

Powerful tools for optimizing the operation and performance of the RMI Alchemy™ Au1550™ processor.

Product Overview

The RMI Alchemy™ DBAu1550™ development board is an integrated hardware and software system that leverages the power of the Au1550™ security network processor - a MIPS-based™ System-on-a-Chip (SoC) with integrated security technology developed by SafeNet for wired and wireless applications where security is important.



The DBAu1550 development board is a turnkey solution that brings processor, memory and peripherals together on a single board, along with debugging assist features and software.

The processor accelerates networking and remote access applications such as gateways and network addressable storage (NAS) units, wireless access points and Voice over Internet Protocol (VoIP) environments. Low power consumption enables the Au1550 processor to support battery and Power-over-Ethernet applications.

The DBAu1550 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 access and network solutions.

Highlights

The DBAu1550 development board gives access and network solutions providers the power to:

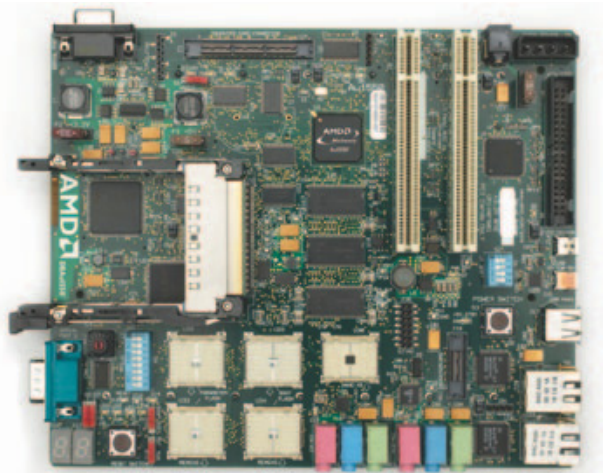
Test processor performance

The DBAu1550 development board integrates hardware and software into a complete, ready-to-run system, which can help developers test the performance of the Au1550 security network processor in a variety of demanding network applications.

Help bring access and network applications to market faster

The debug assist features and software that are part of the DBAu1550 development board have been optimized to help customers rapidly develop new security-conscious access equipment based on the Au1550 processor. The system incorporates an Au1550 processor, SDRAM, MirrorBit™ technology 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 network and access products.



Learn from best practices

The DBAu1550 development board is a complete hardware and software solution that serves as a model for the development of future access solutions.

Features

Memory Devices

- 192MB of 200MHz DDR-400
- 128MB MirrorBit technology Flash memory (Am29LV256)
 - 64MB Boot Flash memory
 - 64MB Parameter Flash memory
- 64MB NAND Flash memory

Expansion

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

Debug Assist Features

- YAMON monitor/debugger
- EJTAG connection to Au1550 processor
- Test points for key signals
- LEDs for easy notification of system activity
- Bank of 7-segment LEDs for software status
- User-settable switches

RMI Alchemy™ DBAu1550™ Development Board

On-board Peripherals

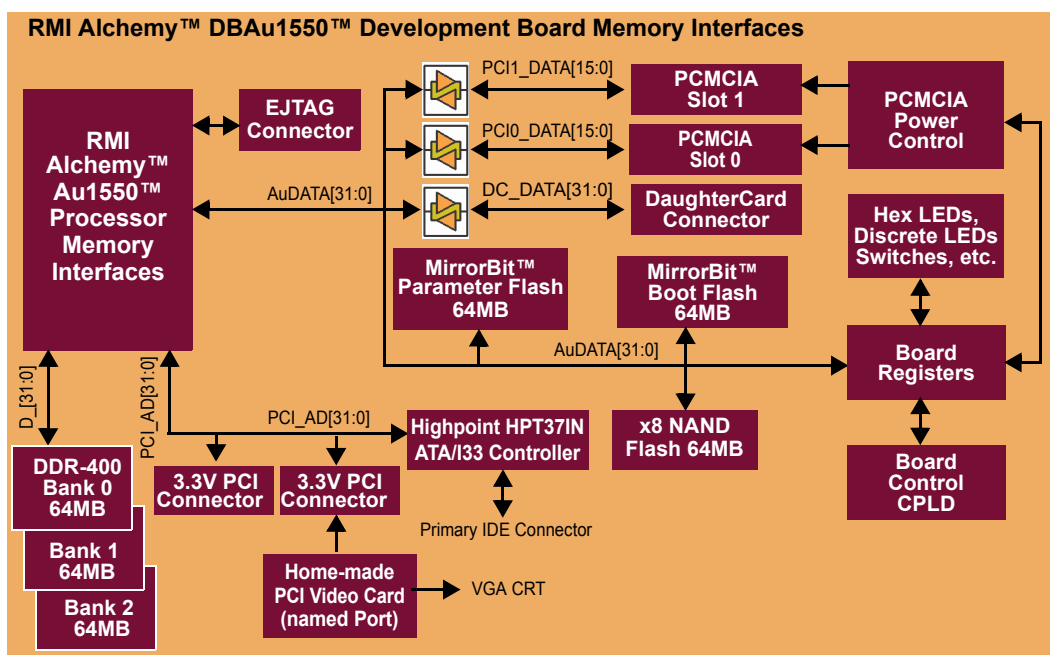
- Two AMD 10/100 Ethernet PHYs (Am79C874VC)
- USB host port with On-The-Go
- USB device port
- AC97 audio CODEC stereo
- Two serial ports
- SMBUS
 - Temperature and Voltage Monitor
 - Serial EEPROM
- SPI BUS
 - Spansion™ SPI Flash memory
 - Temperature Sensor
- PCI-ATA/133 controller
- I²S Audio CODEC

