


Notification Number:	20161031000	Notification Date:	Nov. 7, 2016
Title:	Datasheet for TMS320F28335/TMS320F28334/TMS320F28333/TMS320F28332 TMS320F28235/TMS320F28234/MS320F28232		
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:			
<p>Texas Instruments Incorporated is announcing an information only notification. The product datasheet(s) is updated as seen in the change revision history below:</p>			
<p>TMS320F28335, TMS320F28334, TMS320F28333, TMS320F28332 TMS320F28235, TMS320F28234, TMS320F28232</p>			
<p>SPRS439N – JUNE 2007 – REVISED OCTOBER 2016</p>			<p>www.ti.com</p>

Changes from August 6, 2012 to October 18, 2016 (from M Revision (August 2012) to N Revision)	Page
• Global: Added TMS320F28333.	1
• Global: Restructured document.	1
• Global: Removed <i>Reliability Data for TMS320LF24xx and TMS320F28xx Devices Application Report</i>	1
• Global: Removed C2833x, C2823x C/C++ Header Files and Peripheral Examples.	1
• Global: Replaced "CAN 2.0B" with "ISO 11898-1 (CAN 2.0B)".	1
• Global: Added SYS/BIOS.	1
• Section 1.1 (Features): Removed "Dynamic PLL Ratio Changes Supported" feature.	1
• Section 1.1: Updated JTAG Boundary Scan Support feature.	1
• Section 1.1: Updated Package Options feature.	1
• Section 1.1: Added "(AEC Q100 Qualification for Automotive Applications)" to "Q" temperature option.	1
• Section 1.2 (Applications): Added section.	2
• Section 1.3 (Description): Added section.	3
• Section 1.3: Added Device Information table.	3
• Table 3-1 (F2833x Device Comparison): Changed title from "F2833x Hardware Features" to "F2833x Device Comparison".	8
• Table 3-1: Added data for F28333 device.	8
• Table 3-1: Changed "PWM outputs" to "PWM channels".	8
• Table 3-1: Removed "Product status" row and associated footnote.	8
• Table 3-2 (F2823x Device Comparison): Changed title from "F2823x Hardware Features" to "F2823x Device Comparison".	9
• Table 3-2: Changed "PWM outputs" to "PWM channels".	9
• Table 3-2: Removed "Product status" row and associated footnote.	9
• Section 3.1 (Related Products): Added section.	10
• Section 4.1 (Pin Diagrams): Updated NOTE about PowerPAD.	12
• Section 5.2 (ESD Ratings – Automotive): Added section.	32
• Section 5.3 (ESD Ratings – Commercial): Added section.	32
• Section 5.5 (Power Consumption Summary): Changed section title from "Current Consumption" to "Power Consumption Summary".	34
• Section 5.9.2 (Power Sequencing): Updated XRSn requirement #2.	44
• Table 5-23 (High-Resolution PWM Characteristics at SYSCLKOUT = (60–150 MHz)): Updated footnote.	59
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• Table 5-32: Parameter 9: Updated parametric symbols, descriptions, and values.	62
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• Table 5-33: Parameter 6: Updated parametric symbols, descriptions, and values.	64
• Table 5-33: Parameter 7: Updated parametric symbols and values.	64
• Table 5-33: Parameter 11: Updated parametric symbols, descriptions, and values.	64
• Table 5-34 (SPI Slave Mode External Timing (Clock Phase = 0)): Parameter 16 [$t_{V(SPCL-SOM)S}$, $t_{V(SPCH-SOM)S}$]: Changed MIN values to 0.	66
• Table 5-35 (SPI Slave Mode External Timing (Clock Phase = 1)): Parameter 18 [$t_{V(SPCL-SOM)S}$, $t_{V(SPCH-SOM)S}$]: Changed MIN values to 0.	68
• Section 5.9.4.6.2 (McBSP as SPI Master or Slave Timing): Replaced "For all SPI slave modes ..." paragraphs with "For all SPI slave modes ..." table footnotes.	72
• Table 5-38 (McBSP as SPI Master or Slave Timing Requirements (CLKSTP = 10b, CLKXP = 0)): Added "For all SPI slave modes ..." footnote.	72
• Table 5-40 (McBSP as SPI Master or Slave Timing Requirements (CLKSTP = 11b, CLKXP = 0)): Added "For all SPI slave modes ..." footnote.	73
• Table 5-42 (McBSP as SPI Master or Slave Timing Requirements (CLKSTP = 10b, CLKXP = 1)): Added "For all SPI slave modes ..." footnote.	74
• Table 5-44 (McBSP as SPI Master or Slave Timing Requirements (CLKSTP = 11b, CLKXP = 1)): Added "For all SPI slave modes ..." footnote.	75
• Table 5-62 (Flash Parameters at 150-MHz SYSCLKOUT): Updated "Typical parameters as seen at room temperature ..." footnote.	95
• Section 6.2.7.3 (ADC Calibration): Updated section.	131
• Table 5-44 (McBSP as SPI Master or Slave Timing Requirements (CLKSTP = 11b, CLKXP = 1)): Added "For all SPI slave modes ..." footnote.	74
• Table 5-44 (McBSP as SPI Master or Slave Timing Requirements (CLKSTP = 11b, CLKXP = 1)): Added "For all SPI slave modes ..." footnote.	75
• Table 5-62 (Flash Parameters at 150-MHz SYSCLKOUT): Updated "Typical parameters as seen at room temperature ..." footnote.	95
• Section 6.2.7.3 (ADC Calibration): Updated section.	131

- [Section 6.2.11 \(Serial Peripheral Interface \(SPI\) Module \(SPI-A\)\): Updated "Rising edge with phase delay" clockng scheme.](#) [144](#)
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- [Table 6-31 \(Device Emulation Registers\): Added PARTID and CLASSID for TMS320F28333.](#) [167](#)
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- [Section 8 \(Device and Documentation Support\): Added section.](#) [181](#)
- [Section 8.1 \(Getting Started\): Updated section.](#) [181](#)
- [Figure 8-1 \(Example of F2833x, F2823x Device Nomenclature\): Added 28333 under DEVICE.](#) [182](#)
- [Figure 8-1: Updated TECHNOLOGY: Changed "1.9-V Core" to "1.9-V or 1.8-V Core".](#) [182](#)
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The datasheet number will be changing.

Device Family	Change From:	Change To:
TMS320F2833x, TMS320F2823x	SPRS439M	SPRS439N

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/lit/ds/symlink/tms320f28335.pdf>

Reason for Change:

To more 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 notification:

None.

TMS320F28232PTPQ	TMS320F28234ZJZQR	TMS320F28332PTPQ	TMS320F28335PTPQ
TMS320F28232ZJZQ	TMS320F28235PTPQ	TMS320F28332ZJZQ	TMS320F28335ZJZQ
TMS320F28234PTPQ	TMS320F28235ZJZQ	TMS320F28334PTPQ	TMS320F28335ZJZQR
TMS320F28234ZJZQ	TMS320F28235ZJZQR	TMS320F28334ZJZQ	

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