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Nota di contenuto	DSP Applications Using C and the TMS320C6x DSK; Contents; Preface; List of Examples; Programs/Files on Accompanying Disk; 1 DSP Development System; 1.1 Introduction; 1.2 DSK Support Tools; 1.2.1 DSK Board; 1.2.2 TMS320C6711 Digital Signal Processor; 1.3 Code Composer Studio; 1.3.1 CCS Installation and Support; 1.3.2 Useful Types of Files; 1.4 Programming Examples to Test the DSK Tools; 1.4.1 Quick Test of DSK; 1.4.2 Support Files; 1.4.3 Examples; 1.5 Support Programs/Files Considerations; 1.5.1 Initialization/Communication File; 1.5.2 Vector File; 1.5.3 Linker File 1.6 Compiler/Assembler/Linker Shell1.6.1 Compiler; 1.6.2 Assembler; 1.6.3 Linker; References; 2 Input and Output with the DSK; 2.1 Introduction; 2.2 TLC320AD535 (AD535) Onboard Codec for Input and Output; 2.3 PCM3003 Stereo Codec for Input and Output; 2.4 Programming Examples Using C Code; References; 3 Architecture and

Instruction Set of the C6x Processor; 3.1 Introduction; 3.2 TMS320C6x Architecture; 3.3 Functional Units; 3.4 Fetch and Execute Packets; 3.5 Pipelining; 3.6 Registers; 3.7 Linear and Circular Addressing Modes; 3.7.1 Indirect Addressing; 3.7.2 Circular Addressing
3.8 TMS320C6x Instruction Set3.8.1 Assembly Code Format; 3.8.2 Types of Instructions; 3.9 Assembler Directives; 3.10 Linear Assembly; 3.11 ASM Statement within C; 3.12 C-Callable Assembly Function; 3.13 Timers; 3.14 Interrupts; 3.14.1 Interrupt Control Registers; 3.14.2 Selection of XINT0; 3.14.3 Interrupt Acknowledgment; 3.15 Multichannel Buffered Serial Ports; 3.16 Direct Memory Access; 3.17 Memory Considerations; 3.17.1 Data Allocation; 3.17.2 Data Alignment; 3.17.3 Pragma Directives; 3.17.4 Memory Models; 3.18 Fixed- and Floating-Point Format; 3.18.1 Data Types
3.18.2 Floating-Point Format3.18.3 Division; 3.19 Code Improvement; 3.19.1 Intrinsics; 3.19.2 Trip Directive for Loop Count; 3.19.3 Cross-Paths; 3.19.4 Software Pipelining; 3.20 Constraints; 3.20.1 Memory Constraints; 3.20.2 Cross-Paths Constraints; 3.20.3 Load/Store Constraints; 3.20.4 Pipelining Effects with More Than One EP within an FP; 3.21 TMS320C64x Processor; 3.22 Programming Examples Using C, Assembly, and Linear Assembly; References; 4 Finite Impulse Response Filters; 4.1 Introduction to the z-Transform; 4.1.1 Mapping from s-Plane to z-Plane; 4.1.2 Difference Equations
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5.3.1 Bilinear Transformation Design Procedure

Sommario/riassunto

The TMS320C6x is Texas Instrument's next generation DSP found in over 60 percent of wireless devices from leading manufacturers such as Ericsson, Nokia, Sony, and HandspringAuthor has many years experience working with the TI line of TMS DSPs and his books are based on courses and seminars given at TI sponsored meetingsAll programs listed in the text will be available on the Wiley FTP siteIn addition to its wireless applications, the TMS DSP is tailored to enable a new generation of Internet media entertainment appliances