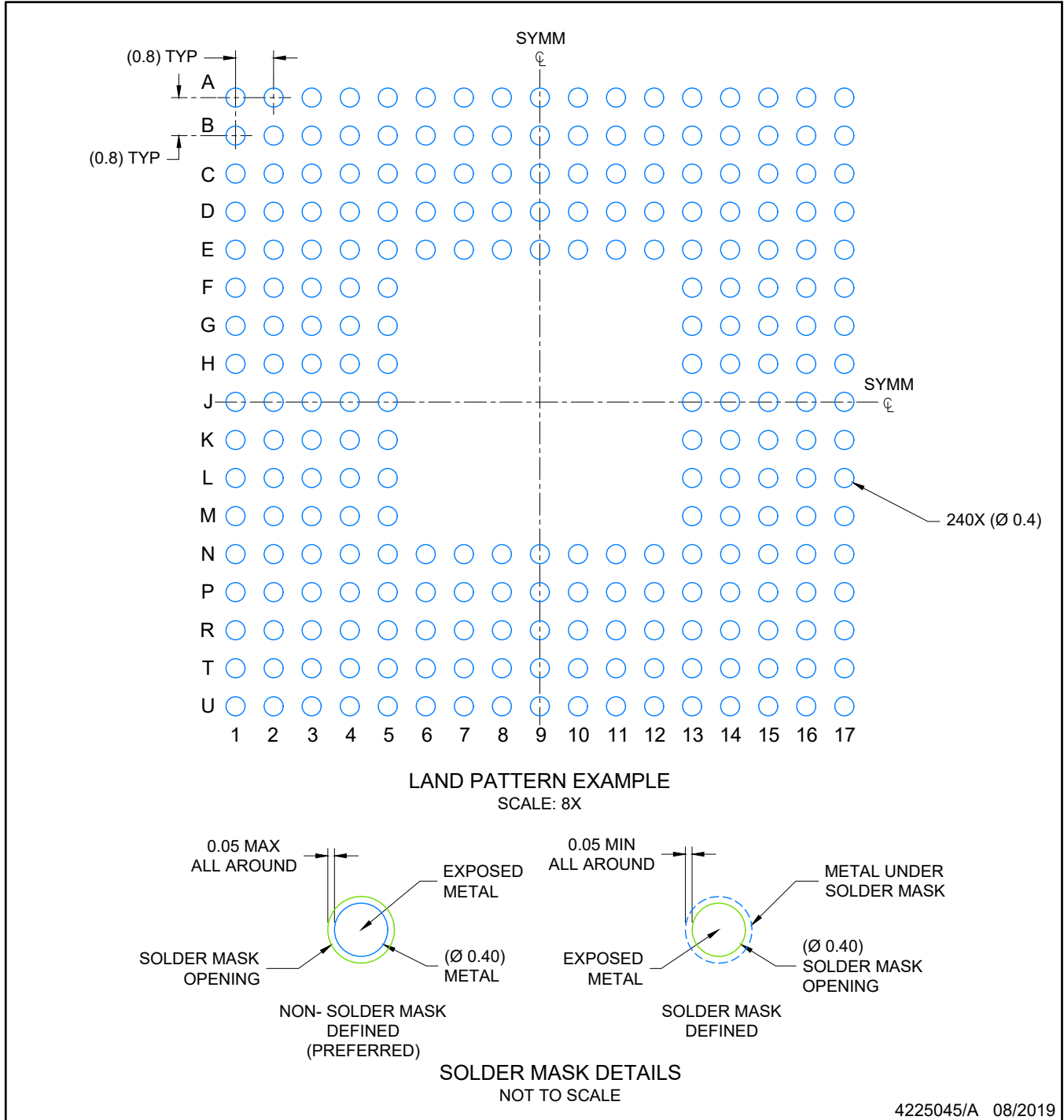
Device	Discontinued MicroStar BGA Device	Redesigned Laminate nfBGA Device	Device Data Sheet
TMS320VC5510A	TMS320VC5510AGGW1	TMS320VC5510AGBC1	SPRS076/SPRS845
TMS320VC5510A	TMS320VC5510AGGW2	TMS320VC5510AGBC2	SPRS076/SPRS845
TMS320VC5510A	TMS320VC5510AGGWA1	TMS320VC5510AGBCA1	SPRS076/SPRS845
TMS320VC5510A	TMS320VC5510AGGWA2	TMS320VC5510AGBCA2	SPRS076/SPRS845
TMS320VC5510A	TMS320VC5510AZGW1	TMS320VC5510AZAV1	SPRS076/SPRS845
TMS320VC5510A	TMS320VC5510AZGW2	TMS320VC5510AZAV2	SPRS076/SPRS845
TMS320VC5510A	TMS320VC5510AZGWA1	TMS320VC5510AZAVA1	SPRS076/SPRS845
TMS320VC5510A	TMS320VC5510AZGWA2	TMS320VC5510AZAVA2	SPRS076/SPRS845
TMS320VC5510A	TMS320VC5510AZGWD2	TMS320VC5510AZAVD2	SPRS845
TMS320VC5510A	TMSDVC5510AGGWA2	TMSDVC5510AGBCA2	SPRS076/SPRS845
TMS320VC5510A	WDVC5510AZGWA2	WDVC5510AZAVA2	SPRS177



