ImageCraft ICCV7 for AVR

ANSI C embedded systems development tools for Atmel AVR microcontrollers

comprehensive target support

- ICCV7 for AVR supports all AT90S and ATMega devices (except for 1200, which does not have SRAM), Tiny26, and AT94K FPSLIC.
- Works with our companion product, ICCtiny for Tiny devices & AT90S1200.
- Strings may be placed in either SRAM or FLASH.
- Write interrupt handlers in C.
- Supports inline assembly, and can interface with assembly modules.
- Byte operations.
- Automatic generation of bit IO instructions such as sbi, cbi, sbis, ... etc.

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.
- Application Builder to generate peripheral initialization code.
- 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.
- In System Programmer downloads code.

ANSI C compiler

- Modern fast C Compiler with FULL support for the ANSI C language. NOT micro-C or extended K&R C.
- 32-bit longs, 32-bit IEEE single precision floating point.
- 64-bit double precision floating point in plan for PRO version.

optimizations

- Device specific instructions.
- Optimized switch handling.
- Algebraic simplifications.
- Block level common subexpression elimination.
- Advanced register allocation.
- Peephole optimization.

assembler / linker

Relocatable assembler and linker.

- Assembler directives include conditional processing. include files, macros and textual defines.
- Industry standard output formats; Intel HEX, AVR COFF.

debugger support

Full debugging in Atmel's AVR Studio, including data watchpoint.

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.

technical support

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

available in multiple versions:

- STD IDE with compiler support for AVR.
- ADV Code Compressor (m) optimizer, which reduces final code by 5-15%. Support for 128K bytes addressing on Mega128, 256k bytes on Mega256, etc.
- PRO Includes Global Optimizer, which improves program size and runtime speed by by 10-15%.

fully functional demo:

- ICCV7 for AVR 45-day fully function demo may be downloaded from our website.
- 4K 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 Last updated: January 24, 2008