Software Included

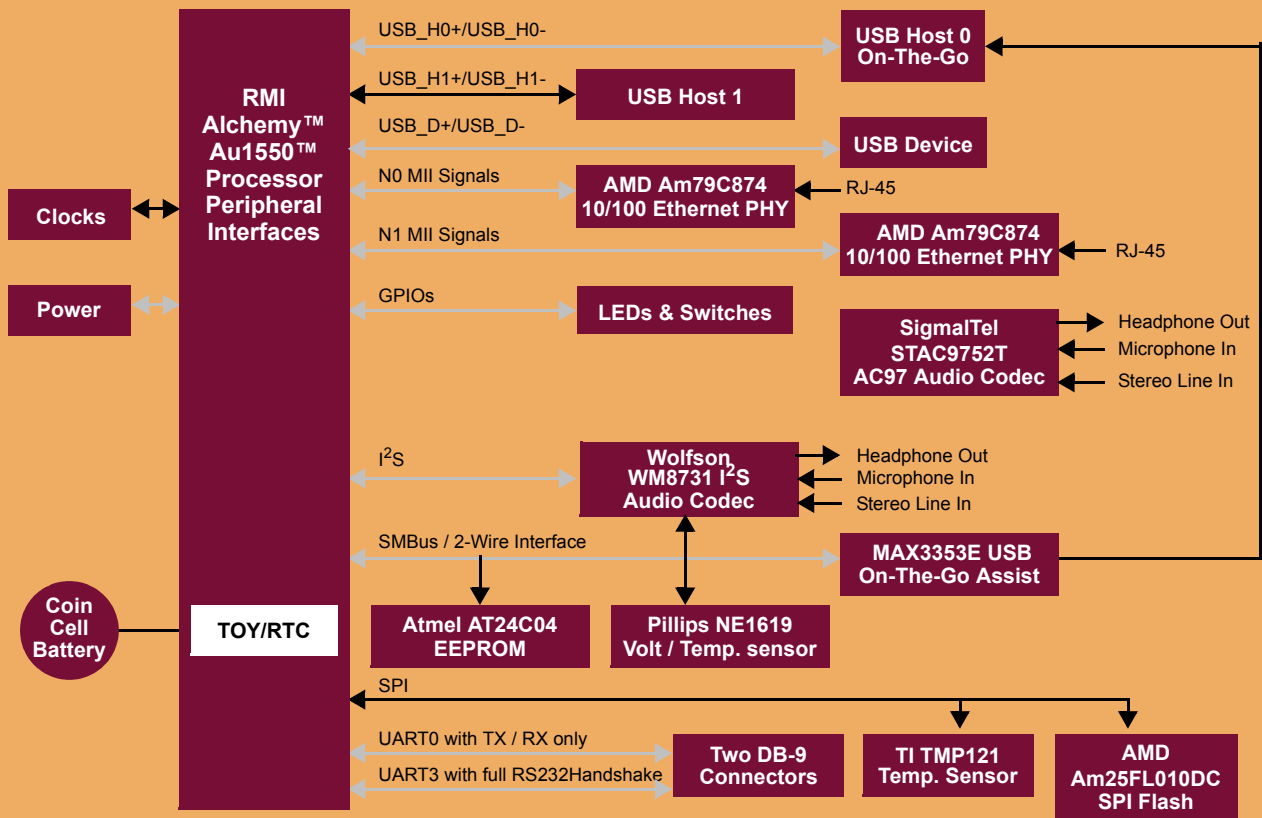
- YAMON monitor/debugger in Flash memory
 - Assembly/disassembly
 - Memory modify/display
 - Register modify/display
 - S-record, download via serial and Ethernet
- Quick Start
- Peripheral initialization routines
- Diagnostics
- Example code
- Development tools
- Microsoft® Windows® CE.Net, VxWorks,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

System Documentation

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



RMI Alchemy™ DBAu1550™ Development Board Peripheral Interfaces



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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