

Optimized to help developers evaluate the operation and performance of the RMI Alchemy™ Au1500® processor.

Overview

The RMI Alchemy™ Solutions DBAu1500™ development board is an integrated hardware and software system that leverages the power of the Au1500™ processor—a MIPS®-based System-on-a-Chip (SoC) with PCI controller. The processor enables the development of high-performance, low-power-consumption Internet Edge solutions, including wireless gateways, wireless access points, handheld computing, Web pads, set-top boxes, and multi-media applications.

The DBAu1500 development board is a turnkey solution that integrates a processor, memory and peripherals together on a single board, along with debugging assist features and software.

The DBAu1500 development board underscores RMI's commitment to providing customers with integrated systems that address their hardware and software needs, and positions RMI as a valued partner in the development of future Internet Edge solutions.



Highlights

Our DBAu1500 development board has been designed to help Internet Edge solutions providers:

Test processor performance

The DBAu1500 development board integrates hardware and software into a complete, ready-to-run system, which can help developers test the performance of the Au1500 processor in a variety of demanding Internet Edge applications.

Bring Internet Edge applications to market faster

The debug assist features and software that are part of the DBAu1500 development board have been optimized to help customers rapidly develop new Internet Edge applications based on the Au1500 processor. The system incorporates an Au1500 processor, SDRAM, AMD MirrorBit™ Flash memory, and two AMD 10/100 Ethernet PHYs together onto a single board, along with debug assist software (including a YAMON monitor/debugger), drivers, and design files. The result is a fully integrated system that is ready to run customer-developed software, which in turn can help reduce the time to market for new Internet Edge solutions.

Learn from best practices

The RMI DBAu1500 development board is a complete hardware and software solution that serves as a model for the development of future Internet Edge solutions.

Features

Memory Devices

- 64MB of 100MHz SDRAM
- 32MB AMD MirrorBit Flash memory (Am29LV640)
 - 16MB Boot Flash memory
 - 16MB Parameter Flash memory

Expansion

- Two hot-swappable PCMCIA slots
- Static memory interface connector
- IDE ATA/133 connector
- 3.3V/PCI connector

Debug Assist Features

- YAMON monitor/debugger
- EJTAG connection to Au1500 processor
- Test points for key signals
- LEDs for easy notification of system activity
- Bank of 7-segment LEDs for software status
- User-settable switches

On-board Peripherals

- Two AMD 10/100 Ethernet PHYs (Am79C874VC)
- USB host port
- USB device/host port
- AC97 audio CODEC stereo
- Two serial ports
- PCI-ATA/133 controller

