SGPC Programmer's Manual

Steven Vroom

November 2016

Contents

$\mathbf{C}\mathbf{c}$	ontents	3
1	Overview 1.1 SGPC Architecture Overview 1.2 Registers	7 7 7 7 7 7
2	Register Set 2.1 General-Purpose Registers 2.2 Program Counter (PC) 2.3 Section Registers 2.4 Backup Registers 2.5 Interrupt Registers 2.6 Output Registers	9 9 9 9 9 9
3	Operand Conventions and Addressing Modes	11
4	Instruction Set Summary	13
5	Interrupts	15
6	I/O Conventions	17
7	Memory Management	19
8	Instruction Set	21
9	Appendix A: Instruction Set Listings	23
10	Appendix B: Simplified Mnemonics	25
11	Appendix C: Common Procedures	27
12	Appendix D: Standard Interrupts and I/O-ports 12.1 Programmable Interrupt Controller (PIC)	29 29 29 29

4 CONTENTS

12.4	Sound Card							29
12.5	Graphical Card							29
12.6	Memory Control Hub (MCH)							29
12.7	Segements and Out Of Bounds Exception							29

About This Book

Related Documentation

Organization

Conventions

Acronyms and Abbreviations

Overview

- 1.1 SGPC Architecture Overview
- 1.2 Registers

User-accessible Registers

Internal Registers

1.3 Instruction Conventions

Instruction Layout

Addressing Modes

- 1.4 Instruction Set
- 1.5 Interrupt Model
- 1.6 Memory Management Model

Register Set

- 2.1 General-Purpose Registers
- Stack Pointer Register (SP)
- 2.2 Program Counter (PC)
- 2.3 Section Registers
- 2.4 Backup Registers
- 2.5 Interrupt Registers
- 2.6 Output Registers

Operand Conventions and Addressing Modes

Instruction Set Summary

Interrupts

I/O Conventions

Memory Management

Instruction Set

Appendix A: Instruction Set Listings

Appendix B: Simplified Mnemonics

Appendix C: Common Procedures

Appendix D: Standard Interrupts and I/O-ports

- 12.1 Programmable Interrupt Controller (PIC)
- 12.2 Keyboard
- 12.3 Programmable Interrupt Timer (PIT)
- 12.4 Sound Card
- 12.5 Graphical Card
- 12.6 Memory Control Hub (MCH)
- 12.7 Segements and Out Of Bounds Exception