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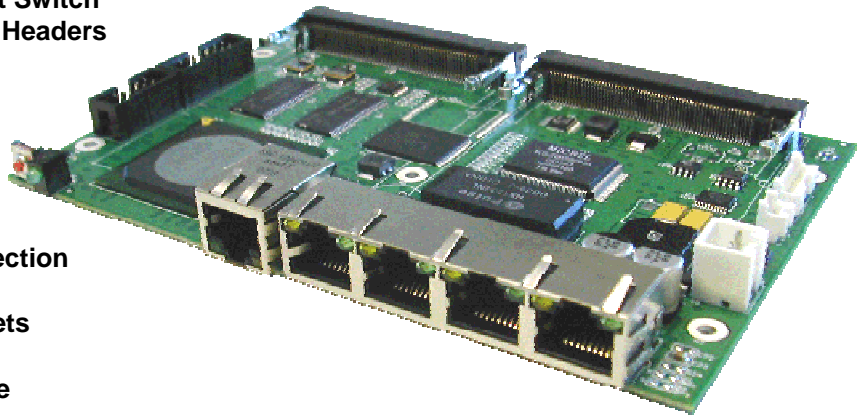**NEW!**

Avila GW2355 Network Computer

A quad Mini-PCI Intel® XScale® IXP425/533MHz processor for broadband gateway network applications

The GW2355 is a member of the Gateworks Avila Network Processor family. The GW2355 meets the requirements for broadband gateway applications. This network processor consists of an Intel® IXP425 XScale® operating at 533MHz, 64Mbytes of SDRAM, and 16Mbytes of Flash. Peripherals include four Type III Mini-PCI sockets, a 10/100 WAN, and a 4-port 10/100 LAN switch. All Ethernet channels have IEC-6100-4 ESD and EFT protection. Additional features include serial EEPROM, real time clock with battery backup, system monitor to track operating temperature and input voltage, front panel pushbutton reset and status led, and watchdog timer. An RS-232 serial port is available through the JTAG programming connector using a Gateworks GW16027 JTAG Serial Port Adapter. The GW2355 also supports Compact Flash and GPS as ordering options. Power is applied through any Ethernet connector with the unused signal pairs in a Passive Power over Ethernet architecture. A board support package is included for Linux 2.6 operating systems.

FEATURES

♦ **Intel® XScale® IXP425 533MHz Processor**
♦ **64Mbytes SDRAM Memory**
♦ **16Mbytes Flash Memory**
♦ **Four Type III Mini-PCI Sockets**
♦ **WAN: 10/100 Base-TX Ethernet Port**
♦ **LAN: 4-Port 10/100 Base-TX Ethernet Switch**
♦ **LAN Ports Also Mapped to Latching Headers**
♦ **1Kbyte Serial EEPROM**
♦ **Battery Powered Real Time Clock**
♦ **Voltage and Temperature Monitor**
♦ **Watchdog Timer**
♦ **Front Panel LED and Reset Switch**
♦ **Passive Power Over Ethernet**
♦ **Reverse Voltage and Transient Protection**
♦ **9 to 48VDC Input Voltage Range**
♦ **20W Shared between Mini-PCI Sockets**
♦ **4W Typical Operating Power**
♦ **-40°C to 85°C Operating Temperature**
♦ **Linux v2.6 Board Support Package**
♦ **1 Year Warranty**
♦ **Optional GPS with Pulse Per Second**
♦ **Optional Compact Flash Socket**

