12500 TI Boulevard, MS 8640, Dallas, Texas 75243

Notification# 20180619001
Datasheet for TMS320F28062 - TMS320F28069
Information Only

Date: June 25, 2018
To: TOKYO ELECTRON DEVICE (DSTR) PCN

Dear Customer:

This is an information-only announcement of a change to the datasheet for 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 PCN Manager (PCN_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services

Information Only
Attachments

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
TMS320F28069PZPQ	null
TMS320F28062PNT	null
TMS320F28069PNT	null
TMS320F28066PZPS	null
TMS320F28062PZPS	null

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

PCN Number:	20180619001	PCN Date:	June 25, 2018
Title:	Datasheet for TMS320F28062 - TMS320F28069		
Customer Contact:	PCN Manager	Dept:	Quality Services

Change Type:		
☐ Assembly Site	☐ Design	☐ Wafer Bump Site
☐ Assembly Process	☒ Data Sheet	☐ Wafer Bump Material
☐ Assembly Materials	☐ Part number change	☐ Wafer Bump Process
☐ Mechanical Specification	☐ Test Site	☐ Wafer Fab Site
☐ Packing/Shipping/Labeling	☐ Test Process	☐ Wafer Fab Materials
		☐ Wafer Fab Process

Notification Details

Description of Change:

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.

TEXAS INSTRUMENTS

TMS320F28069, TMS320F28068, TMS320F28067, TMS320F28066
TMS320F28065, TMS320F28064, TMS320F28063, TMS320F28062

SPRS698G–NOVEMBER 2010–REVISED MAY 2018

Changes from March 22, 2016 to May 18, 2018 (from F Revision (March 2016) to G Revision) — **Page**

- **Global:** Removed TMDS28069USB (F28069 Piccolo controlSTICK). 1
- Section 1.1 (Features): Added "Temperature Options" feature. 1
- Section 1.2 (Applications): Updated section. 2
- Section 3.1 (Related Products): Added section. 10
- Section 4.1 (Pin Diagrams): Added NOTE about PowerPAD. 13
- Section 4.2 (Signal Descriptions): Updated NOTE. 14
- Table 4-1 (Signal Descriptions): Updated DESCRIPTION of $\overline{XRS}$ and V_{DDIO}. 14
- Table 4-1: Added "Reserved" mux positions to GPIO signals. 14
- Section 5.1 (Absolute Maximum Ratings): Updated description of "Input clamp current". 23
- Section 5.2 (ESD Ratings – Commercial): Changed title from "ESD Ratings for TMS320F2806xU" to "ESD Ratings – Commercial". Updated table. 24
- Section 5.3 (ESD Ratings – Automotive): Changed title from "ESD Ratings for TMS320F2806x, TMS320F2806xM, and TMS320F2806xF" to "ESD Ratings – Automotive". Updated table. 24
- Table 5-1 (TMS320F2806x Current Consumption at 90-MHz SYSCLKOUT): Updated "To realize the I_{DD} number shown for HALT mode ..." footnote. 26
- Section 5.12 (Power Sequencing): Added "(for analog pins, this value is 0.7 V above V_{DDA})" to "There is no power sequencing requirement needed ..." paragraph. 35
- Table 5-14 (Flash Parameters at 90-MHz SYSCLKOUT): Added MAX Program Time of 2000 ms for all sectors. 41
- Table 5-14: Added MAX Erase Time of 15 s for all sectors. 41
- Table 5-14: Added footnote about program time. 41
- Table 5-14: Added footnote about parameters in MAX column. 41
- Figure 6-1 (28069 Memory Map): Added starting address of Calibration Data (0x3D 7E82). 54
- Figure 6-1: Updated 0x3F 8000–0x3F FFC0. 54
- Figure 6-1: Updated footnote about 2806xM and 2806xF devices. 54
- Figure 6-1: Added footnote about ROM contents. 54
- Figure 6-2 (28068 Memory Map): Added starting address of Calibration Data (0x3D 7E82). 55
- Figure 6-2: Updated 0x3F 8000–0x3F FFC0. 55
- Figure 6-2: Updated footnote about 2806xM and 2806xF devices. 55
- Figure 6-2: Added footnote about ROM contents. 55
- Figure 6-3 (28067 Memory Map): Added starting address of Calibration Data (0x3D 7E82). 56
- Figure 6-3: Updated 0x3F 8000–0x3F FFC0. 56
- Figure 6-4 (28066 Memory Map): Added starting address of Calibration Data (0x3D 7E82). 57
- Figure 6-4: Updated 0x3F 8000–0x3F FFC0. 57
- Figure 6-5 (28065 Memory Map): Added starting address of Calibration Data (0x3D 7E82). 58
- Figure 6-5: Updated 0x3F 8000–0x3F FFC0. 58
- Figure 6-6 (28064 Memory Map): Added starting address of Calibration Data (0x3D 7E82). 59
- Figure 6-6: Updated 0x3F 8000–0x3F FFC0. 59
- Figure 6-7 (28063 Memory Map): Added starting address of Calibration Data (0x3D 7E82). 60
- Figure 6-7: Updated 0x3F 8000–0x3F FFC0. 60

