

# 12500 TI Boulevard, MS 8640, Dallas, Texas 75243

# Notification# 20170310001 Datasheet for MSP430FR59xx and MSP430FR58xx Information Only

**Date:** March 24, 2017

To: PREMIER FARNELL 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 PCN Manager (PCN www 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**MSP430FR5969IRGZR

**CUSTOMER PART NUMBER** 

null

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

PCN Number:		20170310001		<b>PCN Date</b>	e: M	March 24, 2017		)17
Title:	Title: Datasheet for MSP430FR59xx and MSP430FR58xx							
<b>Customer Contact:</b>		PCN Manager			Dept:		Quality Services	
Change	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 9	Site			Wafer	Fab Site	
Packing/Shipping/Labeling			Test F	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.



MSP430FR5969, MSP430FR59691, MSP430FR5968, MSP430FR5967 MSP430FR5959, MSP430FR5958, MSP430FR5957 MSP430FR5949, MSP430FR5948, MSP430FR5947, MSP430FR59471

SLAS704F -OCTOBER 2012-REVISED MARCH 2017

Chan	ges from March 10, 2015 to March 9, 2017 Pag
	Removed "at Rates up to 10 Mbps" from SPI features list item
	Added Section 3.1, Related Products
•	Updated the requirements for the capacitor on the RST/NMI pin in Table 4-2, Connection of Unused Pins
•	Added second row to t <sub>Samole</sub> parameter in Table 5-23, 12-Bit ADC, Timing Parameters
•	Removed ADC12DIV from the formula for the t <sub>CONVERT</sub> TYP time, because ADC12CLK is after division
•	Added "R <sub>S</sub> < 10 kΩ" to the note that starts "Approximately 10 Tau (τ) are needed" on Table 5-23, 12-Bit ADC,
	Timing Parameters 4
•	Changed the note that starts "Tools that access the Spy-Bi-Wire and BSL interfaces" 5
	Changed Updated Section 6.3, Operating Modes, and its subsections
•	Changed description in Section 6.4, Interrupt Vector Table and Signatures
•	Added Figure 6-1 5
•	Changed Table 6-4, Interrupt Sources, Flags, and Vectors: removed Reserved vectors and moved Signatures to
	Table 6-5
•	Added Table 6-5, Signatures, and moved contents from Table 6-4.
•	Throughout document, changed "bootstrap loader" to "bootloader"
•	Corrected spelling of NMIIFG in Table 6-11, System Module Interrupt Vector Registers
•	Added AESACTL1 register in Table 6-48, AES Accelerator Registers
•	Corrected value in "x" column for PJ.7/HFXOUT row
•	Changed the requirements for the capacitor on the RST/NMI pin in Section 7.1.4, Reset
•	Replaced former section Development Tools Support with Section 8.3, Tools and Software
•	Updated Section 8.4, Documentation Support



#### MSP430FR5869, MSP430FR5868, MSP430FR5867, MSP430FR58671 MSP430FR5859, MSP430FR5858, MSP430FR5857 MSP430FR5849, MSP430FR5848, MSP430FR5847, MSP430FR58471

