

<<汇编语言艺术>>

图书基本信息

书名：<<汇编语言艺术>>

13位ISBN编号：9787302104353

10位ISBN编号：7302104352

出版时间：2005-3

出版时间：清华大学

作者：RANDALL HYDE

页数：888

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

## <<汇编语言艺术>>

### 内容概要

本书是由著名作者Randall Hyde在其十多年的汇编语言教学经验基础上编写而成的，以X86系列微机为背景，从简单的Hello程序开始，系统而详细地阐述了X86微机汇编语言的各种基础知识和编程技巧，内容包括数据表示、存储器管理、各种数据类型、过程、与汇编语言相关的体系结构、控制结构、文件、宏指令、位处理指令、字符串指令、MMX指令、类和对象，以及与其他语言的混合编程等，尤其是在高级汇编语言(HLA)方面，本书进行了细致深入的阐述。

本书可作为高等院校计算机及相关专业的教材和参考用书。

本书力求从艺术的角度来阐述汇编语言的魅力，减轻甚至消除读者对汇编语言学习的恐惧和苦恼，从而轻松快速地掌握汇编语言。

本书可作为高等院校计算机专业学生的教材和参考用书。

<<汇编语言艺术>>

作者简介

作者：（美国）海德（Hyde R.）

## 书籍目录

1 HELLO , WORLD OF ASSEMBLY LANGUAGE 1.1 Chapter Overview 1.2 The Anatomy of an HLA Program 1.3 Running Your First HLA Program 1.4 Some Basic HLA Data Declarations 1.5 Boolean Values 1.6 Character Values 1.7 An Introduction to the Intel 80x86 CPU Family 1.7.1 The Memory Subsystem 1.8 Some Basic Machine Instructions 1.9 Some Basic HLA Control Structures 1.9.1 Boolean Expressions in HLA Statements 1.9.2 The HLA IF..THEN..ELSEIF..ELSE..ENDIF Statement 1.9.3 Conjunction, Disjunction, and Negation in Boolean Expressions 1.9.4 The WHILE..ENDWHILE Statement 1.9.5 The FOR..ENDFOR Statement 1.9.6 The REPEAT..UNTIL Statement 1.9.7 The BREAK and BREAKIF Statements 1.9.8 The FOREVER..ENDFOR Statement 1.9.9 The TRY..EXCEPTION..ENDTRY Statement 1.10 Introduction to the HLA Standard Library 1.10.1 Predefined Constants in the STDIO Module 1.10.2 Standard In and Standard Out 1.10.3 The sfdOUT.newLn ROUTine 1.10.4 The sfdOUT.putiX ROUTines 1.10.5 The sfdOUT.putiXSize ROUTines 1.10.6 The sfdOUT.put ROUTine 1.10.7 The sfd.n.gefc ROUTine 1.10.8 The sfd.n.getiX ROUTines 1.10.9 The sfd.n.teadLn and sfd.n.flushInput ROUTines 1.10.10 The sfdin.get ROUTine 1.11 Additional Details About TRY..ENDTRY 1.11.1 Nesting TRY..ENDTRY Statements 1.11.2 The UNPROTECTED Clause in a TRY..ENDTRY Statement 1.11.3 The ANYEXCEPTION Clause in a TRY..ENDTRY Statement 1.11.4 Registers and the TRY..ENDTRY Statement 1.12 High Level Assembly Language vs. Low Level Assembly 1.13 For More Information

2 DATA REPRESENTATION 2.1 Chapter Overview 2.2 Numbering Systems 2.2.1 A Review of the Decimal System 2.2.2 The Binary Numbering System 2.2.3 Binary Formats 2.3 The Hexadecimal Numbering System 2.4 Data Organization 2.4.1 Bits 2.4.2 Nibbles 2.4.3 Bytes 2.4.4 Words 2.4.5 Double Words 2.4.6 Quad Words and Long Words 2.5 Arithmetic Operations on Binary and Hexadecimal Numbers 2.6 A Note About Numbers vs. Representation 2.7 Logical Operations on Bits 2.8 Logical Operations on Binary Numbers and Bit Strings 2.9 Signed and Unsigned Numbers 2.10 Sign Extension, Zero Extension, Contraction, and Saturation 2.11 Shifts and Rotates 2.12 Bit Fields and Packed Data 2.13 An Introduction to Floating Point Arithmetic 2.13.1 IEEE Floating Point Formats 2.13.2 HLA Support for Floating Point Values 2.14 Binary Coded Decimal (BCD) Representation 2.15 Characters 2.15.1 The ASCII Character Encoding 2.15.2 HLA Support for ASCII Characters 2.16 The Unicode Character Set 2.17 For More Information