NOTES:

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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.



NOTES: (continued)

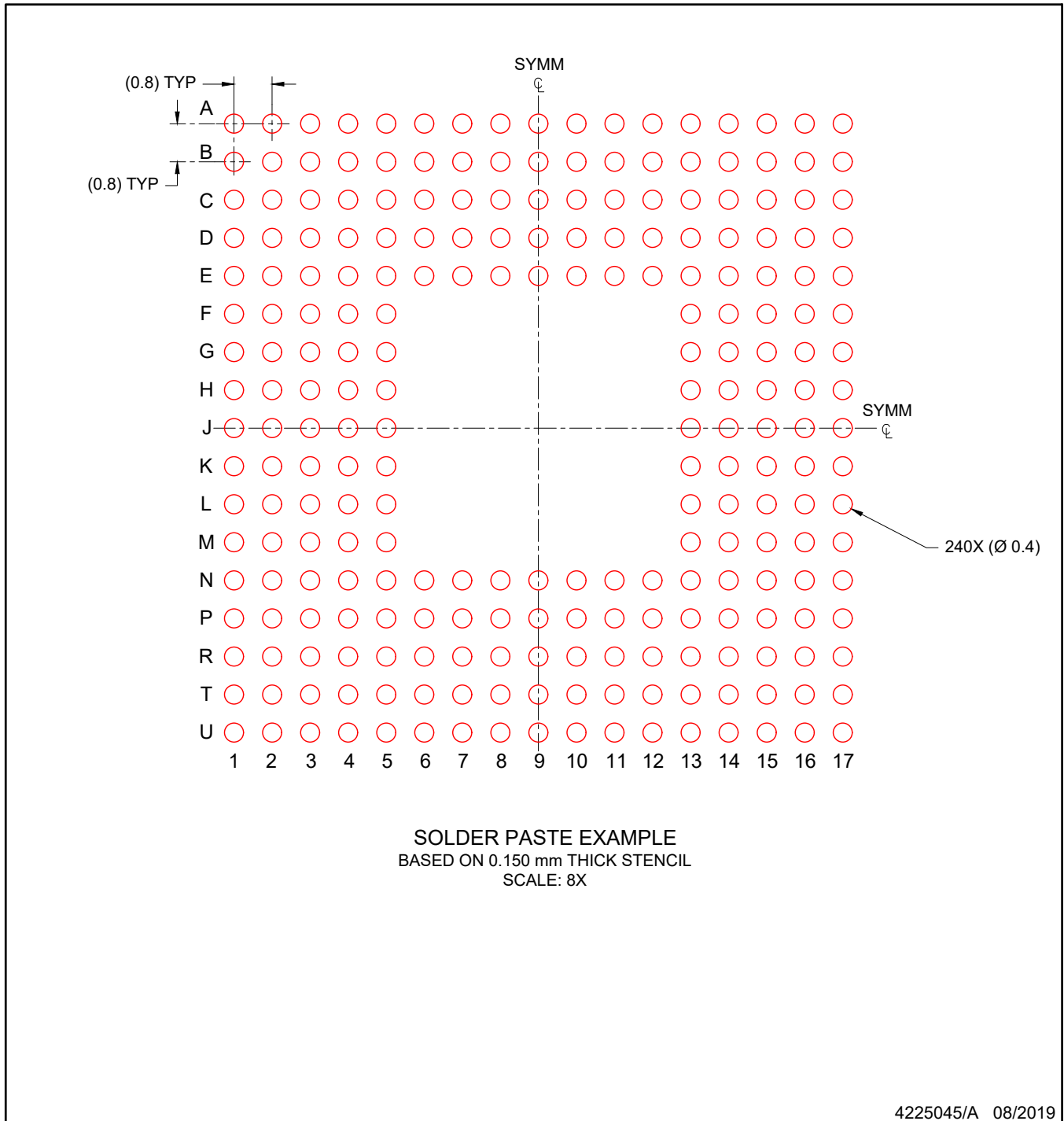
- Final dimensions may vary due to manufacturing tolerance considerations and also routing constraints. Refer to Texas Instruments Literature number SNVA009 (www.ti.com/lit/snva009).

