



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**Notification# 20200203001**  
**Datasheet for MSP430FR2522, MSP430FR2512**  
**MSP430FR2422, MSP430FR2476, MSP430FR2475**  
**Information Only**

**Date:** February 18, 2020  
**To:** PREMIER FARNELL 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](mailto: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.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
MSP430FR2422IPW16	null
MSP430FR2422IRHLT	null
MSP430FR2512IPW16	null
MSP430FR2512IRHLT	null
MSP430FR2522IPW16	null
MSP430FR2522IRHLT	null

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

<b>PCN Number:</b>	20200203001	<b>PCN Date:</b>	Feb. 18, 2020
<b>Title:</b>	Datasheet for MSP430FR2522, MSP430FR2512, MSP430FR2422, MSP430FR2476, MSP430FR2475		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<b>Change Type:</b>			
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design
<input type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Data Sheet
<input type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
		<input type="checkbox"/>	Wafer Bump Site
		<input type="checkbox"/>	Wafer Bump Material
		<input type="checkbox"/>	Wafer Bump Process
		<input type="checkbox"/>	Wafer Fab Site
		<input type="checkbox"/>	Wafer Fab Materials
		<input type="checkbox"/>	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.



**MSP430FR2522, MSP430FR2512**

SLASEE4C – JANUARY 2018 – REVISED DECEMBER 2019

#### Changes from August 20, 2019 to December 10, 2019

Page

- Changed the note that begins "Supply voltage changes faster than 0.2 V/μs can trigger a BOR reset..." in [Section 5.3, Recommended Operating Conditions](#) ..... [16](#)
- Added the note that begins "TI recommends that power to the DVCC pin must not exceed the limits..." in [Section 5.3, Recommended Operating Conditions](#) ..... [16](#)
- Changed the note that begins "A capacitor tolerance of ±20% or better is required..." in [Section 5.3, Recommended Operating Conditions](#) ..... [16](#)
- Added the note "See *MSP430 32-kHz Crystal Oscillators* for details on crystal section, layout, and testing" to [Table 5-4, XT1 Crystal Oscillator \(Low Frequency\)](#) ..... [24](#)
- Changed the note that begins "Requires external capacitors at both terminals..." in [Table 5-4, XT1 Crystal Oscillator \(Low Frequency\)](#) ..... [24](#)
- Added the  $t_{TA, cap}$  parameter in [Table 5-13, Timer\\_A](#) ..... [30](#)
- Corrected the test conditions for the  $R_I$  parameter in [Table 5-20, ADC, Power Supply and Input Range Conditions](#). [37](#)
- Added the note that begins " $t_{sample} = \ln(2^{n+1}) \times \tau$  ..." in [Table 5-21, ADC, 10-Bit Timing Parameters](#) ..... [37](#)
- Changed the CRC covered end address to 0x1AF5 in note (1) in [Table 6-18, Device Descriptors](#) ..... [60](#)
- Added "1.5-V reference factor" in [Table 6-18, Device Descriptors](#) ..... [61](#)



