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# TMS320F2833x and TMS320F2823x DSC Silicon Errata

### 1 Introduction

This document describes the silicon updates to the functional specifications for the TMS320F2833x and TMS320F2823x digital signal controllers (DSCs).

The updates are applicable to:

- 179-ball MicroStar BGA<sup>™</sup>, ZHH Suffix
- 176-ball Plastic BGA, ZJZ Suffix
- 176-pin Low-profile Thin Quad Flatpack, PGF Suffix

#### 2 Device and Development Tool Support Nomenclature

To designate the stages in the product development cycle, TI assigns prefixes to the part numbers of all [TMS320] DSP devices and support tools. Each TMS320<sup>™</sup> DSP commercial family member has one of three prefixes: TMX, TMP, or TMS (e.g., **TMS**320F28335). Texas Instruments recommends two of three possible prefix designators for its support tools: TMDX and TMDS. These prefixes represent evolutionary stages of product development from engineering prototypes (TMX/TMDX) through fully qualified production devices/tools (TMS/TMDS).

- **TMX** Experimental device that is not necessarily representative of the final device's electrical specifications
- **TMP** Final silicon die that conforms to the device's electrical specifications but has not completed quality and reliability verification
- **TMS** Fully qualified production device

Support tool development evolutionary flow:

- **TMDX** Development-support product that has not yet completed Texas Instruments internal qualification testing
- TMDS Fully qualified development-support product

TMX and TMP devices and TMDX development-support tools are shipped against the following disclaimer:

"Developmental product is intended for internal evaluation purposes."

TMS devices and TMDS development-support tools have been characterized fully, and the quality and reliability of the device have been demonstrated fully. TI's standard warranty applies.

Predictions show that prototype devices (TMX or TMP) have a greater failure rate than the standard production devices. Texas Instruments recommends that these devices not be used in any production system because their expected end-use failure rate still is undefined. Only qualified production devices are to be used.

TI device nomenclature also includes a suffix with the device family name. This suffix indicates the package type (for example, ZJZ) and temperature range (for example, A).

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#### **3 Device Markings**

Figure 1 provides an example of the F2833x and F2823x device markings and defines each of the markings. The device revision can be determined by the symbols marked on the top of the package as shown in Figure 1. Some prototype devices may have markings different from those illustrated. Figure 2 shows an example of the device nomenclature.

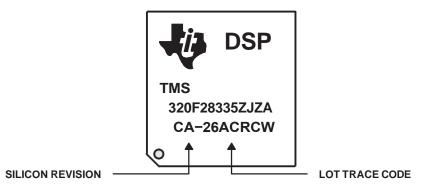
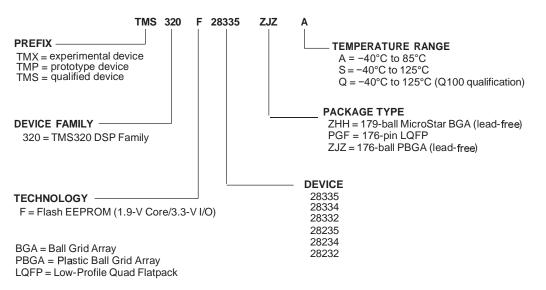


Figure 1. Example of Device Markings

Table 1. Determinin	g Silicon Revision From	Lot Trace Code	(F2833x and F2823x)
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SECOND LETTER IN PREFIX OF LOT TRACE CODE	SILICON REVISION	REVISION ID (0x0883)	COMMENTS
Blank (no second letter in prefix)	Indicates Revision 0	0x0000	This silicon revision is available as TMX.
A	Indicates Revision A	0x0001	This silicon revision is TMS.



**Figure 2. Example of Device Nomenclature** 

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