EL-20-3060-32G (rev. 1.0)

Intel® Bear Ridge IoT Gateway Solution

Key Features

- Intel® Celeron® processor N3060
- 2 x SO-DIMM DDR3L slots
- 2 x GbE LAN ports (Realtek RTL8111HS)
- 32GB onboard eMMC memory
- 1 x Full-size Mini-PCIe slot for 3G module or mSATA storage
- 1 x SDXC card slot
- Supports Windows 7/ 8.1/ 10 and Android 5.1
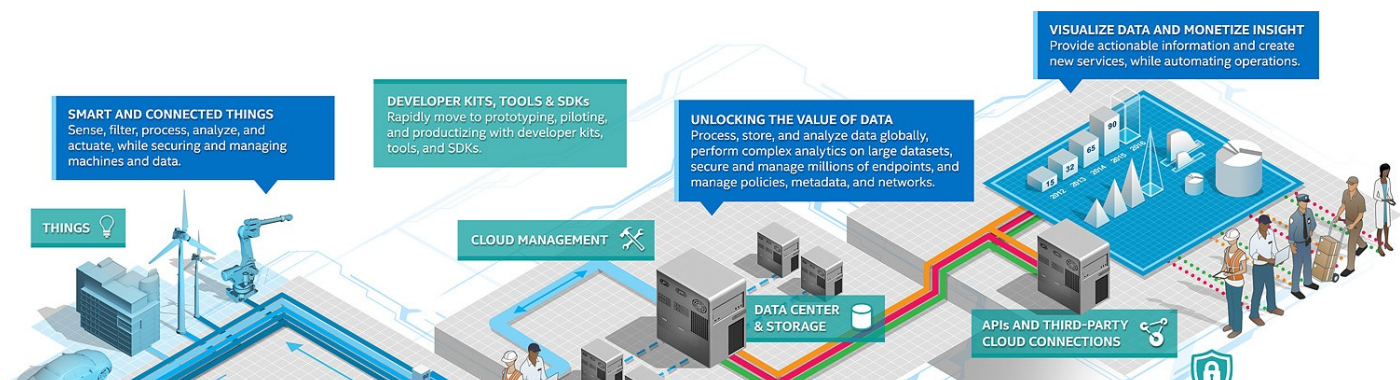
Application

- IoT applications
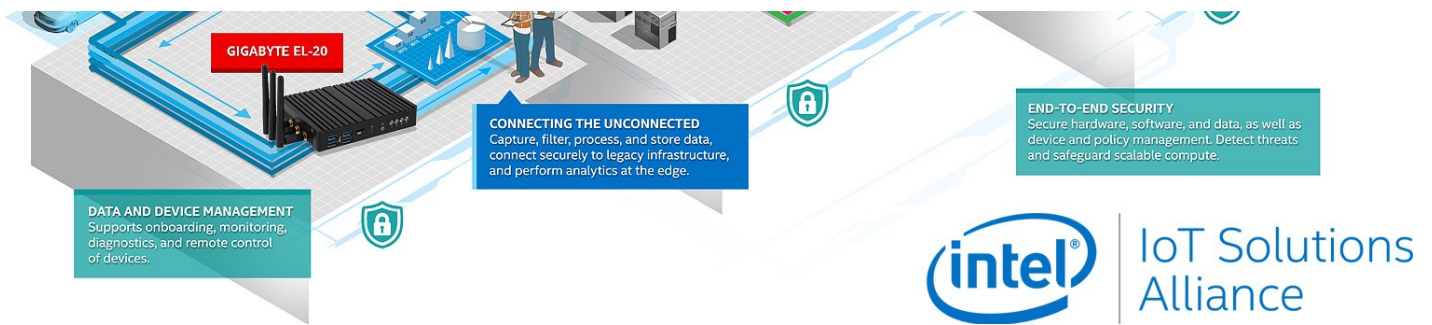
SPECIFICATION

EL-20 IoT Gateway System Overview

Simple Devices for the IoT Era

Being an associate member of the Intel IoT Solutions Alliance GIGAIPC (GIGABYTE Group) is at the heart of the booming Internet of Things computing market. We create reference designs for Intel's new platforms, and develop them further into a large range of professional IoT products and customer-optimized solutions.

The EL-20 series is one of those products, developed as the reference design for Intel's Bear Ridge platform. It is a small form factor (SFF) industrial computer with leading performance and security, robust build quality and the Input/output (I/O) flexibility required of the perfect IoT gateway solution. Business deploying the EL-20 series IoT gateways can quickly establish and future-proof their environments. By using it as a solution to bridge unconnected legacy system, aggregate data output or establish secure data flow between edge devices and the cloud.

Specification

Operating Properties	Operating temperature: 0°C to 40°C Operating humidity: 0%-90% (non-condensing) Non-operating temperature: -20°C to 60°C Non-operating humidity: 0%-95% (non-condensing)
CPU	Intel® Celeron® processor N3060 2 cores, 2 threads 1.6 - 2.48 GHz 2MB L2 cache 6W max. TDP
Socket	1 x BGA 1170
Memory	2 x SO-DIMM slots 1.35V DDR3L memory Up to 8GB 1333/1600MHz Pre-installed 1 x 2GB DDR3L memory module
Flash Memory	32GB eMMC
LAN	2 x GbE LAN ports (Realtek RTL8111HS)
Video	Intel HD Graphics supports dual display Max. resolution via HDMI ports: 3840 x 2160 @ 30Hz or 2560 x 1600 @ 60Hz with 2 memory installed
Audio	Realtek ALC255 controller Supports 2/4/5.1/7.1 channel configurations via HDMI
Expansion Slots	1 x Full-size Mini-PCIe slot (for 3G module or mSATA storage) 1 x Half-size Mini-PCIe slot (for WiFi+BT module)

Rear I/O	1 x DC-in 2 x HDMI v1.4b 2 x RJ45
TPM	-
OS Compatibility	Windows 10 64bit Windows 8.1 64bit Windows 7 32bit / 64bit Ubuntu 15.10 Ubuntu 16.04 LTS Android 5.1 - Please download the "Windows USB Installation Tool" from GIGABYTE's website and install it before installing Windows 7
Power Supply	AC 100~240V 19V DC-in 65W/3.42A
Packaging Content	1 x Quick start guide 1 x EL-20-3060-32GB 1 x 19V AC/DC power adapter 1 x US type power cord * Please contact region sales for antenna modules
Ordering Information	9BTCV7MR-SI
Storage	1 x SDXC card slot
Front I/O	4 x USB 3.0 1 x SDXC card slot 1 x Headphone-out / MIC-in 1 x Power button with LED 1 x HDD activity LED 3 x LEDs reserved for user configuration
System Fans	Fanless
Dimension	140.8 x 107.5 x 27 mm
Motherboard	MZBSWIP
Weight	560g
Side I/O	1 x Micro-B USB 2.0 1 x Micro-B 5-pin *RS232 full-duplex port (TxD, RxD, CTS, RTS, GND) *[NOTE]: 1. Please check the pin definition and ensure the port is suitable for your peripherals. 2. The serial driver GIGABYTE provided for Windows 10 and 8 is a trial version, please contact your peripheral vendor to get the correct driver.

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