EXAMPLE STENCIL DESIGN

GBC0240A

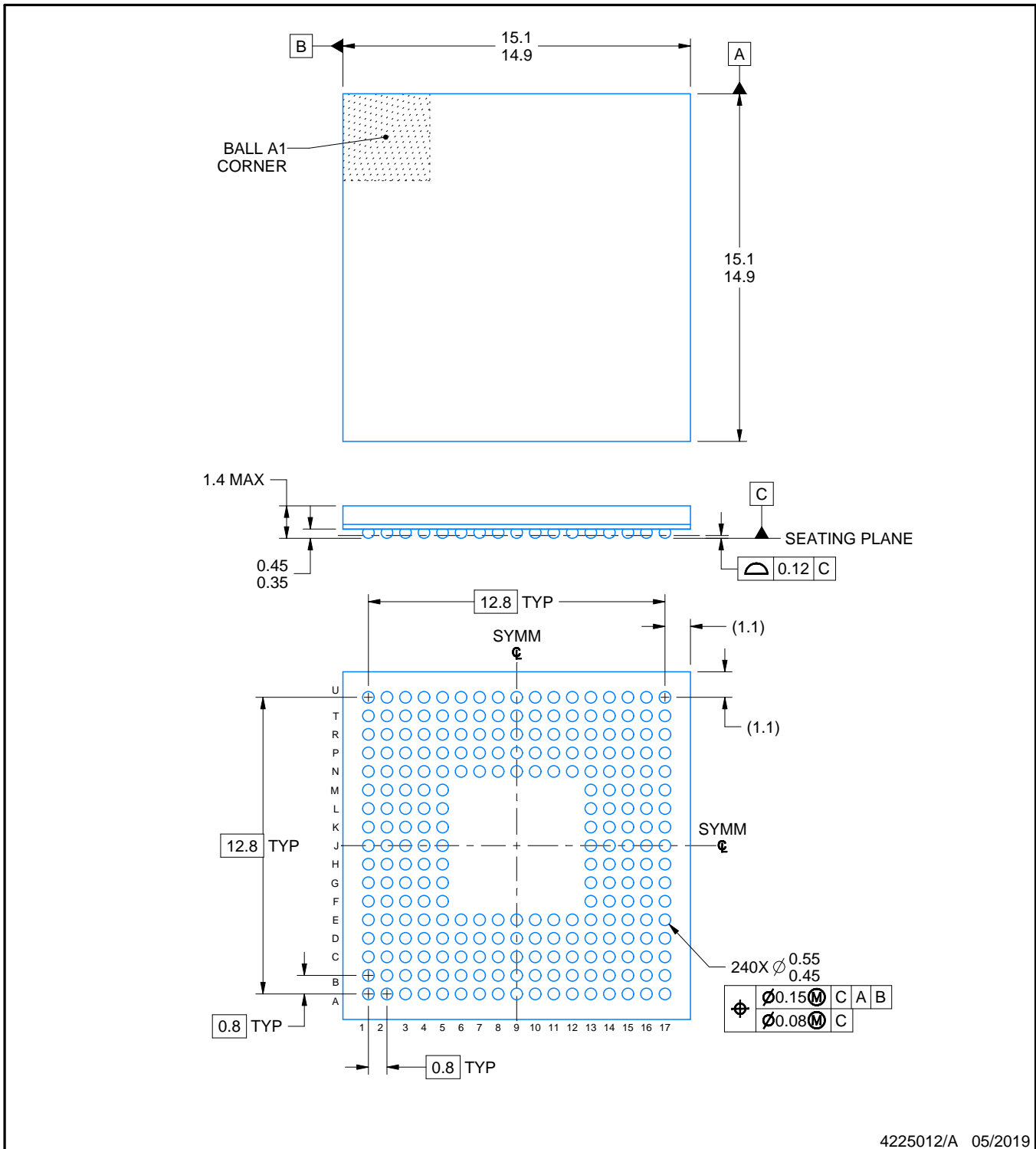
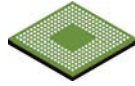
NFBGA - 1.4 mm max height

