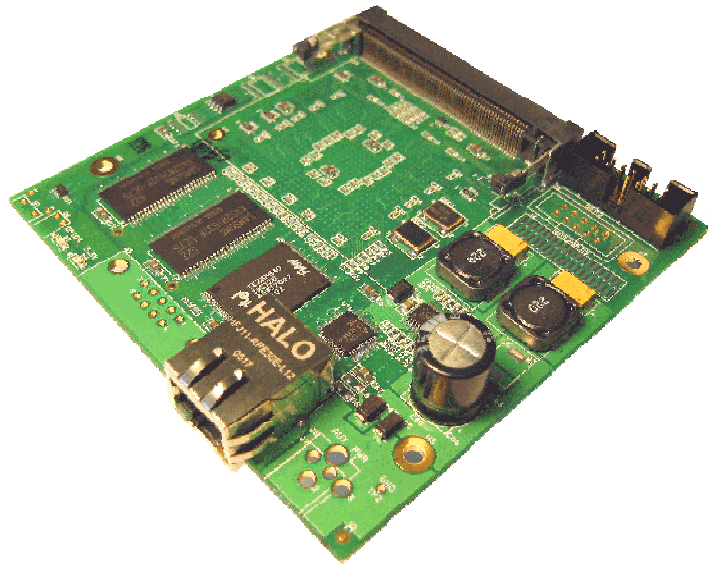


A low cost single Mini-PCI Intel® XScale® IXP420/266MHz processor for customer premises network applications

The GW2347 is a member of the Gateworks Avila Network Processor family. The GW2347 meets the requirements for customer premises network applications. This network processor consists of an Intel® IXP420 XScale® operating at 266MHz, 32Mbytes of SDRAM, and 8Mbytes of Flash. Peripherals include a Type III Mini-PCI socket, 10/100 Base-TX Ethernet port with IEC-6100-4 ESD and EFT protection, and serial EEPROM. An RS-232 serial port is available through the JTAG programming connector using a Gateworks GW16027 JTAG Serial Port Adapter. The GW2347 also supports ordering options such as a system monitor to track operating temperature and input voltage, a front panel serial port, a second serial port available through a 10-pin header, and an auxiliary input power connector. Power is applied through the 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® IXP420 266MHz Processor
- ◆ 32Mbytes SDRAM Memory
- ◆ 8Mbytes Flash Memory
- ◆ Type III Mini-PCI Socket
- ◆ 10/100 Base-TX Ethernet Port
- ◆ 1Kbyte Serial EEPROM
- ◆ Watchdog Timer
- ◆ Passive Power Over Ethernet
- ◆ Reverse Voltage Protection
- ◆ 6 to 20VDC Input Voltage Range
- ◆ 5W Available for Mini-PCI Socket
- ◆ 2W Typical Operating Power
- ◆ 0°C to 70°C Operating Temperature
- ◆ Linux v2.6 Board Support Package
- ◆ 1 Year Warranty
- ◆ Optional System Monitor and Serial Ports
- ◆ Optional Input Power Connector



SPECIFICATIONS

ELECTRICAL

Input Voltage

- ▼ 6 TO 20VDC

Operating Current

- ▼ 0.2A Typical at 12VDC

MECHANICAL

Dimensions

- ▼ 4.0in x 4.0in x 0.6in (102mm x 102mm x 15mm)

Weight

- ▼ 4oz (114g)

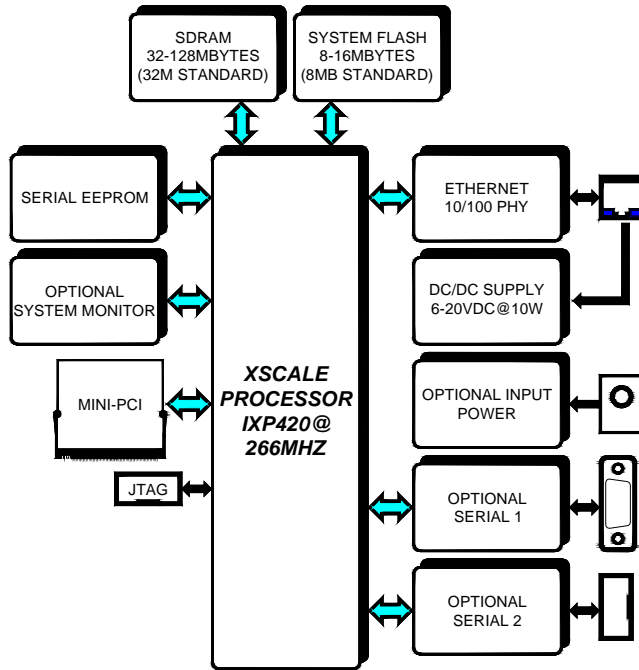
ENVIRONMENTAL

Operating Parameters

- ▼ Temperature: 0°C to +70°C
- ▼ Humidity (non-condensing): 20% to 90%
- ▼ MTBF: 223 Years @ 55°C

Storage Parameters

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



Avila GW2347 Functional Diagram

ORDERING OPTIONS

Standard Configurations

GW2347

- ▼ IXP420 CPU @ 266MHz
- ▼ 32Mbytes SDRAM
- ▼ 8Mbytes Flash

Development Kit

GW2347-DEVKIT

- ▼ GW2347 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 GW2347 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 16Mbytes
- ▼ 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