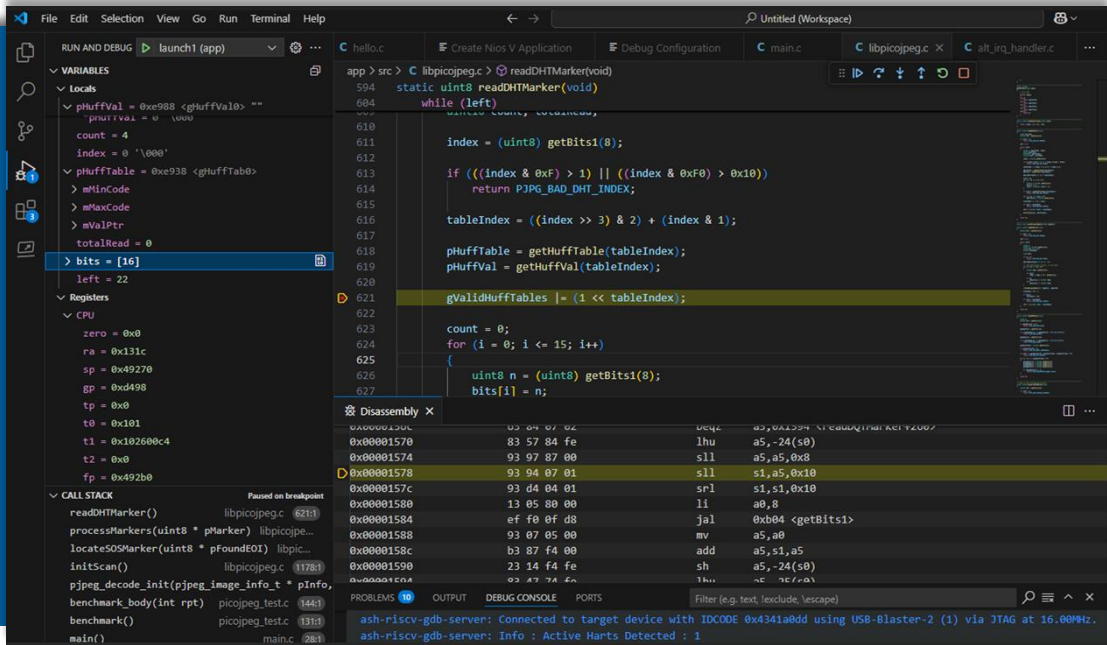


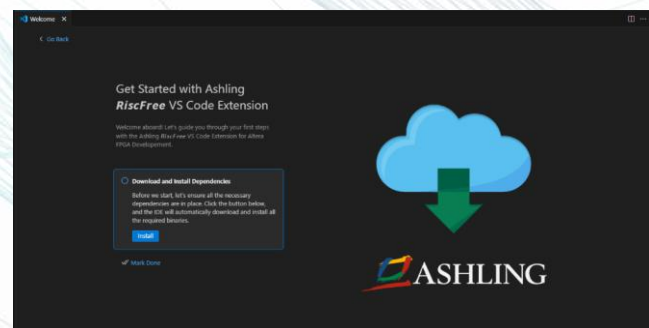
RiscFree™

Visual Studio Code Extension for Altera® FPGA Development



Features

- Fully integrated into **Visual Studio Code (VSC)** with source-code & project creation, editing, build & debug support.
- Developed by Ashling for Altera with a full software development toolchain for Altera FPGAs including an IDE, Compiler, Debugger and Trace support.
- Supports Altera Agilex, Stratix, Arria and Cyclone FPGA devices.
- Works "out-of-the-box" with the Altera Quartus® FPGA Design Software and installed from the Microsoft Visual Studio Marketplace.
- Provides software development and debug support for Nios V soft processors based on the RISC-V ISA.
- Nios V GCC compiler toolchain fully integrated with support for newlib & picolibc run-time libraries using the Nios V Hardware Abstraction Layer (HAL).
- Project Manager and Build Manager including Make and CMake support with rapid import, build and debug of Altera Quartus created application frameworks.
- Different Cores, One Solution.** A single instance of VS Code with the Ashling extension supports simultaneous ("Unified") debugging of any number of heterogeneous or homogeneous Altera FPGA cores including Nios V and Arm-Cortex.
- Run-time Debug using the Altera FPGA Download Cable (USB Blaster).
- Register Visualization for Nios V and Arm cores.
- Zephyr, FreeRTOS and Linux RTOS/OS debug awareness.
- Real-time Trace (on-chip and off-chip) support for both Nios V and Arm cores. Off-chip trace requires the [Vitra-XS](#) trace probe directly available from Ashling.
- Altera's Simics® FPGA simulator support (coming soon).
- Support for advanced features including Docker Containers, AI-powered coding features found in GitHub Copilot and secure, cloud-based development environments provided by GitHub Codespaces.**



Product
RiscFree Visual Studio Code Extension for Altera FPGA Development

Order Code
RF-VSCEXT-ALT

