

High-Powered CPU12 Development at Garage-Powered Prices



ImageCraft ICCV7 for CPU12

ANSI C embedded systems development tools for Freescale HC12 / HCS12/S12X microcontrollers

comprehensive target support

- Write interrupt handlers in C.
- Supports inline assembly and can interface with assembly modules.
- Byte operations.
- Automatic generation of bit field instructions such as bset, bclr, brset, brclr, ...etc.
- Supports single chip and expanded mode.
- Easy to use expanded code paging. (STD supports up to 64K of expanded code paging, ADV/PRO have no limit.)
- Supports all HC12 & HCS12 devices.

powerful and user friendly IDE

- Fast 32-bits Windows program, accepts long file names.
- Uncluttered tabbed editor windows.
- C editor with syntax highlighting, jump to matching braces, block indents and outdents, extensive bookmark support, and code templates.
- Code Browser ^(tm) lists your project's functions and variables by their addresses, data type and sizes.
- Project Manager automatically generates standard makefile, one click to rebuild.
- Simple interface to select compiler options, including choose from a data base of popular chip configurations for memory address setup, select different versions of "printf" based on features and code size, and lots more!
- Built-in ANSI Terminal emulator for target communication.

ANSI C compiler

- Modern fast C Compiler with full support for the ANSI C language. NOT a micro-C or extended K&R C, but a robust ANSI C front end written from the ground up, which has been in use for over 10 years.
- 32-bit longs, 32-bit IEEE single precision floating point.

optimizations

- Optimized switch handling.
- Algebraic simplifications.
- Block level common subexpression elimination.
- Peephole optimization.

assembler / linker

- Relocatable assembler and linker.
- Assembler directives include conditional processing, include files, macros and textual defines.
- Multiple named sections, memory address may contain holes for discontinuous memory spaces.
- Industry standard output formats include Motorola S19, Intel HEX.

debugger support

- Support for NoICE12 with full C source level debugging.
- Supports P&E map file format, Axiom's BDM-12.
- Compiler produces listing files that are usable by most assembly level debuggers using conversion programs.

libraries

- Subset of ANSI C library including printf, memory allocation, strings, and math functions.
- Target-specific functions such as those for accessing EEPROM and various subsystems (SPI, ADC, etc.)

tools

- Make utility, Librarian to manage library file, RCS for source code management.

documentation

- HTML help, PDF and optional printed manual.

third party tool support

- Command line compilers callable from other editors (e.g. Codewright). Multiedit interface DLL also available.
- μ COS/II Real Time kernel.
- Books written using ImageCraft compilers as examples: Peter Spasov's "Microcontroller Technology," Jonathan Valvano's "Embedded Microcomputer Systems: Real Time Interfacing".

technical support

- Excellent technical support via email. Typical turnaround time is the same day!
- Free 6 months maintenance update via web download.
- Low cost annual maintenance plans.

available in multiple versions:

- **STD** - IDE with compiler support for CPU12.
- **ADV** - STD supports up to 64K of expanded code paging, ADV has no limit.
- **PRO** - Includes Global Optimizer, which improves program size and runtime speed by 10-15%.

fully functional demo:

- ICCV7 for CPU12 45-day fully function demo may be downloaded from our website.
- 8K limited for non-commercial use after 45 days.

V7 for Windows pricing:

- V7 Standard for Windows 95/98/NT/XP - \$249
- V7 Advanced for Windows 95/98/NT/XP - \$369
- V7 Professional for Windows 95/98/NT/XP - \$549
- NOTE: STD version owners may upgrade to the ADV or PRO versions for the difference in price.



www.imagecraft.com

706 Colorado Ave. Palo Alto, CA 94303

(650) 493-9326 • FAX (650) 493-9329 • info@imagecraft.com