

Professional Low Cost C Tools for Atmel AVR microcontrollers

ImageCraft ICCV8 for AVR: data sheet

comprehensive target support

- Supports all AT90S, ATTiny (excluding ones without SRAM or which only have 16 registers), ATmega, and ATXMega devices.
- Strings may be placed in either SRAM or FLASH.
- Write interrupt handlers in C.
- Supports inline assembly, and can interface with assembly modules.

special features

- Application Builder for generating peripheral initialization for select AVRs.
- Transparent generation of AVR instructions, including
 - Optimized byte instruction.
 - Automatic use of bit IO instructions such as sbi, cbi, sbis, etc.
 - flash memory access using keyword (`__flash`) without using library functions.
- CRC support.
- subset of MISRA checks. (PRO only)
- Cross module type checking. (PRO only)

powerful and user-friendly IDE

- Based on the powerful open-source cross-platform CodeBlocks (C::B) IDE.
- Workspace and project support.
- Advanced features such as symbol browsing, code folding etc.
- Easy to use. No need to write linker command files. Select target device by name and our tools do the rest.
- Full set of example programs.

ANSI C compiler

- Modern fast C Compiler with full support for the ANSI C language. ISO C86 conformant with some C99 features.
- 32-bit IEEE single precision floating point (STD version), 64-bit double precision (PRO version).
- Command line tools for user workflow integration.
- Written from the ground up by ImageCraft. Not GCC, no GPL issues.

compiler optimizations

- Device specific instructions.
- Optimized switch handling.
- Algebraic simplifications.
- Block level common subexpression elimination.
- Advanced register allocation.
- Peephole optimization.
- Advanced optimizations (PRO only).
- Optimized mixed size expression evaluation (PRO only)
- Code Compression. (PRO only)

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, production ELF file.

debugger support

- Fully compatible with Atmel's AVR Studio. Open .coff COFF output file for full debugging.

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.)
- Librarian to manage library file.

tools

- Make utility.
- Librarian to manage library file.

documentation

- HTML help, PDF and optional printed manual.

technical support

- Technical support by compiler developers via email. Typical turnaround time is the same day!
- Free 12 months maintenance. Low cost (\$50 annually) afterward.
- Update any time via installing the latest demo from website.

fully functional demo:

- ICCV8 for AVR 45-day fully function demo may be downloaded from our website.
- 4K limited for non-commercial use after 45 days.

available in multiple versions:

- Compatible with Windows XP, 7, 8 and Vista
- **STD** - code limited to 64K \$249
- **PRO** - No code size limit. Improved optimizations: 10-20% improvement. 64 bit IEEE floating point support. MISRA checks. Cross-module type checking. \$499.
- **NC** - Non-Commercial use. \$99
- USB dongle for running on multiple PCs. \$60
- NOTE: STD version owners may upgrade to PRO for the difference in price. V7 upgrades available.

direct link:

<http://imagecraft.com/jumptoavr.html>

contact

- info@imagecraft.com
- support@imagecraft.com
- icc-avr@yahoogroups.com (send email to icc-avr-subscribe@yahoogroups.com to sign up)



2625 Middlefield Rd. #685 Palo Alto, CA 94306
(650) 493-9326
FAX (866) 889-4834
info@imagecraft.com