

RELEASE NOTE

INDICATOR : Customer Information Software
INDICATOR NR. : CIS9827
CONCERNS : TK0620-00
80C196 Assembler
Release 6.0 beta

ISSUE DATE : Jul '97
SUPERSEDES : CIS9784
TO BE FILED IN : 80C196 Assembler User's Guide

SUMMARY

A new release of the 80C196 Assembler has been made: Release 6.0 beta.

The main reasons for this update are:

- New generation Embedded Development Environment (EDE) and editor
- Support for MCS® 296 proliferation: 296SA
- New overlayable data segment, which can be declared with the odseg assembler directive
- New user defined stack segment, which can be declared with the sseg assembler directive
- New locating control dataoverlay. This control is used to specify data overlay for the specified modules. It can be used the same way the regoverlay control is used for register overlaying.
- Added RL196 error messages 126 and 127 to the manual.
- Solving of reported problems

On-line manuals

The complete set of manuals is available as MS-Windows on-line help. This allows you to search fast for information you need. These on-line manuals are extended with a full text search feature. This makes it possible to search on any text in the manuals and not only on keywords.

New Embedded Development Environment (EDE)

This version includes the new EDE, with graphical interface to the 196 development tools. EDE stands for "Embedded Development Environment" and is the MS-Windows oriented Integrated Development Environment you can use with your TASKING toolchain to design and develop your application.

SOLVED / KNOWN PROBLEMS

The distribution contains the file readme_a.txt with information about solved problems, known problems and additional notes. For MS-Windows the readme is also available as on-line help (readme_a.hlp). And there are other read*. * files with information about previous releases. They could be of interest to you if you have been using iC-96 before.

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RELEASE NOTE

INDICATOR : Customer Information Software
INDICATOR NR. : CIS9828
CONCERNS : TK0622-00
80C196 C Compiler
Release 6.0 beta

ISSUE DATE : Jul '97
SUPERSEDES : CIS9785
TO BE FILED IN : 80C196 C Compiler User's Guide

SUMMARY

A new release of the 80C196 C Compiler has been made:
Release 6.0 beta.

The main reasons for this update are:

- New generation Embedded Development Environment (EDE) and editor
- Support for MCS® 296 proliferation: 296SA
- New compiler primary control `warning_true_false`. This control enables the 'comparison always returns TRUE' and 'comparison always returns FALSE' warnings.
- Solving of reported problems

On-line manuals

The complete set of manuals is available as MS-Windows on-line help. This allows you to search fast for information you need. These on-line manuals are extended with a full text search feature. This makes it possible to search on any text in the manuals and not only on keywords.

New Embedded Development Environment (EDE)

This version includes the new EDE, with graphical interface to the 196 development tools. EDE stands for "Embedded Development Environment" and is the MS-Windows oriented Integrated Development Environment you can use with your TASKING toolchain to design and develop your application.

SOLVED / KNOWN PROBLEMS

The distribution contains the file `readme_c.txt` with information about solved problems, known problems and additional notes. For MS-Windows the `readme` is also available as on-line help (`readme_c.hlp`). And there are other `read*.*` files with information about previous releases. They could be of interest to you if you have been using iC-96 before.

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Getting Started

This page of the 80C196 Assembler User's Guide tells you where to find the information you need to use the ASM196 assembler. For more information on this manual and related publications, see Chapter 2.

Manual Contents

Notational Conventions

1. Software Installation
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5. Assembly Language Elements
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8. Messages and Error Recovery
- A. Configuring DOS/4GW
- B. Flexible License Manager (FLEXIm)

- C. Assembler Directives Overview
- D. Assembler Controls Table
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Installing the Assembler

To install the ASM196 assembler, see Chapter 1 Software Installation. To automate the assembling and linking processes, configure the environment variables listed in the Software Installation chapter, and see Chapter 3 for instructions on how to create a batch or command file.

