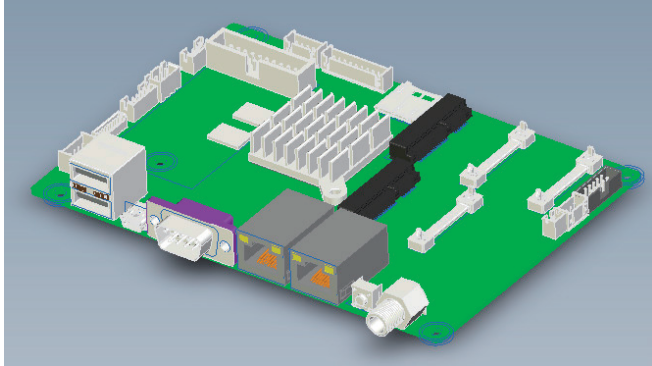


AIOT-X1000

3.5" SubCompact Board with Intel® Quark SoC X1000 Series

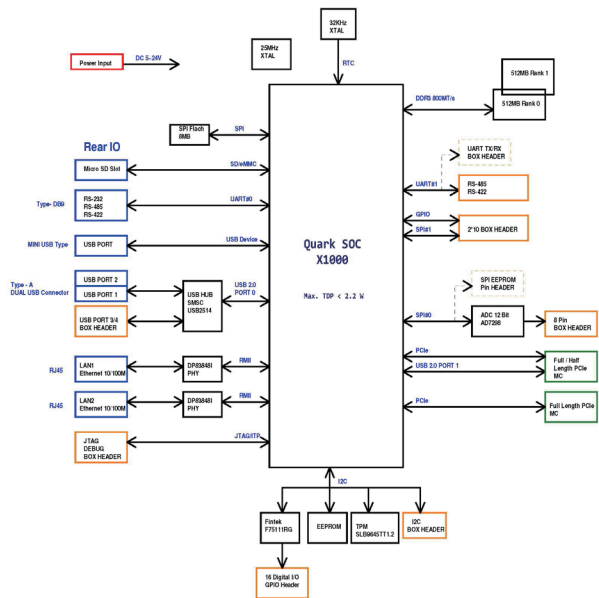


Features

- Intel® Quark SoC X1000 Series
- Onboard 1GB DDR3 800/1066 SODIMM
- Micro SD Slot x 1
- USB 2.0 x 4
- Serial Port x 2 (RS-232/422/485 x 1, RS-422/485 x 1)
- Moon Island Capable with McAfee Security
- VDC 5V or 9~24V (Phoenix/Lockable VDC connector)



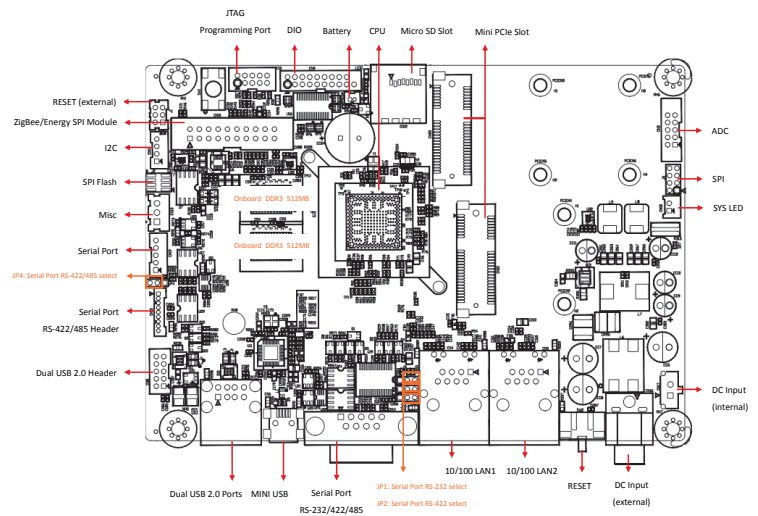
Block Diagram



Specifications

System	
Processor	Intel® Quark SoC X1000
Processor Speed	400MHz Quark Core
System Memory	Onboard 1GB DDR3 800/1066MHz non-ECC, un-buffered memory
TPM	SLB9645T11.2
Expansion Interface	Full Size Mini-PCIe Slot x 1 for PCIe and USB Host Interface, Half Size Mini-PCIe Slot x 1 for PCIe
Boot Loader	8MB SPI Flash
I/O	
Storage	Micro SD Slot x 1
USB	USB 2.0 Port x 4
LAN I/O	10/100 RJ-45 Port x 2
Serial Port	RS-232/422/485 Port x 1, RS-422/485 Header x 1
EEPROM	2K (256 x 8)
DIO	16-bit Digital I/O Interface
ADC	supports 8-pin with 12-bit resolution
SPI	2 pair (supports optional module)
I2C	1 pair (supports optional module)
Power	
Power Requirement	VDC 5V, or 9~24V
Environmental	
Operating Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% R/H, non-condensing
Certificate	CE & FCC
Mechanical	
Form Factor	3.5" 5.75" x 4" (146mm x 101.6mm)
Gross Weight	0.88lb (0.4Kg)
Operating System	
Wind River Linux	5.0.1
Yocto	Latest Kernel Version (V3.8)
Software Security	Moon Island supports McAfee
Optional	
CAN Bus	Module (through RS-232 or Mini Card)
Wi-Fi	Mini PCIe
Bluetooth	Mini PCIe
Zigbee	SPI
RFID	SPI or USB

Definition of Board Functions

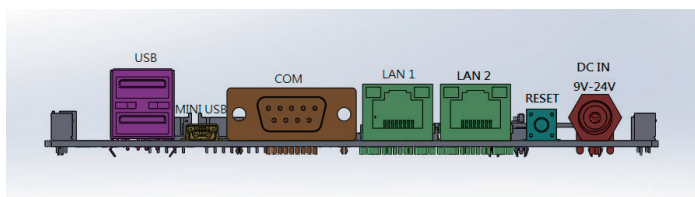


AIOT-X1000

I/O Ports Placement

Rear I/O Port

USB 2.0 Port x 2
 MINI USB Port x 1
 Serial Port x 1 (RS-232/422/485)
 LAN (RJ-45) Port x 2
 RESET Button x 1
 Lockable DC connector x 1 (VDC 5V, or 9–24V)



Internal I/O Connectors

Full Size Mini Card Slot x 1
 Half Size Mini Card Slot x 1
 Micro SD Card Slot x 1
 RS-422/485 Header x 1
 USB 2.0 Header x 1
 I2C x 1
 SPI x 2
 DIO x 1

Reference Scenario: Smart Energy (Example Only)



AAEON AND IOT

- Seamless robust cross-platform connection among Sensors, Gateways and the Cloud
- Smart algorithm either in the Gateways or in the Cloud
- Wide applicable domains featuring in Connectivity, Manageability, and Security

