UBC-221

Intel® Quark™ SoC X1000
2.5" IoT Gateway

NEW

Features

- Intel® Quark™ Single Core SoC X1000 400 MHz processor
- Onbard DDR3 512MB, 800 MHz memory
- 1 UART and 4 GPIO ports
- 1 Mini PCIe and 2 10/100 Ethernet pots (one with PoE)
- Supports Yocto Linux BSP
- Low power consumption, fanless design
- Supports wall mounting and DIN rails
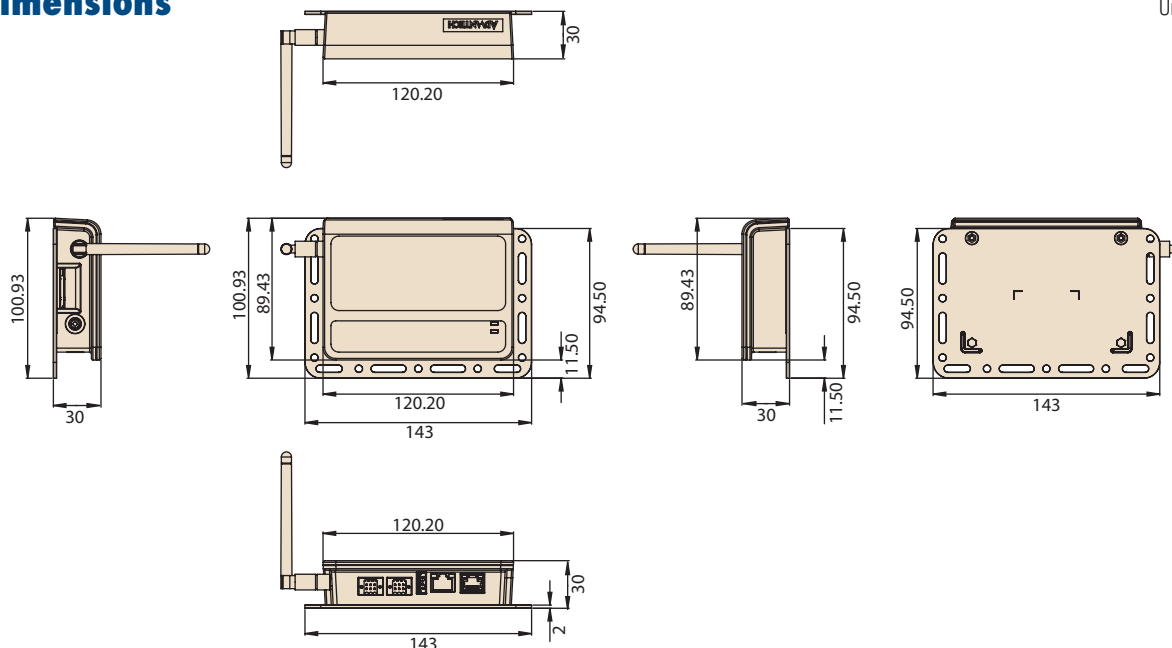
CE FCC RoHS COMPLIANT 2002/95/EC

Introduction

UBC-221 is an embedded IoT gateway solution powered by an Intel® Quark™ SoC X1000 processor that provides a cost-efficient solution for IoT applications. Designed to serve as a communication bridge between sensors for transmitting raw data to the cloud server, UBC-221 supports Wi-Fi, 3G/4G, Bluetooth, and ZigBee connectivity via the onboard mini PCIe expansion port. Additionally, the supported web server package enables PoE and web-based management to ensure easy installation and maintenance.

Specifications

Form Factor		2.5" Box computer
Processor System	CPU	Intel Quark Single x1000 400MHz
	Technology	DDR3 800 MHz
	Capacity	On-board DDR3 512 MB
	Flash	4 MB of SPI NOR Flash for Advantech's boot loader
Ethernet	Chipset	Intel Quark integrated RMII
	Speed	2 x 10/100 Mbps (One with PoE)
Watchdog Timer		From 1~6553s, power on/off 4s
I/O	USB	1 USB 2.0 Host
	SDIO	1 x SD slot
	Serial Port	1 x 4 wire RS-232
	CAN	-
	GPIO	2 GPI/ 2 GPO w/isolation
	LED	1 Green LED for system power 1 Green LED for user define
	Button	-
Expansion	Mini PCIe	1 x mini PCIe slot
	SM	1 x SIM slot
	Antenna Hole	1 x Antenna hole
	SD Socket	1 x SD slot
Power	Power Supply Voltage	12 V / PoE 802.3 at Class 3
	Power Type	DC-in / PoE 802.3 at Class 3
	Power Consumption	2.76W (Max)
Environment	Operating Temperature	0 ~ 60 °C
	Operating Humidity	5 ~ 95% relative humidity, non-condensing
Mechanical	Dimensions (L x W x H)	120 x 89 x 30 mm
	Mounting	Wall mount, DIN rail, VESA 75/100 by option
	Weight	210g
Operation System		Linux
Certifications		CE/FCC Class B

Dimensions

Unit: mm

Ordering Information

Part Number	CPU	Memory	Flash Memory	LAN	GPIO	Mini PCIe	Serial Port	CAN Bus	USB Host	USB OTG	SD	Operating Temperature
UBC-221CS-GNA1E	Intel Quark SoC X1000 400 MHz	DDR3 512 MB	-	1x 10/100 1x 10/100 with PoE	4	1	1	-	1	-	1	0 ~ 60 °C

Packing List

Part Number	Description
1652006794-01	6-pin terminal block

Optional Accessories

Part Number	Description
96PSA-A36W12R1	Power Adapter 100-240V 36W 12V
1700001524	Power cord 3P UL 180cm
170203183C	Power cord 3P EU 183cm
170203180A	Power cord 3P UK 183cm
1700008921	Power Cord 3P PSE 183cm
1700021565-01	Debug cable
SQF-ISDS1-2G-86E	SQFlash SD card SLC 2G (-40 ~ 85 °C)

External I/O

COM USB LAN2 (PoE)

GPIO LAN1