TMS320C6000
CPU and Instruction Set

Reference Guide

Literature Number: SPRU189G
July 2006
About This Manual

This document has been separated into 3 documents to support the digital signal processors (DSPs) of the TMS320C6000™ DSP family. The new CPU and Instruction Set Reference Guides are:

- **SPRU731** (TMS320C62x DSP)
- **SPRU732** (TMS320C64x/C64x+ DSP)
- **SPRU733** (TMS320C67x/C67x+ DSP)

Related Documentation From Texas Instruments

The following documents describe the C6000™ devices and related support tools. Copies of these documents are available on the Internet at www.ti.com. *Tip: Enter the literature number in the search box provided at www.ti.com.*

The current documentation that describes the C6000 devices, related peripherals, and other technical collateral, is available in the C6000 DSP product folder at: www.ti.com/c6000.

**SPRU731** — **TMS320C62x DSP CPU and Instruction Set Reference Guide.** Describes the CPU architecture, pipeline, instruction set, and interrupts for the TMS320C62x digital signal processors (DSPs) of the TMS320C6000 DSP family. The C62x DSP generation comprises fixed-point devices in the C6000 DSP platform.

**SPRU732** — **TMS320C64x/C64x+ DSP CPU and Instruction Set Reference Guide.** Describes the CPU architecture, pipeline, instruction set, and interrupts for the TMS320C64x and TMS320C64x+ digital signal processors (DSPs) of the TMS320C6000 DSP family. The C64x/C64x+ DSP generation comprises fixed-point devices in the C6000 DSP platform. The C64x+ DSP is an enhancement of the C64x DSP with added functionality and an expanded instruction set.

**SPRU733** — **TMS320C67x/C67x+ DSP CPU and Instruction Set Reference Guide.** Describes the CPU architecture, pipeline, instruction set, and interrupts for the TMS320C67x and TMS320C67x+ digital signal processors (DSPs) of the TMS320C6000 DSP family. The C67x/C67x+ DSP generation comprises floating-point devices in the C6000 DSP platform. The C67x+ DSP is an enhancement of the C67x DSP with added functionality and an expanded instruction set.

**SPRU190** — **TMS320C6000 DSP Peripherals Overview Reference Guide.** Provides an overview and briefly describes the peripherals available on the TMS320C6000 family of digital signal processors (DSPs).

**SPRU197** — **TMS320C6000 Technical Brief.** Provides an introduction to the TMS320C62x and TMS320C67x digital signal processors (DSPs) of the TMS320C6000 DSP family. Describes the CPU architecture, peripherals, development tools and third-party support for the C62x and C67x DSPs.

**SPRU395** — **TMS320C64x Technical Overview.** Provides an introduction to the TMS320C64x digital signal processors (DSPs) of the TMS320C6000 DSP family.
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