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|--------------------------|--|-------------------------------------|---------------------|
| PCN Number: | 20200206003 | PCN Date: | Feb 18, 2020 |
| Title: | Datasheet for MSP430FR2033, MSP430FR2032 | | |
| Customer Contact: | PCN Manager | Dept: | Quality Services |
| Change Type: | | | |
| <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"/> | | <input type="checkbox"/> | Wafer Bump Site |
| <input type="checkbox"/> | | <input type="checkbox"/> | Wafer Bump Material |
| <input type="checkbox"/> | | <input type="checkbox"/> | Wafer Bump Process |
| <input type="checkbox"/> | | <input type="checkbox"/> | Wafer Fab Site |
| <input type="checkbox"/> | | <input type="checkbox"/> | Wafer Fab Materials |
| <input type="checkbox"/> | | <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.



MSP430FR2033, MSP430FR2032

SLASE45E –OCTOBER 2014–REVISED DECEMBER 2019

Changes from January 22, 2019 to December 9, 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 | 15 |
| • 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 | 15 |
| • Changed the note that begins "A capacitor tolerance of ±20% or better is required..." in Section 5.3, Recommended Operating Conditions | 15 |
| • Added the note "See MSP430 32-kHz Crystal Oscillators for details on crystal section, layout, and testing" to Table 5-3, XT1 Crystal Oscillator (Low Frequency) | 22 |
| • Changed the note that begins "Requires external capacitors at both terminals..." in Table 5-3, XT1 Crystal Oscillator (Low Frequency) | 22 |
| • Added the $t_{(int)}$ parameter in Table 5-8, Digital Inputs | 24 |
| • Added the $t_{TA, cap}$ parameter in Table 5-10, Timer_A | 25 |
| • Corrected the test conditions for the $R_{I, MUX}$ parameter in Table 5-17, ADC, Power Supply and Input Range Conditions | 31 |
| • Added the note that begins " $t_{Sample} = \ln(2^{n+1}) \times \tau$..." in Table 5-18, ADC, 10-Bit Timing Parameters | 31 |

The datasheet number will be changing.

| | | |
|----------------------------|--------------|------------|
| Device Family | Change From: | Change To: |
| MSP430FR2033, MSP430FR2032 | SLASE45D | SLASE45E |

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/MSP430FR2032>

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:

| | | | |
|-------------------|-------------------|-------------------|-------------------|
| MSP430FR2032IG48 | MSP430FR2032IG48R | MSP430FR2032IG56 | MSP430FR2032IG56R |
| MSP430FR2032IPMR | MSP430FR2033IG48 | MSP430FR2033IG48R | MSP430FR2033IG56 |
| MSP430FR2033IG56R | MSP430FR2033IPM | MSP430FR2033IPMR | |

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

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