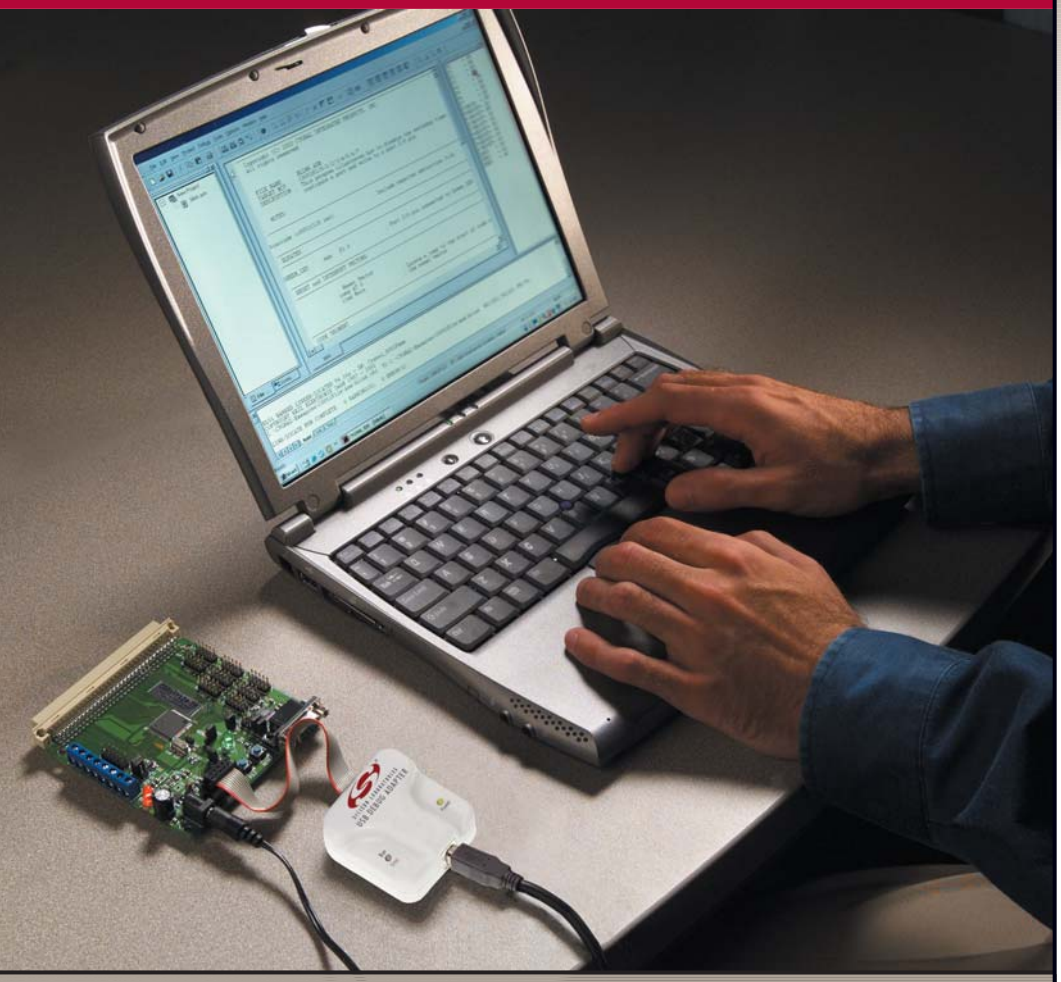
# Microcontroller Development Tools

## PROFESSIONAL, COMPREHENSIVE DEVELOPMENT TOOLS



### BUILT-IN DEBUG

Every microcontroller from Silicon Laboratories includes on-chip debug circuitry that supports non-intrusive, full-speed, in-circuit debugging of the production part installed in the user's end application, eliminating the sockets, external emulation hardware and performance-degrading cables typical of emulators. Emulators are never required, ever!