3 MEMORY ACCESS AND ORGANIZATION 3.1 Chapter Overview 3.2 the 80x86 Addressing Modes 3.2.1 80x86 Register Addressing Modes 3.2.2 80x86 32-bit Memory Addressing Modes 3.3 Run-Time Memory Organization 3.3.1 The Code Section 3.3.2 The Static Sections 3.3.3 The Read-Only Data Section 3.3.4 The Storage Section 3.3.5 The @NOStorage Attribute 3.3.6 The Var Section 3.3.7 Organization of Declaration Sections Within Your Programs 3.4 HOW HLA Allocates Memory for Variables 3.5 HLA Support for Data Alignment 3.6 Address Expressions 3.7 Type Coercion 3.8 Register Type Coercion 3.9 The Stack Segment and the PUSH and POP Instructions 3.9.1 The Basic PUSH Instruction 3.9.2 The Basic POP Instruction 3.9.3 Preserving Registers with the PUSH and POP Instructions 3.9.4 The Stack Is a LIFO Data Structure 3.9.5 Other PUSH and POP Instructions 3.9.6 Removing Data from the Stack Without POPping It 3.9.7 Accessing Data You've Pushed on the Stack Without POPping It 3.10 Dynamic Memory Allocation and the Heap Segment 3.11 The INC and DEC Instructions 3.12 Obtaining the Address of a Memory Object 3.13 For More Information

4 CONSTANTS , VARIABLES , AND DATA TYPES 4.1 Chapter Overview 4.2 Some Additional Instructions: INTMUL, BOUND, INTO 4.3 The "I" BYTE Data Types 4.4 HLA Constant and Value Declarations 4.4.1 Constant Types 4.4.2 String and Character Literal Constants 4.4.3 String and Text Constants in the CONST Section 4.4.4 Constant Expressions 4.4.5 Multiple CONST Sections and Their Order in an HLA Program 4.4.6 The HLA VAL Section 4.4.7 Modifying VAL Objects at Arbitrary Points in Your Programs 4.5 The HLA TYPE Section 4.6 ENUM and HLA Enumerated Data Types 4.7 Pointer Data Types 4.7.1 Using Pointers in Assembly Language 4.7.2 Declaring Pointers in HLA 4.7.3 Pointer Constants and Pointer Constant Expressions 4.7.4 Pointer Variables and Dynamic Memory Allocation 4.7.5 Common Pointer Problems 4.8 The HLA Standard Library CHARS.HHF Module 4.9 Composite Data Types 4.10 Character

Strings 4.11 HLA Strings 4.12 Accessing the Characters Within a String 4.13 The HLA String Module and Other String-Related Routines 4.14 In-Memory Conversions 4.15 Character Sets 4.16 Character Set Implementation in HLA 4.17 HLA Character Set Constants and Character Set Expressions 4.18 The IN Operator in HLA HLL Boolean Expressions 4.19 Character Set Support in the HLA Standard Library 4.20 Using Character Sets in Your HLA Programs 4.21 Arrays 4.22 Declaring Arrays in Your HLA Programs 4.23 HLA Array Constants 4.24 Accessing Elements of a Single Dimension Array 4.24.1 Sorting an Array of Values 4.25 Multidimensional Arrays 4.25.1 Row Major Ordering 4.25.2 Column Major Ordering 4.26 Allocating Storage For Multidimensional Arrays 4.27 Accessing Multidimensional Array Elements in Assembly Language 4.28 Large Arrays and MASM (Windows Programmers Only) 4.29 Records 4.30 Record Constants 4.31 Arrays of Records 4.32 Arrays/Records as Record Fields 4.33 Controlling Field Offsets Within a Record : 4.34 Aligning Fields Within a Record 4.35 Pointers to Records ~ 4.36 Unions 4.37 Anonymous Unions 4.38 Variant Types 4.39 Union Constants 4.40 Namespaces 4.41 Dynamic Arrays in Assembly Language 4.42 HLA Standard Library Array Support 4.43 For More Information5 PROCEDURES AND UNITS .....6 ARITHMETIC7 LOW LEVEL CONTROL STRUCTURES8 FILES9 ADVANCED ARITHMETIC10 MACRO S AN D TH E H LA CoMPI LE TIME LANGUAGE11 BIT MANIPULATION15 MIXED LANGUAGE PROGRAMMINGA ASCII CHARACTER SETB THE 80X86 INSTRUCTION SETINDEX

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>