

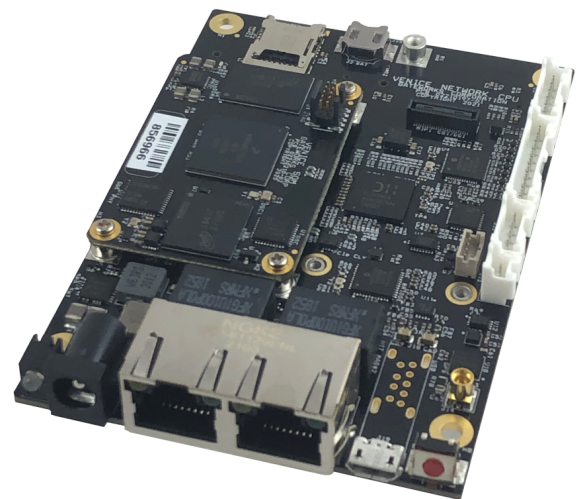
A 70x100mm i.MX8M Mini SBC with 2 Mini-PCle Slots, Two GbE Ethernet, PoE, GPS and MIPI-CSI & MIPI-DSI

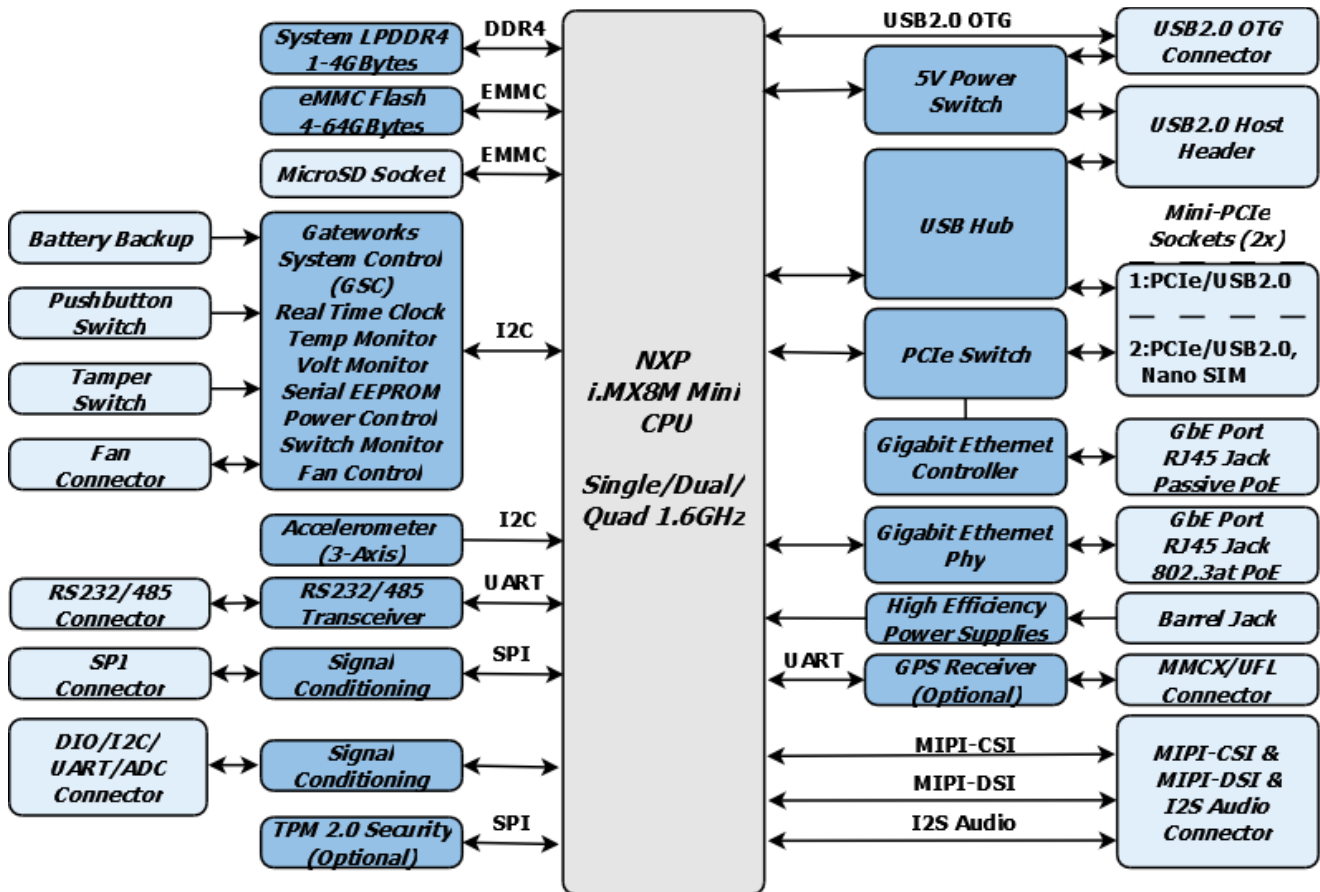
The GW7200-00 is a member of the Gateworks 7th generation Venice family of single board computers targeted for rugged and industrial embedded applications. The GW7200-00 features the 64-bit NXP™ i.MX8M Mini Quad Core ARM® Cortex™-A53 SoC processor operating at 1.6GHz, 1GBytes of LPDDR4 DRAM, and 8GBytes of eMMC System Flash. Two Mini-PCle expansion sockets can be used for PCI Express peripherals such as 802.11ax/ac/b/g/n WiFi radios, 5G/4G/3G/CATM1 cellular modems. Peripheral headers support Digital I/O, Analog Input, RS232/RS485/TTL Serial, I2C and SPI. A combined MIPI-DSI/CSI header with I2S audio offers video input/output. A MicroSD & Nano SIM slot are standard. A 3-Axis accelerometer is standard. An optional GPS is available. A TPM 2.0 secure crypto-processor is optional for ensuring system security and integrity. The Gateworks System Controller provides embedded features such as real time clock, voltage and temperature monitor, programmable pushbutton, and programmable board shut-down and wake-up for remote applications. A wide-range DC input power supply provides up to 15W of power. Power is applied through a dedicated barrel jack or an Ethernet port in an active 802.3af/at or passive Power over Ethernet (PoE) architecture. Ubuntu Linux BSP is supported.