PLASTIC BALL GRID ARRAY



NOTES: (continued)

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



NOTES:

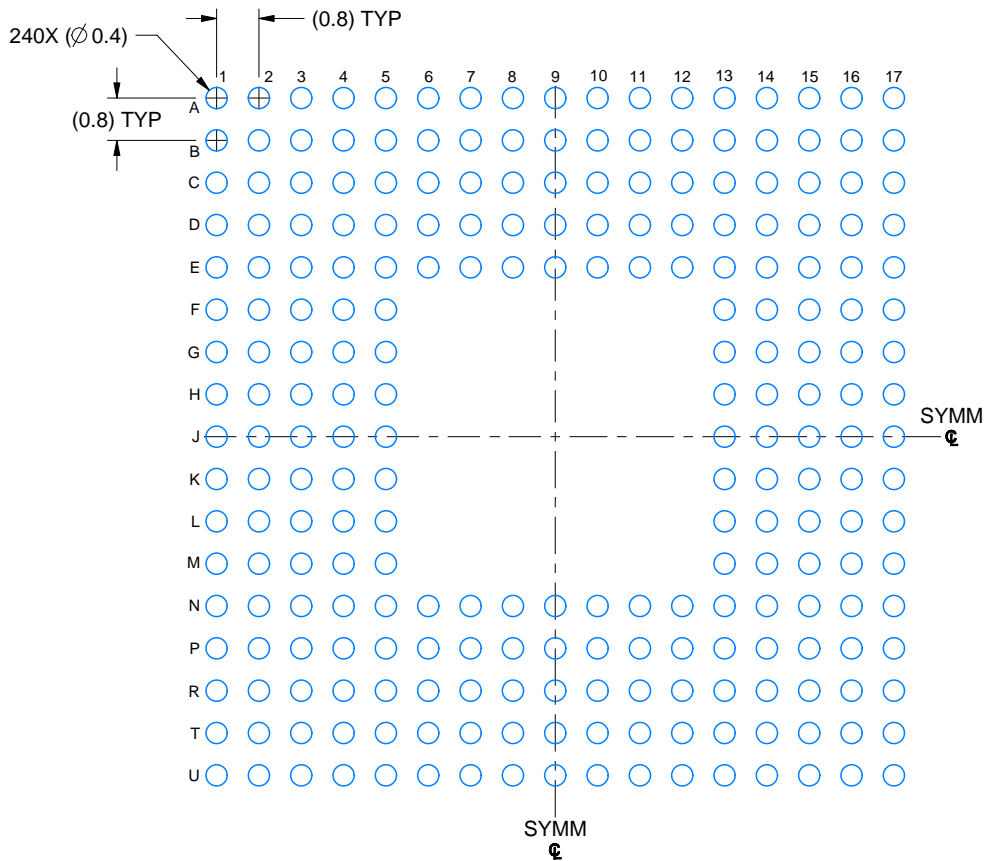
1. All linear dimensions are in millimeters. Any dimensions in parenthesis are for reference only. Dimensioning and tolerancing per ASME Y14.5M.
2. This drawing is subject to change without notice.

