

# IoT GATEWAY HARDWARE PLATFORM

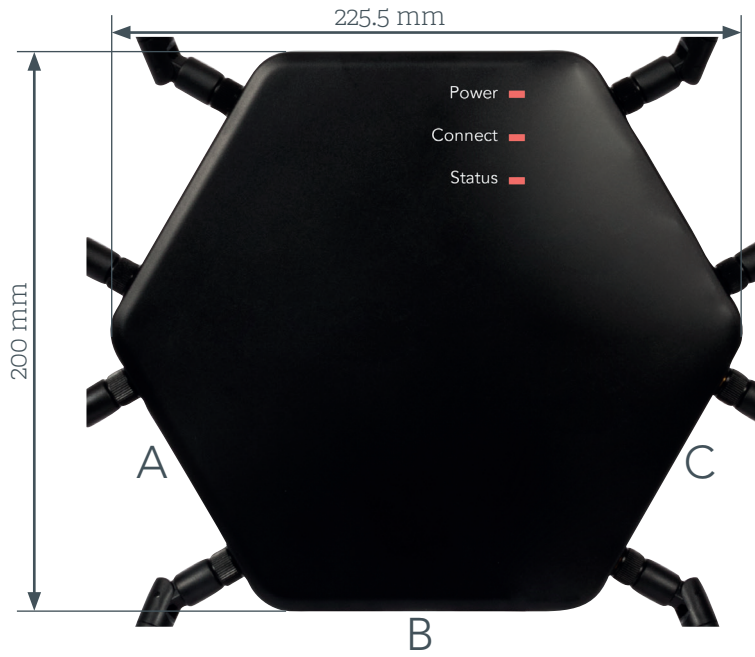
## conga-IoT



- Highly Flexible IoT Gateway
- Based on Intel® Atom™ Architecture
- Application Ready Platform
- Easily Customizable for Rapid Field Deployment
- Highly Configurable Utilizing Standard Wireless and Cellular add-on cards
- Flexible and Scalable:
  - Computing Performance
  - Wireless Connectivity
  - Software Integration

Form Factor	Hexagon, outside dimension approx. 220 x 225,5mm (without antennas)
CPU	conga-QA5 Qseven Module Based on Intel® Apollo Lake Processor series Intel® Atom™ x7-E3950, 2.0 GHz Quad Core, L2 cache 2MB, 12W TDP Scalable from dual core Intel® Atom™ x5-E3930 to quad core Intel® Atom™ x7-E3950
DRAM	Dual channel 4 GByte (optional 8 GByte) DDR3L memory
Mass Storage	eMMC 32 GByte (optional up to 128 GByte) MLC Flash
External I/O Interfaces	2x LAN 10/100/1000 (Intel® I211AT), 1x Power over Ethernet support Connector for external PSU - 19V DC   power button 4x RP-SMA antenna connectors 4x SMA antenna connectors
Internal I/O Interfaces	2x USB 2.0 1x M.2 card slot (for 3G/LTE cellular) 6x miniPCIe (USB 2.0) optional, for wireless extension cards i.e. 3G, LTE, Narrow Band IOT, Zigbee, ... 2x mSATA
Diagnostic I/O Interfaces	1x DisplayPort max. resolution 2560x1600 1x USB 2.0 1x SD card slot 1x Micro SIM (for 3G/LTE cellular)
On-board functionality	1x EEPROM (8k) 2x temperature sensor RTC battery TPM 2.0 3x multicolor LEDs
Cooling	Integrated in housing
congatec Board controller	Multi Stage Watchdog   non-volatile User Data Storage   Manufacturing and Board Information   Board Statistics   BIOS Setup Data   Backup I²C bus (fast mode   400 kHz   multi-master)   Power Loss Control
Embedded BIOS Features	AMI Aptio® UEFI 2.x firmware   congatec Embedded BIOS features (OEM Logo   OEM CMOS Defaults   LCD Control   Display Auto Detection   Backlight Control   Flash Update)
Software Support	Windows 10 IoT Enterprise, Yocto, Linux
Input Voltage	DC 19V or Power over Ethernet (PoE)
Temperature	Operating : Commercial: 0 to +40°C Extended: -20 to +50°C Storage : -20 to +60°C
Humidity	Operating: 10 to 90% r. H. non cond. Storage: 5 to 95% r. H. non cond.

