

Optimized to help developers evaluate the operation and performance of the RMI Alchemy™ Au1000™ processor.

Overview

The RMI Alchemy™ Solutions DBAu1000™ development board is an integrated hardware and software system. It leverages the power of the RMI Alchemy™ Solutions Au1000™ processor—a small form factor System-on-a-Chip (SoC) that enables the development of high performance, low-power-consumption Internet Edge solutions, including WAPs (Wireless Access Points), routers, gateways, printers, point-of-sale terminals, set-top boxes, and Internet security products.

The DBAu1000 development board is a turnkey solution that integrates a processor, memory and peripherals together onto a single board, along with debugging assist features and software.

The DBAu1000 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 DBAu1000 development board has been designed to help Internet Edge developers:

Test processor performance

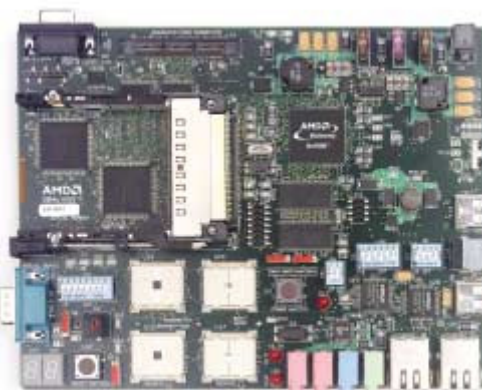
By integrating hardware and software into a seamless system, the DBAu1000 development board enables developers to evaluate the performance and functionality of the RMI Au1000 processor in demanding Internet Edge applications.

Bring hardware and software solutions to market faster

The DBAu1000 development board has been optimized to help customers develop hardware and software solutions based on RMI's Au1000 processor. This system incorporates an Au1000 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 development time for new solutions.

Learn from best practices

The unique needs of both software and hardware designers drove the creation of RMI's DBAu1000 development board. The result is a sophisticated system 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

Debug Assist Features

- YAMON monitor/debugger
- EJTAG connection to Au1000 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
- 4MB/s IrDA

System Documentation

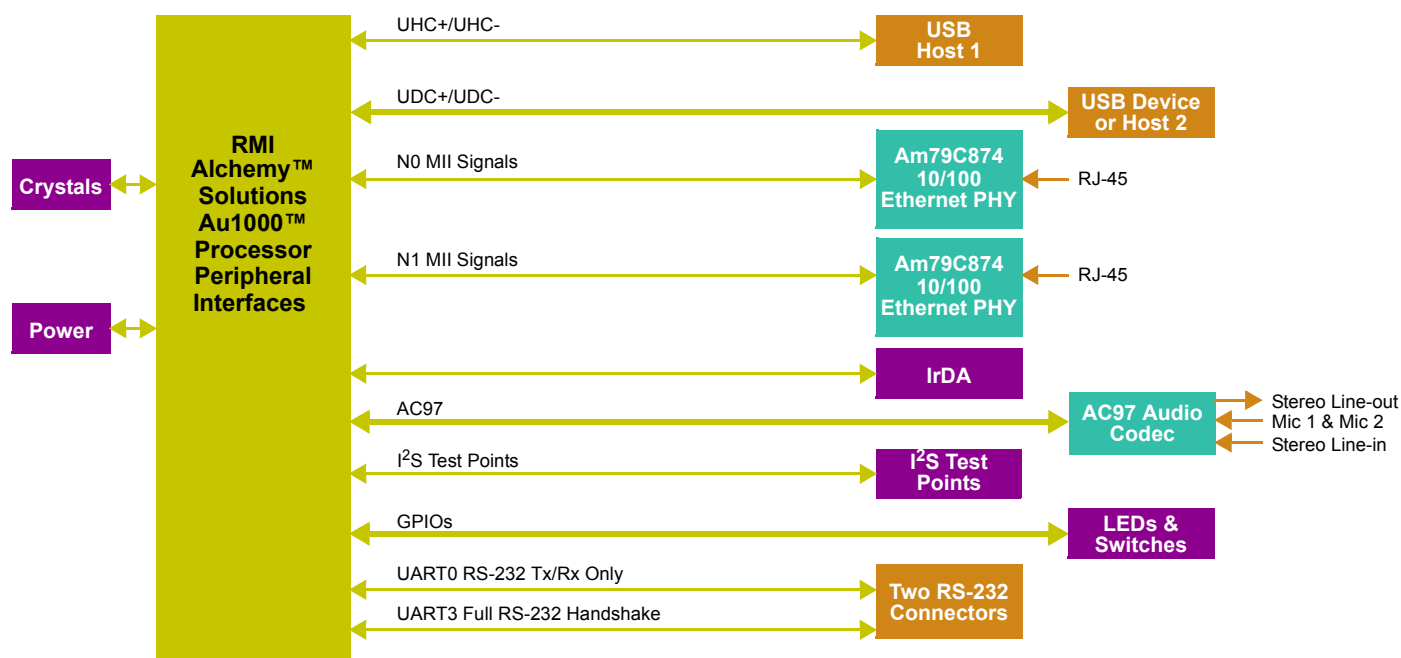
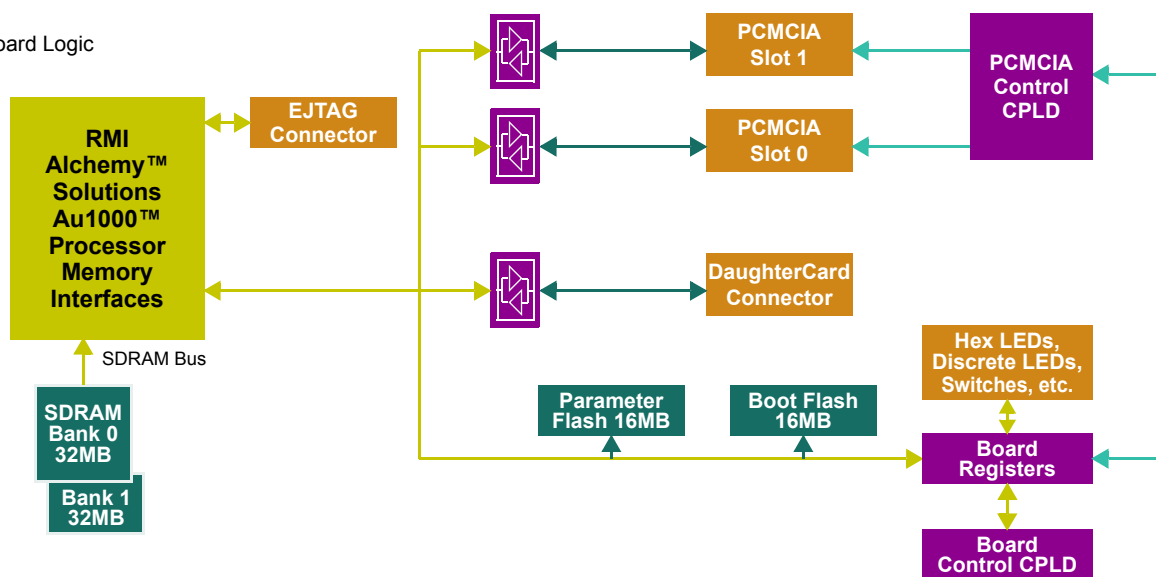
- User's guide
- Hardware datasheets
- Complete set of hardware design files, including schematics, layout, and BOM

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™ DBAu1000™ Development Board

- Au1000 Processor
- I/O Controller
- Memory
- Connectors
- Supplied Board Logic



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