EXAMPLE BOARD LAYOUT

ZAV0240A

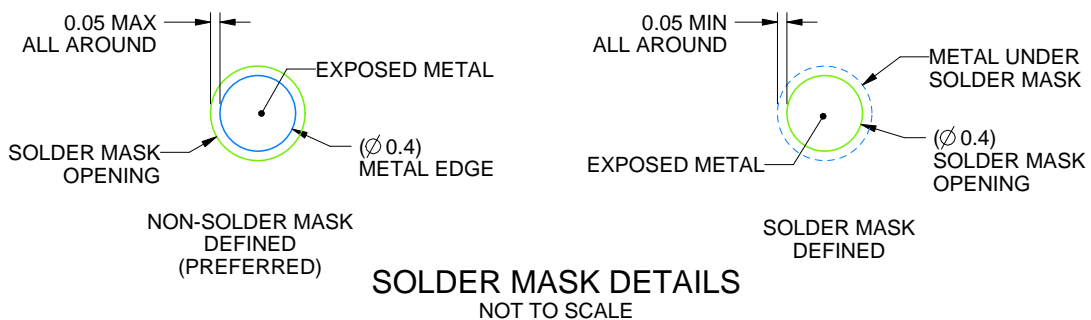
NFBGA - 1.4 mm max height

PLASTIC BALL GRID ARRAY



LAND PATTERN EXAMPLE

EXPOSED METAL SHOWN
SCALE: 7X



SOLDER MASK DETAILS

NOT TO SCALE

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NOTES: (continued)

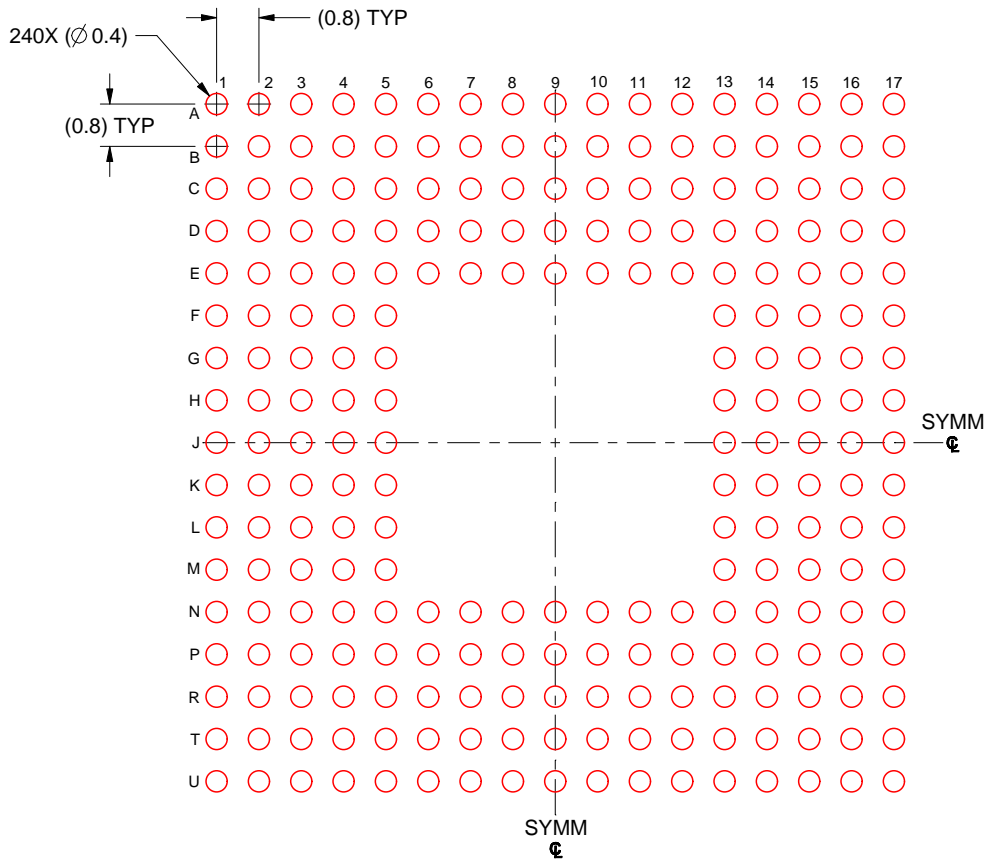
- Final dimensions may vary due to manufacturing tolerance considerations and also routing constraints. For information, see Texas Instruments literature number SPRAA99 (www.ti.com/lit/spraa99).

EXAMPLE STENCIL DESIGN

ZAV0240A

NFBGA - 1.4 mm max height

PLASTIC BALL GRID ARRAY



SOLDER PASTE EXAMPLE
BASED ON 0.125 mm THICK STENCIL
SCALE: 7X

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NOTES: (continued)

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

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