# conga-loT | Dimensions



A



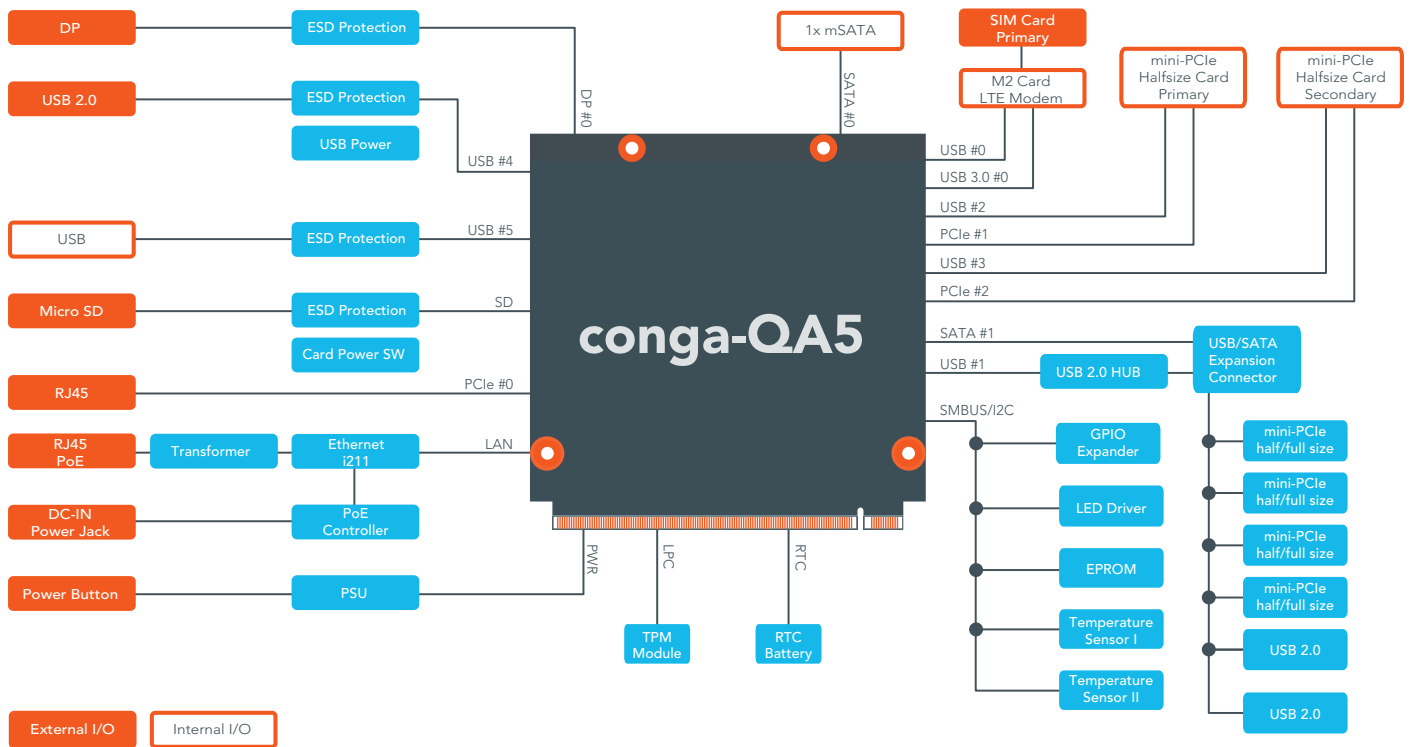
B



C



# conga-IoT | Block Diagram



# conga-IoT | Order Information

Article	PN	Description
conga-CGW01 IoT Gateway (QA5i)	020300X	conga-CGW01 IoT Gateway Assembly contains: - QA5i, Q7 CPU module - conga-CGW01, carrier board - conga-CGW02, extension board - WiFi I, LTE modem - conga-CGW01 QA5i Mechanical assembly - commercial temperature components (0-60°C)
<b>Accessories</b>	<b>PN</b>	<b>Description</b>
Power Supply	10000170	19V NB power supply, 3.42A, 65W, straight plug 7.4x5.1x12.5mm
LTE Antenna	10000182	LTE SMA Antenna, 5 dBi, omnidirectional with flexible joint, black
WLAN Antenna	10000183	WLAN SMA Antenna RP-SMA 802.11 ac/a/h/b/g/n, 5 dBi, omnidirectional with flexible joint, black
Mounting Kit	56000063	Wallmount bracket