- Figure 6-8 (28062 Memory Map): Added starting address of Calibration Data (0x3D 7E82). 61
- Figure 6-8: Updated 0x3F 8000–0x3F FFC0. 61
- Figure 6-8: Updated footnote about 2806xM and 2806xF devices. 61
- Figure 6-8: Added footnote about ROM contents. 61
- Section 6.5.1.1 (Using the On-chip VREG): Updated section. 68
- Section 6.5.2 (On-chip Power-On Reset (POR) and Brownout Reset (BOR) Circuit): Updated section. 68
- Figure 6-11 (Clock Tree): Updated figure. 72
- Section 6.9.2.1.1 (Features): Updated NOTE about ADCIN pins which are multiplexed with AIO function. 89
- Section 6.9.4 (Serial Peripheral Interface (SPI) Module): Updated "Rising edge with phase delay" clockng scheme. 103
- Section 6.9.4.1 (SPI Master Mode Electrical Data/Timing): Updated section. 106
- Section 6.9.4.2 (SPI Slave Mode Electrical Data/Timing): Updated section. 108
- Table 6-55 (I2C Timing Requirements): Added table. 129
- Table 6-56 (I2C Switching Characteristics): Changed table title from "I2C Timing" to "I2C Switching Characteristics". 129
- Table 6-62 (High-Resolution PWM Characteristics): Updated footnote about MEP step size. 137
- Section 6.9.12 (High-Resolution Capture Modules (HRCAP1 to HRCAP4)): Updated list of HRCAP channel independent key resources. 140
- Figure 6-52 (HRCAP Functional Block Diagram): Updated figure 140
- Table 6-72 (GPIOA MUX): Added footnote about USB functionality of GPIO26 and GPIO27. 147
- Table 6-85 (USB Output Ports DP and DM Switching Characteristics): Z(DRV): Changed MAX value from 44Ω to 50Ω. 159
- Section 8 (Device and Documentation Support): Updated and restructured section. 161
- Section 8.3 (Tools and Software): Added section. 162
- Section 8.4 (Documentation Support): Updated section. 164
- Section 9.1 (Packaging Information): Added paragraph about THERMAL PAD MECHANICAL DATA figure. 166

The datasheet number will be changing.

Device Family	Change From:	Change To:
TMS320F28062 - TMS320F28069	SPRS698F	SPRS698G

These changes may be reviewed at the datasheet links provided.

http://www.ti.com/product/TMS320F28062

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:

TMS320F28062FPFPQ	TMS320F28065PNT	TMS320F28067PFPS	TMS320F28069FPZT
TMS320F28062FPNT	TMS320F28065PZPQ	TMS320F28067PNT	TMS320F28069MPFPQ
TMS320F28062FPZT	TMS320F28065PZPS	TMS320F28067PZPQ	TMS320F28069MPNT
TMS320F28062PFPQ	TMS320F28065PZT	TMS320F28067PZPS	TMS320F28069MPZPQ
TMS320F28062PFPQR	TMS320F28065UPFPS	TMS320F28067PZT	TMS320F28069MPZT
TMS320F28062PFPS	TMS320F28065UPNT	TMS320F28068FPFPQ	TMS320F28069PFPQ
TMS320F28062PNT	TMS320F28065UPZPS	TMS320F28068FPNT	TMS320F28069PFPS
TMS320F28062PZPQ	TMS320F28065UPZT	TMS320F28068FPZT	TMS320F28069PNT
TMS320F28062PZPS	TMS320F28066PFPQ	TMS320F28068MPFPQ	TMS320F28069PZA
TMS320F28062PZT	TMS320F28066PFPS	TMS320F28068MPNT	TMS320F28069PZPQ
TMS320F28062UPNT	TMS320F28066PNT	TMS320F28068MPZT	TMS320F28069PZPS
TMS320F28062UPZT	TMS320F28066PZPQ	TMS320F28068PNT	TMS320F28069PZT
TMS320F28063PNT	TMS320F28066PZPS	TMS320F28068PZPS	TMS320F28069UPFPS
TMS320F28063PZT	TMS320F28066PZT	TMS320F28069FPFPQ	TMS320F28069UPNT
TMS320F28064PZT	TMS320F28066UPZT	TMS320F28069FPNT	TMS320F28069UPZPS
TMS320F28065PFPS	TMS320F28067PFPQ	TMS320F28069FPZPQ	TMS320F28069UPZT

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com