Running the Assembler

To learn how to invoke the assembler, read Chapter 3. To learn how each control affects the assembly process, read Chapter 4. Chapter 8 provides information you can use to interpret an assembler error, including possible causes and suggested actions to recover from the error.

Programming in ASM196

To learn about the basic elements of the assembly language and the ASM196 instruction set, read Chapters 5 and 6. Chapter 7 shows you how to include assembler macros in your program.

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Getting Started

This page of the 80C196 C Compiler User's Guide tells you where to find the information you need to use the C196 compiler. For more information on this manual and related publications, see Chapter 2.

Manual Contents

Notational Conventions

- 1. Software Installation
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- 3. Compiling and Linking
- 4. Compiler Controls
- 5. Startup Code
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- 7. Assembly Code Instructions
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- 9. Messages and Error Recovery
- 10. Language Implementation
 - A. Configuring DOS/4GW
 - B. Flexible License Manager (FLEXlm)
- Glossary

Installing the Compiler

To install the C196 compiler, see Chapter 1 Software Installation. The installation utility on the distribution media leads you through installing the compiler and the utilities on your host system. To automate the compiling and linking processes, configure the environment variables listed in the Software Installation chapter, and see Chapter 3 for instructions on how to create a batch or command file.

Running the Compiler

To learn how to invoke the compiler, read Chapter 3. To learn how each control affects the compilation process, see Chapter 4. Chapter 9 provides information you can use to interpret a compiler error or

warning and including possible causes and suggested actions to recover from the error.

Programming in C196

To learn about the 80C196 architecture and the C196 data types, calling conventions, and library functions, read Chapters 6 through 10 and the example at the end of Chapter 3.

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Getting Started

This page of the 80C196 Utilities User's Guide tells you where to find information needed to use the RL196, OH196, LIB196, MK196 utilities and The FPAL96, a floating-point object module library for 80C196 microcontrollers. For information on this manual and related publications, see Chapter 1.

Manual Contents

Notational Conventions

1. Overview
 2. The RL196 Linker
 3. The OH196 Converter
 4. The LIB196 Librarian
 5. Using the FPAL96 Library
 6. FPAL96 Functions Reference
 7. Exceptions and Exception Handling
 8. The MK196 Make Utility
 9. Messages and Error Recovery
- Glossary

Installing the Utilities

To install the 80C196 utilities, see the Software Installation chapter in the 80C196 Assembler User's Guide or the 80C196 C Compiler User's Guide. That chapter also explains the system requirements, environment variable settings, and directory structure to set up your system for the translator and utilities.

Making Efficient Use of RL196

To understand how RL196 operates on your modules, read Chapter 2. This chapter explains the default settings of the linker, and it can help you use the correct linking and locating controls in the linker invocation line.

Running the RL196 Linker

See Chapter 2 to learn how to invoke the linker from the prompt or a batch file and how to use the linking and locating controls. This chapter includes a controls reference section that explains each control in detail.

Converting OMF96 Object Files to Hexadecimal Format

Third-party vendors' PROM programmers do not always accept the 80C196 Absolute Module Format. In this case, you can run the absolute object file created by RL196 through the OH196 utility which produces a file in hexadecimal format. Read Chapter 3 for instructions on how to run OH196.

Creating Libraries with the LIB196 Library Manager

To learn how to create your own library, read Chapter 4. This chapter also describes procedures for maintaining the libraries using the LIB196 commands.

Using Floating-point Functions

To learn about the major functions of FPAL96, see Chapter 1. To learn how to control the behavior of the FPAL96 library, read Chapter 5. To see examples on how to use each function in ASM196, and C196, see Chapter 6.

Handling Floating-point Exceptions

Chapter 7 shows you how to create your own exception handler and explains the different types of exceptions FPAL96 can generate while running.

Building your application with the MK196 Make Utility

See Chapter 8 to learn how to maintain, update, and reconstruct your application software.

Determining the Cause of Errors

If errors occur during linking, you can find a list of errors and possible fixes in Chapter 9.

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