Open. Lowest Power. Programmable RISC-V Solutions.

Design
Tools

CPUs

Operating
Systems

Microsemi

Mi-V
™

Boards

Solutions

Design
Support

www.mi-v.org

Microsemi

Power Matters.™

The Mi-V™ ecosystem, provided by Microsemi and industry leaders, aims to increase adoption of the RISC-V ISA and Microsemi's soft CPU product family.

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Design Tools

The Mi-V Ecosystem includes several design tools for use with Microsemi FPGAs and some for use with other RISC-V processors.

RISC-V

• SoftConsole IDE—Microsemi's free software development environment that enables the rapid production of C and C++ executables and includes GNU ARM Eclipse Plug-in, GCC compiler, and GDB debugger

SoftConsole

• Libero SoC design suite—Microsemi's comprehensive, easy to use FPGA design suite

• Firmware catalog—includes all of the available drivers and is installed with Libero or available standalone

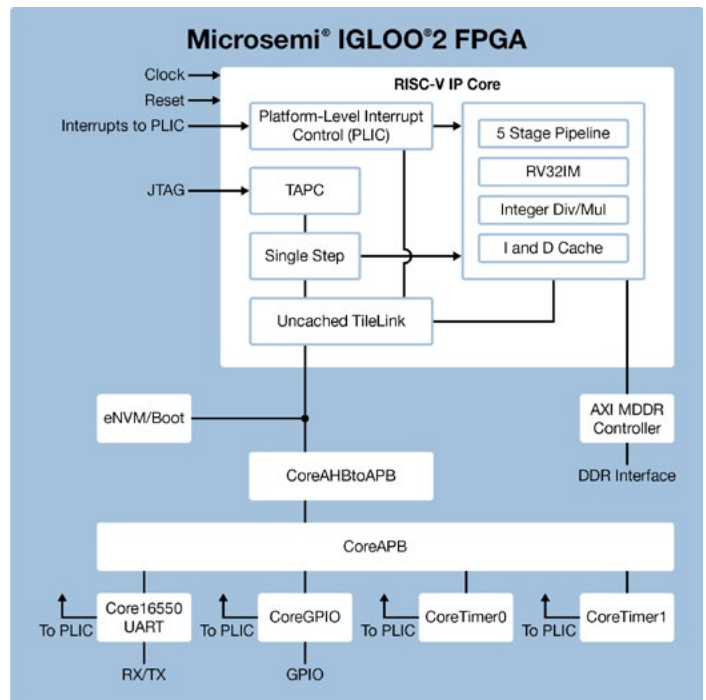• Imperas virtual extendable platform kit

imperas

• antmicro Renode virtual platform

antmicro EMBEDDED SYSTEMS

CPUs

32-bit integer machines with and without floating point

Microsemi® IGLOO®2 FPGA

Operating Systems

Operating systems for RISC-V include the most popular commercial and open-source options.

Commercial Operating Systems for RISC-V

Open-Source Operating Systems for RISC-V

Boards

Low-cost and full-featured boards which run RISC-V cores are available from Microsemi and distribution partners.

Microsemi
- PolarFire Evaluation kit
- PolarFire Splash kit
- RTG4 Development kit

Future Electronics
- PolarFire Avalanche board
- IGLOO2 RISC-V Creative board

Arrow Electronics
- PolarFire Everest board

Solutions

Microsemi posts solutions for RISC-V on the GitHub site to provide easy access for designers as well as regular updates of solutions.

github.com/RISCV-on-Microsemi-FPGA

Solutions provided on GitHub include:

- FreeRTOS demo and source files

- µc/OS sample design

- Sample projects for all boards

  o Hello world, blinky, etc.
- RISC-V bare metal boot loader
- RISC-V hardware abstraction layer

- SoftConsole IDE sample workspace

Design Support

Microsemi technical support team and design services team are prepared to support RISC-V designs.
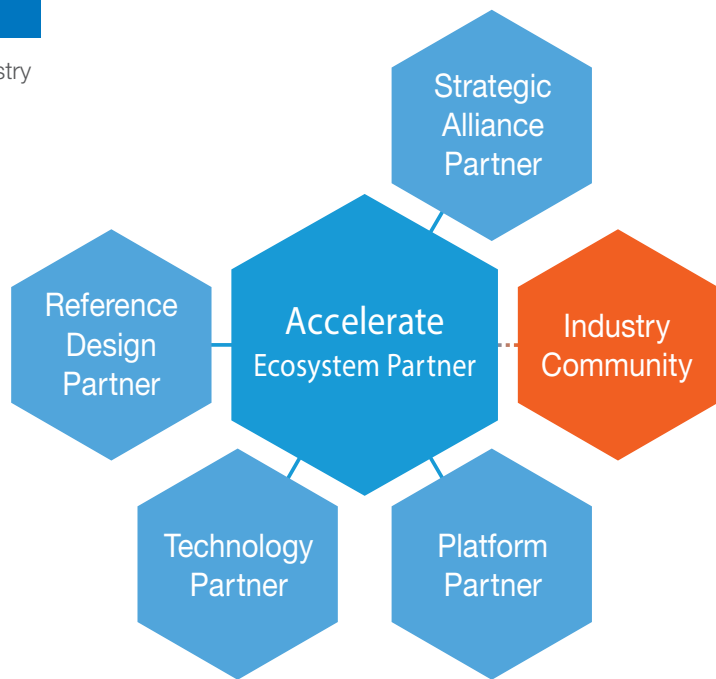
For Technical Support

- Web: soc.microsemi.com/mycases

- Phone (NA): 800.262.1060

- Phone (Int'l): +1 650.318.4460

- Email: *soc_tech@microsemi.com*

For Design Services

www.microsemi.com/product-directory/fpga-soc-design/4182-fpga-design-services-solutions

Accelerate Partner Program

Microsemi's Accelerate program gathers an ecosystem of industry partners to facilitate collaboration amongst leading silicon, IP, systems, software, and design experts to deliver validated solutions that expedite time to market for end-customers and time-to-revenue for partners. Microsemi's Mi-V™ Embedded Ecosystem, aims to increase adoption of RISC-V ISA and Microsemi's soft CPU product family.

To learn about becoming a Mi-V Ecosystem Partner, visit http://www.microsemi.com/form/86-accelerate-ecosystem-partner-program.

Strategic Alliance Partner

Reference Design Partner

Accelerate Ecosystem Partner

Industry Community

Technology Partner

Platform Partner

Microsemi is continually adding new products to its industry-leading portfolio.

For the most recent updates to our product line and for detailed information and specifications, please call, email, or visit our website.

Toll-free: 800-713-4113

sales.support@microsemi.com

www.microsemi.com

Microsemi Corporation (Nasdaq: MSCC) offers a comprehensive portfolio of semiconductor and system solutions for aerospace & defense, communications, data center and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; enterprise storage and communication solutions, security technologies and scalable anti-tamper products; Ethernet solutions; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, California and has approximately 4,800 employees globally. Learn more at www.microsemi.com.

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