### COMPREHENSIVE DEVELOPMENT KITS

Silicon Laboratories comprehensive development kits provide everything needed to develop complex electronic systems quickly and easily. These kits come complete with all required hardware and software and outperform traditional "emulators" at a fraction of the cost. Development kits are available for sale on our website at www.silabs.com.

### INTEGRATED DEVELOPMENT ENVIRONMENT (IDE)

Silicon Laboratories IDE combines an editor, project manager, code development tools and a debugger into a single, intuitive environment for code development and in-system debug. No additional target RAM, program memory or communications channels are required. The development kits come complete with integrated 8051 macro assembler, C compiler and linker.

### DEVELOPMENT KITS

- Complete development/prototyping system
- Prototyping/demonstration board
- Silicon Laboratories IDE
  - Source code editor
  - Project manager
  - Flash programmer
  - Full speed in-circuit debugging
    - Run control
    - Single-stepping
    - Real-time breakpoints
    - Stack monitor
  - Register/memory inspection & modification
  - Conditional memory watchpoints
  - Single-step and animated execution modes
  - Variable watch window
- MCU configuration wizard

### THIRD PARTY TOOL SUPPORT

- Broad range of third-party compilers and development tools available
- Flash programming and source-level debug of OMF-51 object files is fully supported

### ToolStick: "Plug-n-Debug"

- Fully contained evaluation system in a USB stick
- Risk free evaluation of Silicon Labs' tool suite
- Demonstrates small form factor, mixed-signal MCUs


## SOLUTIONS GUIDE

**PROFESSIONAL, COMPREHENSIVE DEVELOPMENT KIT AND SUPPORT TOOLS**

SILICON LABORATORIES

# Microcontroller Development Tools

## COMPREHENSIVE DEVELOPMENT TOOLS

### Integrated Development Environment

**A** Standard Windows® Menus and Toolbars provide optimum access to all IDE features including the editor, debugger, customizable tool menu and online help.

**B** Project Window offers clear visibility and easy management of all files associated with design project.

**C** Edit Source Debugger Window helps create programs using the language-sensitive, full-featured editor. Debug assembly or C language program with the source in full view. Useful debug features, such as break-point markers and program counter location, dramatically speed debugging.

**D** Output Window conveniently displays the assembler output and listing file.

**E, F** Register Window and Memory Window help in examining and directly modifying memory, register and Flash contents during debugging. These flexible windows are automatically updated each time program execution stops, and values that changed are highlighted.

### System Requirements:

- A Pentium-class host PC running Windows Operating System
- One available USB port
- 64 MB RAM and 40 MB free hard drive space recommended

