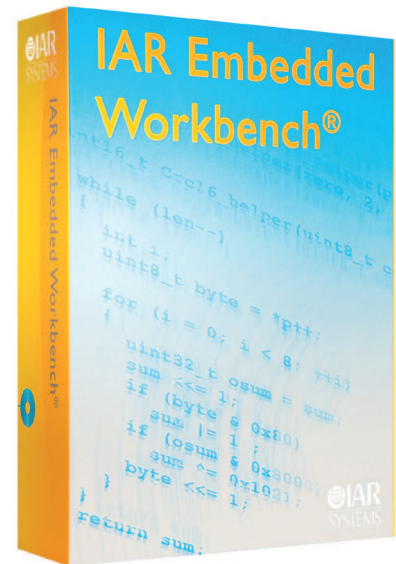


# IAR Embedded Workbench® TI Targets

IAR Embedded Workbench® is a set of highly sophisticated and easy-to-use development tools for embedded applications. It integrates the IAR C/C++ Compiler™, assembler, linker, librarian, text editor, project manager, and C-SPY® Debugger in an integrated development environment (IDE). With its built-in chip-specific code optimizer, IAR Embedded Workbench generates efficient and reliable FLASHable code for TI targets. In addition to this solid technology, IAR Systems also provides professional worldwide technical support.



## Comprehensive support for TI Targets

IAR Embedded Workbench includes support for most TI microcontrollers and microprocessors in one single environment:

- Stellaris
- Sitara ARM processors
- TMS570
- MSP430
- RF/IF and ZigBee solutions

## Powerful code generation and debugging

The IAR C/C++ Compiler offers a choice of programming language

- C, C++ and assembly languages
- ARM EABI and CMSIS compliant
- Advanced optimizations make the application smaller and faster

Hardware debug support in IAR C-SPY Debugger allows real time debugging

- Instruction trace support
- ETM, SWD and JTAG supported for ARM based targets
- MSP430 USB debug interface

## Key features

- Completely Integrated Development Environment (IDE)
- IAR C/C++ compiler tool chain
- IAR C-SPY Debugger with support for hardware and simulator debugging
- Power debugging for optimizing power consumption
- Code analysis tools including MISRA-C checker, code coverage and performance profiler

## Supported Debug Probes

- IAR J-Trace is an ETM trace probe for Stellaris
- IAR J-Link provides JTAG/SWD debugging for all ARM Cortex-based MCUs and MPUs
- IAR J-Link Ultra offers higher download speeds, debug speeds and power sampling with higher accuracy and sampling frequency
- FET debugger support for all TI FET modules
- Integration with third party debugger probes
- Integrated support for XDS100

## Instruction set simulator

- Trace simulation
- Interrupt simulation
- Peripheral simulation

Advanced analysis tools let you examine the application in every possible perspective

- Function profiler
- Runtime stack analysis
- Code coverage
- Built-in MISRA C Checker supporting MISRA-C:1998 and MISRA-C:2004 runs at compile time

## Timeline

- Single window displays graphical representation of variables, interrupts, call stack and power consumption on a shared timeline
- Provides an overview of the application's behavior

RTOS awareness makes complex designs easier to debug

- Plug-ins available for kernel aware debugging
- Available for a majority of popular RTOSes

## Power debugging

- Available for ARM Cortex-based processors
- Provides an integrated monitoring of power consumption correlated to the source code, allowing tuning applications for minimized power consumption
- Power profiling
  - Power profiling makes power consumption profiling on function level for the application using statistical sampling
- Power graph
  - The power graph is integrated in the timeline window to give a correlated view of power consumption and system events such as interrupts and changes in the call stack
- Power log
  - The power log shows detailed data for each power sample, including current, program counter value, and a time stamp.
- Power breakpoints
  - Execution can be set to break on a Threshold value (high or low)
- Filtering power data
  - Power samples can be filtered based on threshold values (high or low)

## User friendly

### Embedded focus

- Built-in flash loaders for devices with on-chip flash
- Pre-configured device files
- Automatic project configuration based on device selection
- Ready-made project templates makes project setup easy
- Example projects for many different TI microcontroller devices

### One environment for all projects

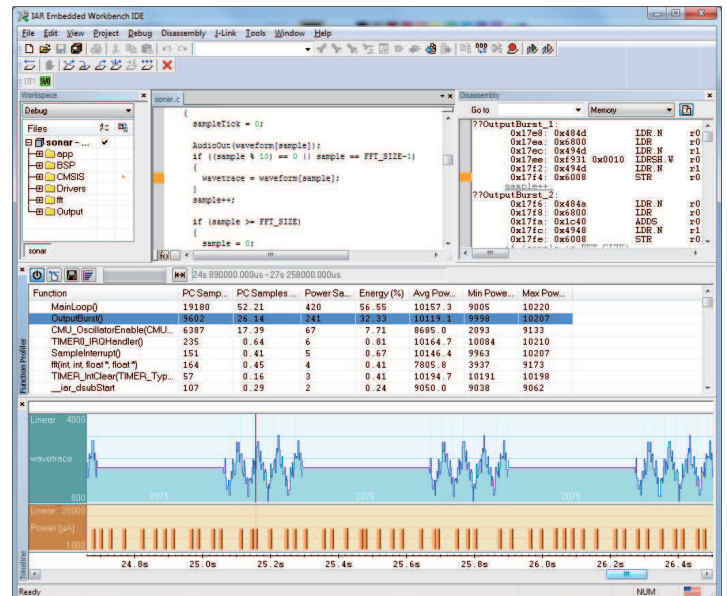
- Allows increased code reuse between projects
- No need to learn new tools when changing hardware
- Different processor architectures can be used in a single workspace

### Easy workflow

- Powerful Project Manager can arrange multiple projects in a workspace
- Smart Source Browser, multiple views and dockable windows for easy navigation
- Edit source code directly in the debugger and set breakpoints directly in the editor while writing code

### Extensive help system

- IAR Information Center
  - Web based access to tutorials, examples, documentation and other resources from within IAR Embedded Workbench
- Context-sensitive help
- Extensive user documentation in PDF format



## Reliable

IAR Embedded Workbench is proven in use

- Tool technology tested by over 100,000 developers means maximum field exposure
- 28 years of experience developing and providing tools is incorporated in IAR Embedded Workbench
- Validation reports from independent test house available guarantee compiler conformance to language specifications

### Professional customer support

- "Local Support Globally"
  - 10 Offices in North America, South America, Europe and Asia provide support together with distributors and representatives in 28 countries worldwide
- Support and Update Agreement
  - Includes software updates
  - Prioritized technical support by telephone, e-mail and fax
  - VIP Support contracts available
- "My Pages" at [www.iar.com](http://www.iar.com)
  - Read about new product releases
  - Download product updates
  - Transfer licenses to co-workers
  - Manage contact information

## Evaluation software

Free 30-day evaluation editions available at [www.iar.com/download](http://www.iar.com/download)

For the latest product news, up-to-date device support list, hardware debugger support and etc, please visit <http://www.iar.com/ti>

Availability of features depends on target implementation. Please visit [www.iar.com](http://www.iar.com) for details.

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