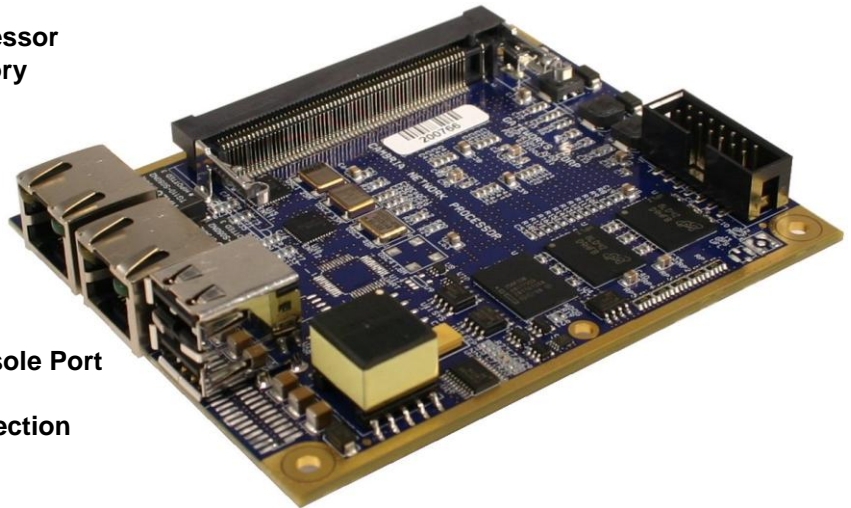


A compact single Mini-PCI Intel® XScale® IXP435/667MHz processor for embedded network applications

The GW2350 is a member of the Gateworks Cambria Network Processor family. This network processor consists of an Intel® IXP435 XScale® operating at 667MHz, 128Mbytes of DDRII-400 SDRAM, and 32Mbytes of Flash. Peripherals include a Type III Mini-PCI socket, two 10/100 Base-TX Ethernet ports with IEC-6100-4 ESD and EFT protection, and two USB Host ports. Additional features include digital I/O, serial EEPROM, system monitor to track operating temperature and input voltage, and watchdog timer. The GW2350 also supports GPS and RS485 serial as ordering options. Power is optionally applied through an auxiliary latching connector or through either Ethernet connector with the unused signal pairs in a passive power over Ethernet architecture. An RS232 serial port is available through the JTAG connector using a Gateworks GW16027 JTAG Serial Port Adapter or a Gateworks GW16042 USB JTAG Programmer. A board support package is included for Linux 2.6 operating systems.

FEATURES

- ◆ Intel® XScale® IXP435 667MHz Processor
- ◆ 128Mbytes DDRII-400 SDRAM Memory
- ◆ 32Mbytes Flash Memory
- ◆ One Type III Mini-PCI Socket
- ◆ Two 10/100 Base-TX Ethernet Ports
- ◆ Two v2.0 Host USB Ports
- ◆ Digital I/O Control and Monitoring
- ◆ 1Kbyte Serial EEPROM
- ◆ Voltage and Temperature Monitor
- ◆ IXP Processor Watchdog Timer
- ◆ JTAG Programming and Serial Console Port
- ◆ Passive Power Over Ethernet
- ◆ Reverse Voltage and Transient Protection
- ◆ 8 to 48VDC Input Voltage Range
- ◆ 8W Mini-PCI Socket Power
- ◆ 5W Typical Operating Power
- ◆ -40°C to 85°C Operating Temperature
- ◆ Linux 2.6 Board Support Package
- ◆ 1 Year Warranty
- ◆ Optional GPS and RS485 Serial Port



SPECIFICATIONS

ELECTRICAL

Input Voltage:

- ▼ 8 to 48VDC

Operating Current:

- ▼ 0.2A Typical @ 24VDC

MECHANICAL

Dimensions:

- ▼ 3.3 x 4.0in (84 x 102mm)

Weight:

- ▼ 3 oz (86g)

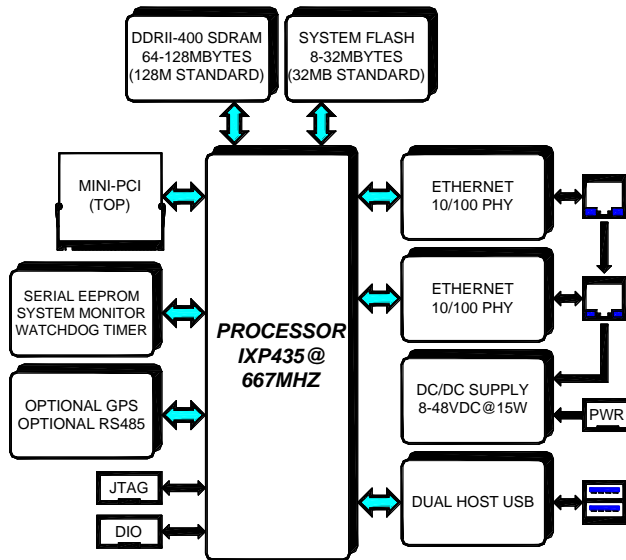
ENVIRONMENTAL

Operating Parameters:

- ▼ Temperature: -40°C to +85°C
- ▼ Humidity (non-condensing): 20% to 90%
- ▼ MTBF: 200 years @ 55°C

Storage Parameters:

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



Cambria GW2350 Functional Diagram

ORDERING OPTIONS

Standard Configuration

GW2350

- ▼ IXP435 CPU @ 667MHz
- ▼ 128Mbytes SDRAM
- ▼ 32Mbytes Flash
- ▼ One Type III Mini-PCI Slots

Development Kit

GW2350-DEVKIT

- ▼ GW2350 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 GW2350 can be customized for higher volume applications by changing the features listed below. Contact the factory for additional information.

- ▼ Intel IXP43x processor type and speed
- ▼ DDRII SDRAM from 64Mbytes to 128Mbytes
- ▼ Flash from 8Mbytes to 32Mbytes
- ▼ Adding and removing peripherals
- ▼ Operating temperature range

Product	CPU	Size (in)	Mini-PCI Sites	Ethernet Ports	PoE	Special Features	Operating Range
GW2350	IXP43x	3.3x4	1	2	Passive	Small, USB, Optional GPS	8-48VDC
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