## CONTACT INFORMATION


SILICON LABORATORIES

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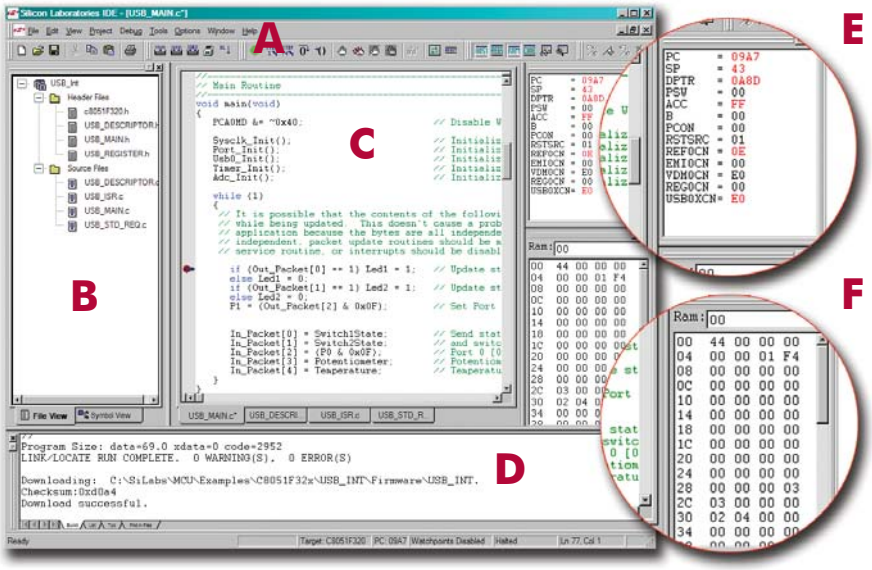
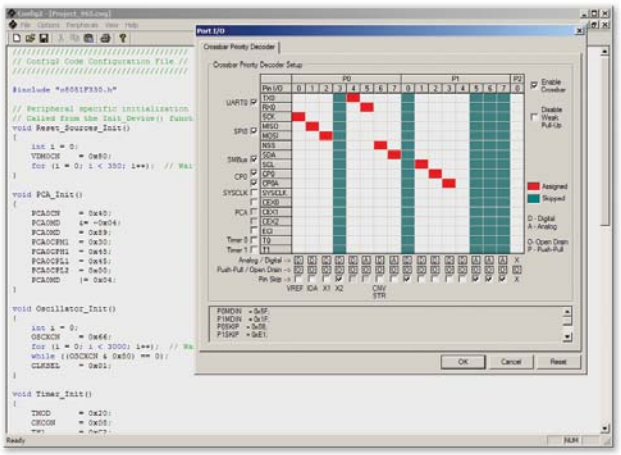
## Integrated Development Environment



### Configuration Wizard

A configuration wizard automatically generates MCU and on-chip peripheral initialization code. Clicking on checkboxes and entering values in scripted dialogs generates the assembly or C language code needed to enable and configure peripherals, assign functions to I/O pins and specify MCU operation.

## ORDERING INFORMATION

| Part Number | Description |
|---|---|
| ToolStick | Fully Contained Evaluation System in a USB Stick |
| CP2101EK | Evaluation Kit for CP2101 USB-to-UART Bridge Chip |
| CP2102EK | Evaluation Kit for CP2102 USB-to-UART Bridge Chip |
| CP2103EK | Evaluation Kit for CP2103 USB-to-UART Bridge Chip |
| C8051F064EK | Evaluation Kit for C8051F064 MCU |
| ZigBee-2.4-DK | 2.4 GHz ZigBee Development Kit |
| ETHERNET-DK | Embedded Ethernet Development Kit |
| MODEM-DK | Embedded Modem Development Kit |
| C8051F005DK | Development Kit for C8051F000, F001, F002, F003, F004, F005, F006, F007, F110, F0011, F012, F015, F016, F017, F018 and F019 MCUs |
| C8051F020DK | Development Kit for C8051F020, F021, F022 and F023 MCUs |
| C8051F040DK | Development Kit for C8051F040, F041, F042, F043, F044, F045, F046 and F047 MCUs |
| C8051F060DK | Development Kit for C8051F060, F061, F062, F063, F064, F065, F066 and F067 MCUs |
| C8051F120DK | Development Kit for C8051F120, F121, F122, F123, F124, F125, F126, F127, F130, F131, F132 and F133 MCUs |
| C8051F206DK | Development Kit for C8051F206 MCU |
| C8051F226DK | Development Kit for C8051F220, F221, F226, F230, F231, and F236 MCUs |
| C8051F300DK | Development Kit for C8051F300, F301, F302, F303, F304, and F305 MCUs |
| C8051F310DK | Development Kit for C8051F310, F311, F312, F313, F314, F315, F316 and F317 MCUs |
| C8051F320DK | Development Kit for C8051F320 and F321 MCUs |
| C8051F330DK | Development Kit for C8051F330, F330D, F331, F332, F333, F334 and F335 MCUs |
| C8051F350DK | Development Kit for C8051F350, F351, F352 and F353 |