SBC	CPU	DRAM	eMMC	GPS	WiFi/BLE
GW7200-00	Quad 1.6GHz	1GByte	8GBytes	No	Use Mini-PCle Slot
GW7200-01	Quad 1.6GHz	4GByte	64GBytes	No	Use Mini-PCle Slot
GW7201-00	Quad 1.6GHz	1GByte	8GBytes	Yes	Use Mini-PCle Slot
GW7201-01	Quad 1.6GHz	4GByte	64GBytes	Yes	Use Mini-PCle Slot

FEATURES

- NXP™ 64-bit i.MX8M Mini 1.6GHz Quad Core ARM® Cortex™-A53 SoC Processor
- 1GByte LPDDR4 DRAM Memory
- 8GBytes eMMC Flash System Memory
- Two High-Power Gen 2 Mini-PCle Sockets with USB 2.0 and Nano SIM
- MicroSD & Nano SIM slot
- Two GbE Ethernet Ports supporting 802.3at/af and Passive PoE
- Optional u-blox GPS Receiver with MMCX Antenna Connector
- Digital I/O & Analog Port, I2C & SPI Port
- RS232/RS485 and TTL Serial Port
- USB 2.0 OTG Port
- MIPI-DSI and MIPI-CSI Port, I2S Audio
- Digital 3-axis MEMS Accelerometer
- TPM 2.0 Security Element (Opt.)
- Real Time Clock with Battery Backup
- Voltage and Temperature Monitor
- Serial Configuration EEPROM
- Programmable Watchdog Timer
- 8 to 60VDC Input Voltage Range
- Power Through Dedicated Connector or Ethernet with 802.3af/at Active or Passive PoE
- 6W@25°C Typical Operating Power
- 15W Available for Mini-PCle Sockets
- Reverse Voltage Protection
- -40°C to +85°C Operating Temperature
- Ubuntu Linux Board Support Package
- 1 Year Warranty





Venice GW7200-00 Block Diagram

SPECIFICATIONS

Electrical

Input Voltage

- 8 to 60VDC Barrel Jack or Active PoE

Operating Current

- 163mA Typical @ 24VDC

Mechanical

Dimensions

- 70x100x21mm (2.75x3.9x0.8in)

Weight

- 2.8 oz (80g)

Environmental

Operating Parameters

- Temperature: -40°C to +85°C
 - *Note: -25C to +85C for -01 Models
- Humidity (non-condensing): 20% to 90%
- MTBF: 31.8 Years at 55°C

Storage Parameters

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

ORDERING OPTIONS

See table at beginning of datasheet

Development Kit - GW11048-1-A

- GW7200 Single Board Computer
- U-Boot Boot Loader
- Ubuntu Linux Board Support Package
- Ethernet & Accessory Cables
- Power Supply
- JTAG Programmer

Product Customization

The GW7200 can be customized for volume applications. Contact the factory for additional information.

- i.MX8M Mini processor type and speed
- LPDDR4 DRAM up to 4GBytes
- System Flash up to 64GBytes
- GPS
- TPM 2.0 Security
- Removing peripherals to achieve lowest cost