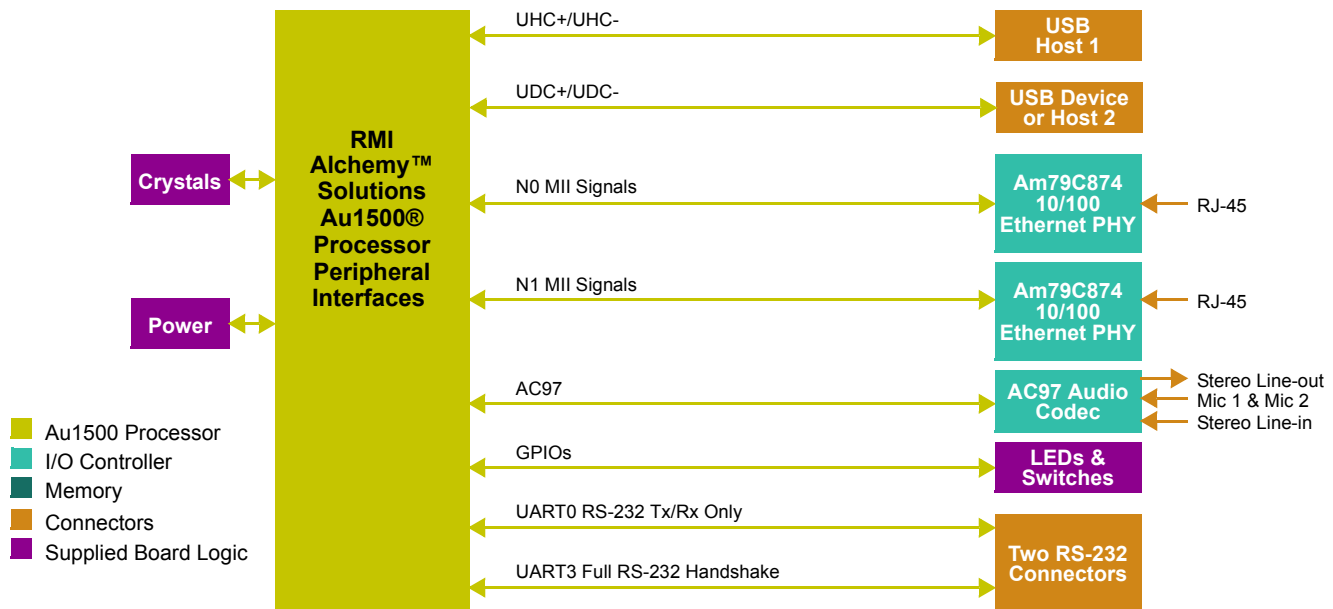
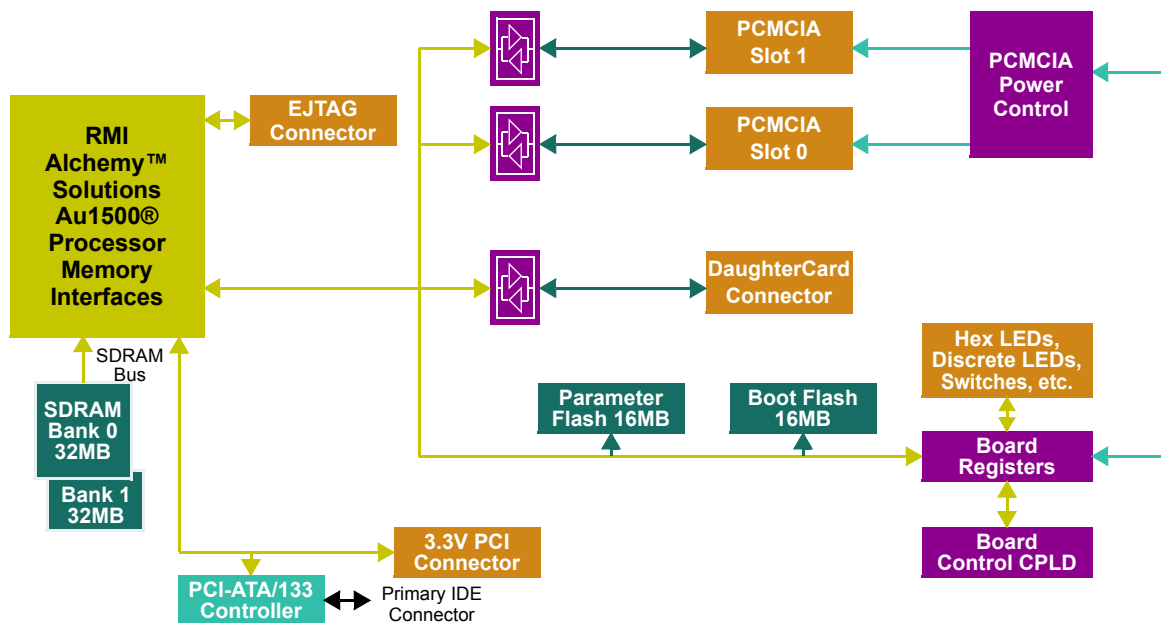
System Documentation

- User's guide
- Hardware datasheets
- Complete set of hardware design files, including schematics, layout, and BOM

Software Included

- YAMON monitor/debugger in Flash memory
 - Assembly/disassembly
 - Memory modify/display
 - Register modify/display
 - S-record, download via serial and Ethernet
- Quick Start
- Peripheral initialization routines
- Diagnostics
- Example code
- Development tools
- Microsoft® Windows® CE.Net, VxWorks, embedded Linux demonstration images

RMI Alchemy™ DBAu1500™ Development Board



About RMI

Raza Microelectronics, Inc. (RMI®) is a fabless semiconductor company providing highly-integrated feature-rich products ranging from power-optimized System-on-a-Chip (SoC) solutions to High-Performance Processors for the Digital Consumer, Wireless, Networking and Security markets. RMI offers the most advanced and most complete MIPS-Based™ processing solutions with both 32/64-bit architectures supporting frequencies from 300MHz to 1.2GHz. The company is headquartered in Cupertino, CA with offices in Texas, India, Korea, Japan and China. More information about RMI can be found on the company's website at www.RazaMicro.com

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