SPECIFICATIONS

ELECTRICAL
Input Voltage
▾ 9 to 48VDC
Operating Current
▾ 0.16A Typical @ 24VDC
MECHANICAL
Dimensions
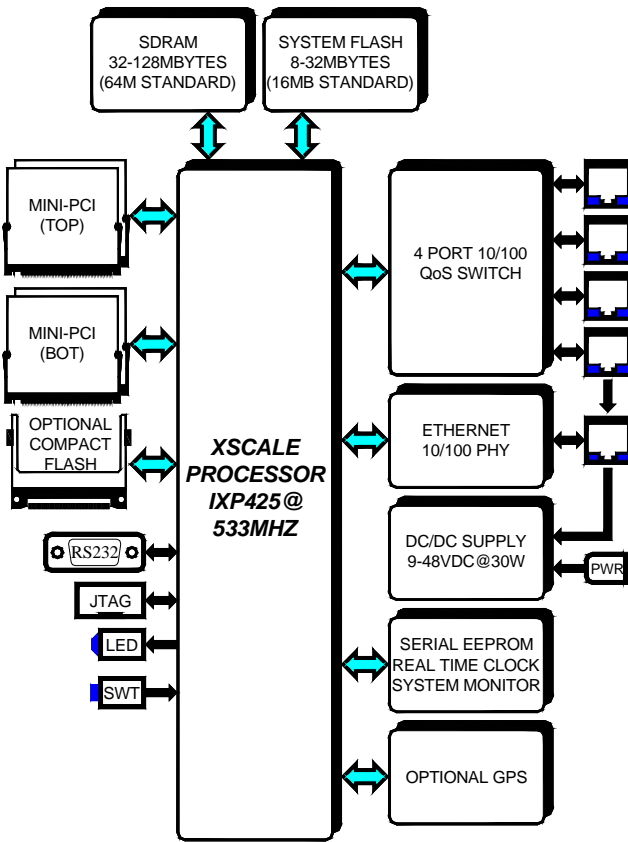▾ 4.0in x 6.0in x 1.2in (102mm x 152mm x 30mm)
Weight
▾ 4oz (114g)

ENVIRONMENTAL
Operating Parameters
▾ Temperature: -40°C to +85°C
▾ Humidity (non-condensing): 20% to 90%
▾ MTBF: 66 years @ 55°C
Storage Parameters
▾ Temperature: -40°C to +85°C
▾ Humidity (non-condensing): 5% to 95%

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Avila GW2355 Functional Diagram

ORDERING OPTIONS

Standard Configuration
GW2355
- IXP425 CPU @ 533MHz
- 64Mbytes SDRAM
- 16Mbytes Flash
- Four Type III Mini-PCI Slots

Development Kit
GW2355-DEVKIT
- GW2355 Network Computer
- Redboot v2.04 Loader
- Linux v2.6 Board Support Package
- USB, Ethernet and Serial Cables
- Passive PoE Power Supply
- JTAG Programmer with Linux & Windows Drivers

Other Configurations
The GW2355 can be customized for volume applications by changing the features listed below. Contact the factory for additional information.
- Intel IXP42x processor type and speed
- SDRAM from 32Mbytes to 128Mbytes
- Flash from 8Mbytes to 32Mbytes
- Optional Compact Flash Socket
- Optional GPS Module
- Adding optional peripherals
- Removing populated peripherals
- Operating temperature range

Product	CPU	Size (in)	Mini-PCI Sites	Ethernet Ports	PoE	Special Features	Operating Range
GW2347	IXP42x	4x4	1	1	Passive	Small, Low Power	6-20VDC
GW2357	IXP42x	4x4	1	1	802.3af	Small, 802.3af Power	38-60VDC
GW2353	IXP42x	4x7	2	1	Passive	Audio, Video, GPS, Auto	8-48VDC
GW2355	IXP42x	4x6	4	5	Passive	Optional GPS, QoS Switch	9-48VDC
GW2348-2	IXP42x	4x6	2	2	Passive	Low Cost Two Radio	9-48VDC
GW2348-4	IXP42x	4x6	4	2	Passive	Optional USB	9-48VDC
GW2358-4	IXP43x	4x6	4	2	Passive	USB, Optional GPS & RS485	8-48VDC

Other configurations of each product are possible. Contact factory for more information.
Gateworks Avila and Cambria Feature Comparison