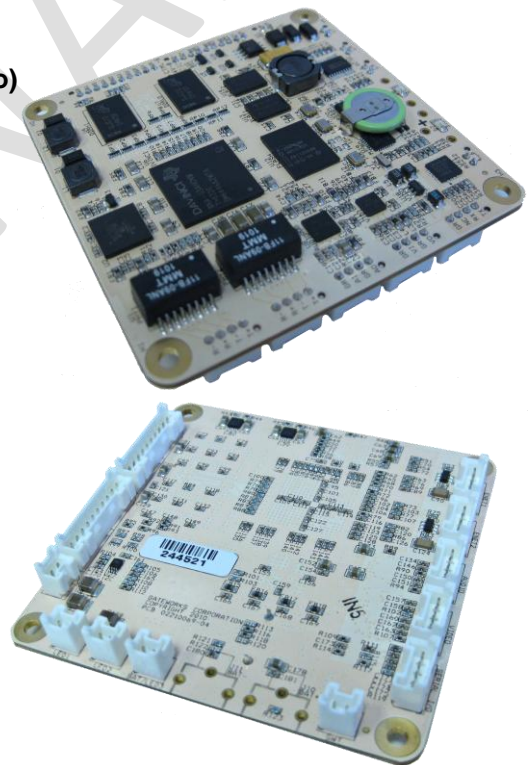


A small form factor, rugged, extended temperature embedded media processor for H.264 video encode and decode applications

The GW2361 is a member of the Gateworks Rincon Processor Family. The GW2361 Media Processor is based on the Texas Instruments DaVinci™ DM6446 digital media system processor. The DM6446 includes an ARM926EJ-S™ RISC core, a TMS320C64x+™ DSP core, a video processing front end used for video capture, and a video processing back end used for display. The GW2361 includes 256Mbytes of DDRII memory, and 32Mbytes of Flash. Peripherals include video encoder with composite input, video decoder with composite output, audio codec with line input and output, and two switched 10/100-BaseTX Ethernet ports with IEC-6100-2/4 ESD and EFT data protection. Additional features include an RS232 serial port, an RS485 Serial Port, a real time clock with battery backup, an operating voltage and temperature monitor, and software programmable digital I/O. The board is designed to operate in harsh environments and features a wide input 6-28VDC power supply and -40°C to +85°C operating temperature. Software includes an open source board support package based upon OpenWRT Linux which includes a web configurable multicast GStreamer server and client application for operation out of the box.

FEATURES

- ◆ TI DaVinci TMS320DM6446 Media Processor
- ◆ 256Mbytes DDRII SDRAM Memory (120MB ARM, 236MB Video)
- ◆ 32Mbytes Flash Memory
- ◆ 256Kbits Serial EEPROM
- ◆ Composite Video Input and Output
- ◆ Audio Line Input and Output
- ◆ Two 10/100 Base-TX Switched Ethernet Ports with IEC-6100-2/4 ESD/EFT Data Protection
- ◆ RS232 and RS485 Serial Ports
- ◆ Real Time Clock with Battery Backup
- ◆ Operating Temperature and Voltage Monitor
- ◆ Six Programmable Digital I/O
- ◆ Three Programmable Status LEDs
- ◆ JTAG with Serial Console Port
- ◆ 6 to 28VDC Input Voltage Range
- ◆ Reverse Voltage and Transient Protection
- ◆ 2W Typical Operating Power
- ◆ -40°C to +85°C Operating Temperature
- ◆ OpenWRT Linux 2.6 BSP with Multicast GStreamer Software
- ◆ Low Latency H.264 Video Codec (<200ms End-to-End)
- ◆ Supports VLC clients
- ◆ 1 Year Warranty
- ◆ Optional battery terminals for 6 AA cells



SPECIFICATIONS

ELECTRICAL

Input Voltage

- ▼ 8 to 28VDC

Operating Current

- ▼ 0.18A Typical @ 12VDC

MECHANICAL

Dimensions

- ▼ 3.0 x 3.0 x 0.82in (76 x 76 x 21mm)

Weight

- ▼ 1.5 oz (43g)

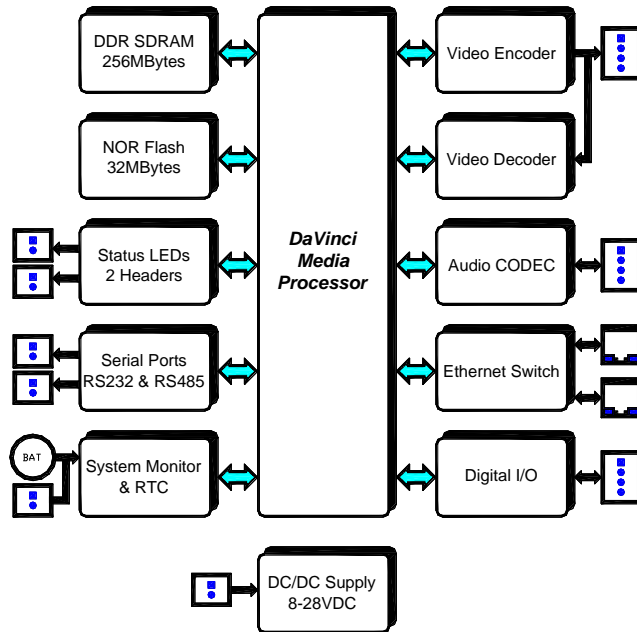
ENVIRONMENTAL

Operating Parameters

- ▼ Temperature: -40°C to +85°C
- ▼ Humidity (non-condensing): 20% to 90%
- ▼ MTBF: To Be Determined

Storage Parameters

- ▼ Temperature: -40°C to +85°C
- ▼ Humidity (non-condensing): 5% to 95%



Rincon GW2361 Functional Diagram

ORDERING OPTIONS

Standard Configuration

GW2361

- ▼ TI TMS320DM6446 CPU @ 513MHz
- ▼ 256Mbytes DDRII DRAM
- ▼ 32Mbytes System Flash
- ▼ -40 to +85°C

Development Kit

GW2361-DEVKIT

- ▼ GW2361 Rincon Media Processor
- ▼ OpenWRT Linux v2.6 Board Support Package
- ▼ Ethernet and Video/Audio Cables
- ▼ Power Supply
- ▼ JTAG Programmer with Linux & Windows Drivers

Other Configurations

The GW2361 can be customized for volume applications by changing the features listed below. Contact the factory for additional information.

- ▼ Processor speed
- ▼ Adding optional peripherals
- ▼ Removing populated peripherals
- ▼ Operating temperature range