SLASE34D -MAY 2014-REVISED MARCH 2017

#### Changes from March 10, 2015 to March 9, 2017

Page

•	Removed "at Rates up to 10 Mbps" from SPI features list item	1
•	Added Section 3.1, Related Products	6
	Updated the requirements for the capacitor on the RST/NMI pin in Table 4-2, Connection of Unused Pins	. 16
•	Added second row to t <sub>Sample</sub> parameter in Table 5-23, 12-Bit ADC, Timing Parameters	. 45
•	Removed ADC12DIV from the formula for the t <sub>CONVERT</sub> TYP time, because ADC12CLK is after division	. <u>16</u> . <u>45</u> . <u>45</u>
•	Added " $R_S < 10 \text{ k}\Omega$ " to the note that starts "Approximately 10 Tau ( $\tau$ ) are needed" on Table 5-23, 12-Bit ADC,	
	Timing Parameters	45
•	Changed the note that starts "Tools that access the Spy-Bi-Wire and BSL interfaces"	. 52
•	Changed Updated Section 6.3, Operating Modes, and its subsections	. <u>52</u> . <u>54</u> . <u>57</u>
•	Changed description in Section 6.4, Interrupt Vector Table and Signatures	. 57
•	Added Figure 6-1	57
•	Changed Table 6-4, Interrupt Sources, Flags, and Vectors: removed Reserved vectors and moved Signatures to	
	Table 6-5	. 58
•	Added Table 6-5, Signatures, and moved contents from Table 6-4	. 59
•	Throughout document, changed "bootstrap loader" to "bootloader"	. 60
•	Corrected spelling of NMIIFG in Table 6-11, System Module Interrupt Vector Registers	. 66
•	Corrected value in "x" column for PJ.7/HFXOUT row	109
•	Changed the requirements for the capacitor on the RST/NMI pin in Section 7.1.4, Reset	119
•	Replaced former section Development Tools Support with Section 8.3, Tools and Software	124
	Updated Section 8.4, Documentation Support	126

The datasheet number will be changing.

Device Family	Change From:	Change To:
MSP430FR59xx	SLAS704E	SLAS704F
MSP430FR58xx	SLASE34C	SLASE34D

These changes may be reviewed at the datasheet links provided.

http://www.ti.com/product/MSP430FR5969

http://www.ti.com/product/MSP430FR5869

# **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:**

MSP430FR58471IRHAR	MSP430FR5857IRHAT	MSP430FR59471IRHAR	MSP430FR5957IRHAT
MSP430FR58471IRHAT	MSP430FR5858IDA	MSP430FR59471IRHAT	MSP430FR5958IDA
MSP430FR5847IDA	MSP430FR5858IDAR	MSP430FR5947IDA	MSP430FR5958IDAR
MSP430FR5847IDAR	MSP430FR5858IRHAR	MSP430FR5947IDAR	MSP430FR5958IRHAR
MSP430FR5847IRHAR	MSP430FR5858IRHAT	MSP430FR5947IRHAR	MSP430FR5958IRHAT
MSP430FR5847IRHAT	MSP430FR5859IDA	MSP430FR5947IRHAT	MSP430FR5959IDA
MSP430FR5848IDA	MSP430FR5859IDAR	MSP430FR5948IDA	MSP430FR5959IDAR
MSP430FR5848IDAR	MSP430FR5859IRHAR	MSP430FR5948IDAR	MSP430FR5959IRHAR
MSP430FR5848IRHAR	MSP430FR5859IRHAT	MSP430FR5948IRHAR	MSP430FR5959IRHAT
MSP430FR5848IRHAT	MSP430FR58671IRGZR	MSP430FR5948IRHAT	MSP430FR5967IRGZR
MSP430FR5849IDA	MSP430FR58671IRGZT	MSP430FR5949IDA	MSP430FR5967IRGZT

MSP430FR5849IDAR	MSP430FR5867IRGZR	MSP430FR5949IDAR	MSP430FR5968IRGZR
MSP430FR5849IRHAR	MSP430FR5867IRGZT	MSP430FR5949IRHAR	MSP430FR5968IRGZT
MSP430FR5849IRHAT	MSP430FR5868IRGZR	MSP430FR5949IRHAT	MSP430FR59691IRGZR
MSP430FR5857IDA	MSP430FR5868IRGZT	MSP430FR5957IDA	MSP430FR59691IRGZT
MSP430FR5857IDAR	MSP430FR5869IRGZR	MSP430FR5957IDAR	MSP430FR5969IRGZR
MSP430FR5857IRHAR	MSP430FR5869IRGZT	MSP430FR5957IRHAR	MSP430FR5969IRGZT

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