

OSEK/VDX

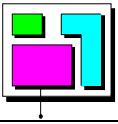
OSEK Run Time Interface (ORTI)

Appendix B1: ARM7TDMI Processor Register Naming

Version 1.0

29. October 2002

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Preface

OSEK/VDX is a joint project of the automotive industry. It aims at an industry standard for an open-ended architecture for distributed control units in vehicles.

For detailed information about OSEK project goals and partners, please refer to the “OSEK Binding Specification”.

General conventions, explanations of terms and abbreviations have been compiled in the additional inter-project "OSEK Overall Glossary".

Regarding implementation and system generation aspects please refer to the "OSEK Implementation Language" (OIL) specification.

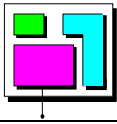
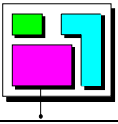


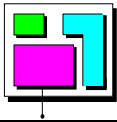
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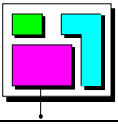
1 Introduction

This document describes the ARM7TDMI CPU specific names reserved for the use with ORTI. The register names are used within the ORTI CONTEXT object.

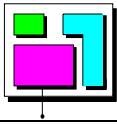


2 Register Naming

<i>Register</i>	<i>ORTI Name</i>	<i>Remark</i>
R0	_ARM7_R0	
R1	_ARM7_R1	
R2	_ARM7_R2	
R3	_ARM7_R3	
R4	_ARM7_R4	
R5	_ARM7_R5	
R6	_ARM7_R6	
R7	_ARM7_R7	
R8	_ARM7_R8	
R9	_ARM7_R9	
R10	_ARM7_R10	
R11	_ARM7_R11	
R12	_ARM7_R12	
R13	_ARM7_R13	SP
R14	_ARM7_R14	LR
R15	_ARM7_R15	PC
CPSR	_ARM7_CPSR	
R8_fiq	_ARM7_R8_FIQ	R8, FIQ mode
R9_fiq	_ARM7_R9_FIQ	R9, FIQ mode
R10_fiq	_ARM7_R10_FIQ	R10, FIQ mode
R11_fiq	_ARM7_R11_FIQ	R11, FIQ mode
R12_fiq	_ARM7_R12_FIQ	R12, FIQ mode
R13_fiq	_ARM7_R13_FIQ	R13 (SP), FIQ mode
R14_fiq	_ARM7_R14_FIQ	R14 (LR), FIQ mode
SPSR_fiq	_ARM7_SPSR_FIQ	SPSR, FIQ mode
R13_svc	_ARM7_R13_SVC	R13 (SP), supervisor mode
R14_svc	_ARM7_R14_SVC	R14 (LR), supervisor mode
SPSR_svc	_ARM7_SPSR_SVC	SPSR, supervisor mode
R13_abt	_ARM7_R13_ABT	R13 (SP), abort mode
R14_abt	_ARM7_R14_ABT	R14 (LR), abort mode



SPSR_abt	_ARM7_SPSR_ABT	SPSR, abort mode
R13_irq	_ARM7_R13_IRQ	R13 (SP), IRQ mode
R14_irq	_ARM7_R14_IRQ	R14 (LR), IRQ mode
SPSR_IRQ	_ARM7_SPSR_IRQ	SPSR, IRQ mode
R13_und	_ARM7_R13_UND	R13 (SP), undef mode
R14_und	_ARM7_R14_UND	R14 (SP), undef mode
SPSR_und	_ARM7_SPSR_UND	SPSR, undef mode



3 History

Version	Date	Remarks
1.0	29. October 2002	Authors: Joachim Stehle (Vector Informatik)