**MSP430FR2422**

SLASEE5C – JANUARY 2018 – REVISED DECEMBER 2019

#### Changes from August 20, 2019 to December 10, 2019

Page

- Changed the note that begins "Supply voltage changes faster than 0.2 V/μs can trigger a BOR reset..." in [Section 5.3, Recommended Operating Conditions](#) ..... [13](#)
- Added the note that begins "TI recommends that power to the DVCC pin must not exceed the limits..." in [Section 5.3, Recommended Operating Conditions](#) ..... [13](#)
- Changed the note that begins "A capacitor tolerance of ±20% or better is required..." in [Section 5.3, Recommended Operating Conditions](#) ..... [13](#)
- Added the note "See *MSP430 32-kHz Crystal Oscillators* for details on crystal section, layout, and testing" to [Table 5-4, XT1 Crystal Oscillator \(Low Frequency\)](#) ..... [20](#)
- Changed the note that begins "Requires external capacitors at both terminals..." in [Table 5-4, XT1 Crystal Oscillator \(Low Frequency\)](#) ..... [20](#)
- Added the  $t_{TA, cap}$  parameter in [Table 5-13, Timer\\_A](#) ..... [26](#)
- Corrected the test conditions for the  $R_I$  parameter in [Table 5-20, ADC, Power Supply and Input Range Conditions](#). [33](#)
- Added the note that begins " $t_{sample} = \ln(2^{n+1}) \times \tau$  ..." in [Table 5-21, ADC, 10-Bit Timing Parameters](#) ..... [33](#)
- Changed the CRC covered end address to 0x1AF5 in note (1) in [Table 6-18, Device Descriptors](#) ..... [55](#)
- Added "1.5-V reference factor" in [Table 6-18, Device Descriptors](#) ..... [56](#)

**Changes from April 26, 2019 to December 10, 2019**
**Page**

- Changed the note that begins "Supply voltage changes faster than 0.2 V/μs can trigger a BOR reset..." in [Section 5.3, Recommended Operating Conditions](#) ..... [21](#)
- Added the note that begins "TI recommends that power to the DVCC pin must not exceed the limits..." in [Section 5.3, Recommended Operating Conditions](#) ..... [21](#)
- Changed the note that begins "A capacitor tolerance of ±20% or better is required..." in [Section 5.3, Recommended Operating Conditions](#) ..... [21](#)
- Added the note "See [MSP430 32-kHz Crystal Oscillators](#) for details on crystal section, layout, and testing" to [Table 5-4, XT1 Crystal Oscillator \(Low Frequency\)](#) ..... [28](#)
- Changed the note that begins "Requires external capacitors at both terminals..." in [Table 5-4, XT1 Crystal Oscillator \(Low Frequency\)](#) ..... [28](#)
- Added the  $t_{TA, cap}$  parameter in [Table 5-13, Timer\\_A](#) ..... [35](#)
- Added the  $t_{TB, cap}$  parameter in [Table 5-14, Timer\\_B](#) ..... [35](#)
- Corrected the test conditions for the  $R_1$  parameter in [Table 5-21, ADC, Power Supply and Input Range Conditions](#). [42](#)
- Added the note that begins " $t_{Sample} = \ln(2^{n+1}) \times \tau$  ..." in [Table 5-22, ADC, Timing Parameters](#) ..... [42](#)
- Changed CRC covered end address to 0x1AF7 in table note (1) in [Table 6-30, Device Descriptors](#) ..... [72](#)

The datasheet number will be changing.

Device Family	Change From:	Change To:
MSP430FR2522, MSP430FR2512	SLASEE4B	SLASEE4C
MSP430FR2422	SLASEE5B	SLASEE5C
MSP430FR2476, MSP430FR2475	SLASE07A	SLASE07B

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/MSP430FR2522>
<http://www.ti.com/product/MSP430FR2422>
<http://www.ti.com/product/MSP430FR2475>
**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:**

MSP430FR2512IPW16	MSP430FR2512IPW16R	MSP430FR2512IRHLR	MSP430FR2512IRHLT
MSP430FR2522IPW16	MSP430FR2522IPW16R	MSP430FR2522IRHLR	MSP430FR2522IRHLT
MSP430FR2422IPW16	MSP430FR2422IPW16R	MSP430FR2422IRHLR	MSP430FR2422IRHLT
MSP430FR2475TPT	MSP430FR2475TPTR	MSP430FR2475TRHAR	MSP430FR2475TRHAT
MSP430FR2475TRHBR	MSP430FR2475TRHBT	MSP430FR2476TPT	MSP430FR2476TPTR
MSP430FR2476TRHAR	MSP430FR2476TRHAT	MSP430FR2476TRHBR	MSP430FR2476TRHBT

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	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>

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