



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**Notification# 20240129003.0
Datasheet for TMS320F28003x
Information Only**

Date: February 02, 2024
To: MOUSER PCN

Dear Customer:

This is an information-only announcement of a change to a device that is currently offered by Texas Instruments.

The changes discussed within this notification are for your information only.

Any negotiated alternative change requirements will be provided via the customer's defined process. Customers with previously negotiated, special requirements will be handled separately. Any inquiries should be directed to your local Field Sales Representative.

For questions regarding this notice, contact your local Field Sales Representative or the Change Management team.

Sincerely,

Change Management Team
SC Business Services

20240129003.0
Information Only Datasheet
Attachments

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, you have recently purchased these devices. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
F280033SPM	NULL
F280033SPN	NULL
F280033SPT	NULL
F280033SPZ	NULL
F280034PTRQ1	NULL
F280034SPM	NULL
F280034SPN	NULL
F280034SPT	NULL
F280034SPZ	NULL
F280036CPMRQ1	NULL
F280036PMRQ1	NULL
F280037CPTRQ1	NULL
F280037CPZRQ1	NULL
F280037CSPM	NULL
F280037CSPN	NULL
F280037CSPT	NULL
F280037CSPTR	NULL
F280037CSPZ	NULL
F280037PZRQ1	NULL
F280037SPM	NULL
F280037SPMR	NULL
F280037SPN	NULL
F280037SPNR	NULL
F280037SPT	NULL
F280037SPZ	NULL
F280038CPMQ1	NULL
F280038CPMRQ1	NULL
F280038PMRQ1	NULL
F280039CPZQ1	NULL
F280039CPZRQ1	NULL
F280039CSPM	NULL
F280039CSPMR	NULL
F280039CSPN	NULL
F280039CSPNR	NULL
F280039CSPZ	NULL
F280039CSPZR	NULL
F280039PZRQ1	NULL
F280039SPM	NULL
F280039SPN	NULL
F280039SPZ	NULL

Technical details of this Product Change follow on the next page(s).

PCN Number:	20240129003.0	PCN Date:	February 02, 2024
Title:	Datasheet for TMS320F28003x		
Customer Contact:	Change Management team	Dept:	Quality Services
Change Type:	Electrical Specification		
PCN Details			
Description of Change:			
<p>Texas Instruments Incorporated is announcing an information only notification. The product datasheet(s) is being updated as summarized below. The following change history provides further details.</p> <p style="text-align: right;"> TMS320F280039C, TMS320F280039C-Q1, TMS320F280039-Q1, TMS320F280038C-Q1 TMS320F280037C, TMS320F280037C-Q1, TMS320F280037, TMS320F280036C-Q1 TMS320F280036-Q1, TMS320F280034, TMS320F280034-Q1 </p>			
		<small>SPRSP61C – OCTOBER 2021 – REVISED DECEMBER 2023</small>	

Changes from November 30, 2022 to December 7, 2023

Page

- **This Revision History lists the changes from SPRSP61B to SPRSP61C.** 1
- **Global:** Added TMS320F280033-Q1 device [Preview information (not Production Data)]..... 1
- **Global:** Information on the TMS320F280039-Q1, TMS320F280039, TMS320F280038-Q1, TMS320F280037-Q1, TMS320F280036C-Q1, TMS320F280036-Q1, TMS320F280034-Q1, and TMS320F280033 devices is now Production Data..... 1
- **Global:** TMS320F280039C-Q1, TMS320F280039-Q1, TMS320F280037C-Q1, and TMS320F280034-Q1 are now available in the 80-pin PN package..... 1
- **Features** section: Changed Security features under "On-chip memory" feature..... 1
- **Features** section: Updated "Functional Safety-Compliant" feature and "Safety-related certification" feature.... 1
- **Package Information** table: Added table..... 3
- **Functional Block Diagram** figure: Updated "Buses Legend" by changing "CLU" to "CLA"..... 6
- **Device Comparison** table: Changed "Code security for on-chip flash and RAM" to "Security: JTAGLOCK, Zero-pin boot, Dual-zone security"..... 8
- **Device Comparison** table: Changed the number of ADC channels for the 100-pin PZ package from 23 to 25. 8
- **Device Comparison** table: TMS320F280039C-Q1, TMS320F280039-Q1, TMS320F280037C-Q1, TMS320F280034-Q1, and TMS320F280033-Q1 are now available in the 80-pin PN package..... 8
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- **Power and Ground** table: Updated description of VREGENZ..... 36
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- **ADC Electrical Data and Timing** section: Updated "The ADC inputs should be kept below $V_{DDA} + 0.3\text{ V}$..." Note..... 127
- **ADC Timing Parameter Descriptions** table: Changed title from *ADC Timing Parameters* to *ADC Timing Parameter Descriptions*. Updated table..... 132
- **Comparator Subsystem (CMPSS)** section: Updated section. Added "Two digital filters, 65536 max filter clock prescale" to "Each CMPSS includes" list..... 135
- **Block Diagram** section: Added "Each reference 12-bit DAC can be configured to drive a reference voltage into the negative input of the respective comparator" paragraph. Added "Reference DAC Block Diagram" figure..... 136
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- **Sigma-Delta Filter Module (SDFM)** section: Changed "Master Filter Enable (MFE) bit" to "Main Filter Enable (MFE) bit"..... 159
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- *I2C Electrical Data and Timing* section: Updated Note..... 166
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- *PMBus Fast Mode Switching Characteristics* table: Added f_{FSM_CLK} , FSM_CLK clock frequency..... 169
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- *Peripheral Registers Memory Map* table: Changed table title from "Peripheral Registers Memory Map (C28)" to "Peripheral Registers Memory Map". Updated table..... 201
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The datasheet number will be changing.

Device Family	Change From:	Change To:
TMS320F28003x	SPRSP61B	SPRSP61C

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/TMS320F280039C>

Reason for Change:

To accurately reflect device characteristics.

Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

No anticipated impact. This is a specification change announcement only. There are no changes to the actual device

Changes to product identification resulting from this PCN:

None.

Product Affected:

F280037CSPM	F280037CSPTR	F280039SPZ	F280037SPT
F280036PMRQ1	F280036CPMRQ1	F280038PMRQ1	F280037SPZ
F280034SPZ	F280033SPZ	F280037CSPN	F280033SPN
F280039CSPNR	F280039CSPMR	F280037SPMR	F280037PTRQ1
F280039CSPZ	F280037SPM	F280034SPM	F280037CSPZ
F280039CSPZR	F280037SPNR	F280034SPN	F280037SPN
F280039SPM	F280034PTRQ1	F280039CPZRQ1	F280034SPT
F280039SPN	F280033SPM	F280039CSPN	F280033SPT
F280037CPTQ1	F280039CPZQ1	F280037PZRQ1	F280038CPMRQ1
F280037CPTRQ1	F280039CSPM	F280039PZRQ1	F280038CPMQ1
F280037CSPT	F280037CPZRQ1		

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.

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