TASKING C 196 Compiler

- Windows* Based Embedded Development Environment
- Full ANSI C to Ensure Early Error Detection
- Architecture Specific C Language Extensions
- Extensive Optimizations
- Interrupt Functions in C and In-Line Assembly
- Vertical Register Windowing
- Single Precision Floating Point
- Generates Relocatable OMF-96 Object Code
- Complete ANSI-C Libraries in C Source
- Full Intel OMF-96 and Intel Hex

The compiler package consists of the optimizing ANSI C compiler, macro assembler, linker/locator, libraries, utilities and EDE our Windows based embedded development environment. The level of optimization of the compiler is selectable by the user and is used to improve the size and the execution efficiency of the application code. There are four levels of optimization, levels 0,1, 2 and 3.

The ANSI C language implies initialization of static variables at program startup time. In embedded applications this is accomplished by copying values from ROM to RAM. The const attribute tells the compiler that the variable is unchangeable: it will reside in ROM only. This saves RAM space and program startup time. The const attribute can also apply to pointers. The volatile keyword forces the compiler to access real memory locations instead of keeping variables in registers as much as possible. The volatile keyword is essential particularly for memory mapped I/O. Special function registers provide direct access to peripherals at C level. C196 supports SFRs for on-chip peripherals, such as high speed input/output, pulse width modulation, A to D converter, watchdog timer, serial port and standard I/O lines.



To enable variables to be accessed faster C196 provides a register storage type to be used in variable declarations to allocate variables in register memory. This register memory can then be accessed with 8-bit addressing. For those members of the Intel MCS[®] 96 microcontroller family that can address 512 bytes or more of on chip RAM, register windowing is supported to provide fast access to variables using 8-bit addressing.

A number of ANSI standard C libraries are supplied together with a single precision floating point library and some additional libraries specific to the Intel MCS 96 microcontroller derivative used.

MICROCONTROLLERS SUPPORTED:

8xC196Kx/Mx/Nx, 80296SA

DEVELOPMENT PLATFORMS:

Windows 3.1, Windows 95, Windows NT, Extended DOS, Sun SPARC/SunOS, Sun SPARC/Solaris, HP9000, DEC Alpha, VAX/VMS

AVAILABILITY: Now

No

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