

AVM49R MPEG-1/2/4 Encoder/Decoder Multimedia Reference Platform

Highlights

- Ideally suited for:
 - Home gateways
 - IP set-top boxes
 - Digital multimedia clients
- Supports wired and wireless connectivity
- Complete reference platform for real-time MPEG-1/2/4 encoding and decoding
- Designed for adding HDD and USB devices
- PCI slot to add wireless or graphics devices
- Standard S-video and composite outputs for standard definition TV
- Runs MontaVista Linux PE 3.1 version operating system
- Mini ITX form factor board
- Compact 6.7 inch x 6.7 inch (170 mm x 170 mm) size

Description

The AVM49R multimedia reference platform enables the rapid development of low-cost IP set-top boxes, digital video recorders, personal video recorders, home gateways and multimedia clients. It's based on a combination of the Toshiba Tmpr4938 64-bit MIPS-based RISC processor, the Toshiba TC86C001FG companion chip that supports IDE and USB ports and Vweb's VW2010 MPEG-1/2/4 encoder/decoder chip that supports full-screen MPEG-2/4 playback and transmit/receive MPEG-1/2/4 streaming. The AVM49R fully featured design kit comes complete with an AVM49R chassis that includes an AVM49R development board, power supply, documentation, drivers and application demo software binary.

Features

- CPU
 - Highly integrated 64-bit MIPS-based RISC processor that includes on-chip peripherals.

- Peripherals include:
 - Two 10/100 Ethernet controllers (EMACs)
 - SDRAM controller
 - PCI controller
 - DMA and interrupt controllers, timer/counter, etc.
- Companion chips
 - TC86C001 super I/O chip
 - PCI 32-bit 33 MHz host interface
 - One channel of ATA66 EIDE interface
 - USB 1.1 host 2-channel, device 1-channel
 - Vweb VW2010 MPEG-1/2/4 CODEC chip
 - Real-time MPEG-1/2/4 compression/decompression or encode/decode
 - Superior quality encoding and decoding
 - Maximizes HDD use with MPEG-4 technology
 - Full-feature OSD support
 - Two 32-bit graphics planes
 - Multiple browser supported by the chip
 - Anti-flicker filter for web browser

AVM49R Board



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Product Brief

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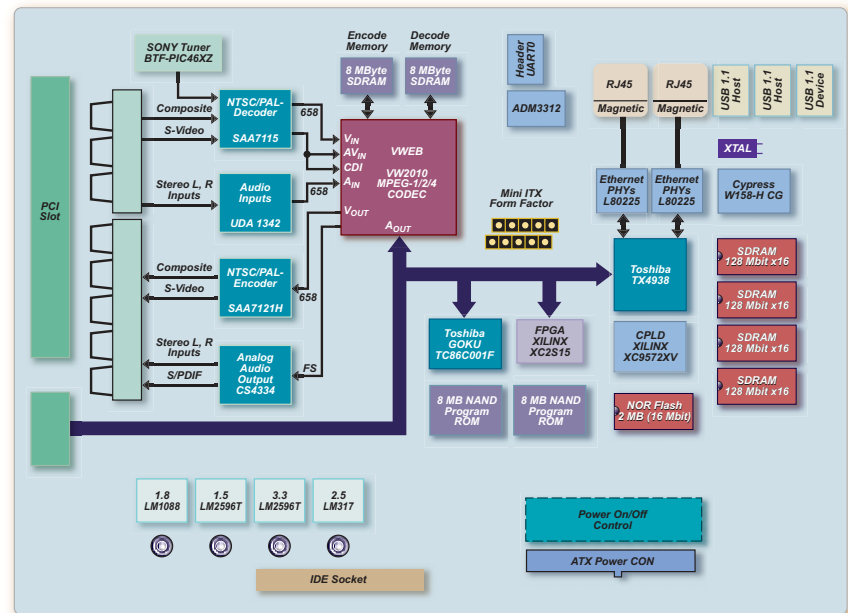
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Reference Design Deliverables

- AVM49R box including AVM49R board
- AVM49R design specification
- TMPR4938, VW2010 and TC86C001F data sheets
- AVM49R schematics (PDF or Orcad)
- AVM49R Gerber database (Power PCB)
- Patch for MontaVista Linux PE 3.1 operating system
 - Need preview license from MontaVista for RBTX4938
 - <http://www.mvista.com/previewkit/index.html>
- Patch for ROM monitor (YAMON) source code
 - Need to register with MIPS Technologies for YAMON
 - http://www.mips.com/content/Products/SoftwareTools/content_html/yamon
- CPLD/FPGA source code
- Documentation

AVM49R Block Diagram



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