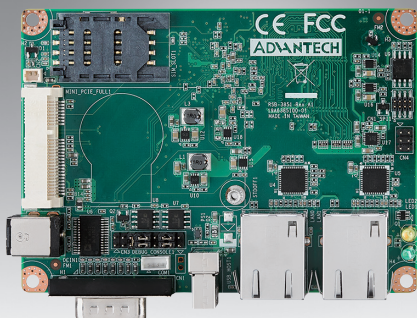


RSB-3851

Intel® Quark™ x1000 2.5" SBC

Preliminary



Features

- Intel® Quark™ Single Core SoC X1000 400 MHz processor
- Onboard DDR3 512MB, 800 MHz memory
- Supports 4 GPIO and 1 RS-232/422/485
- Supports 2 10/100 Ethernet and 1x MiniPCIe socket
- Low power consumption, fanless design
- Supports Linux and Android

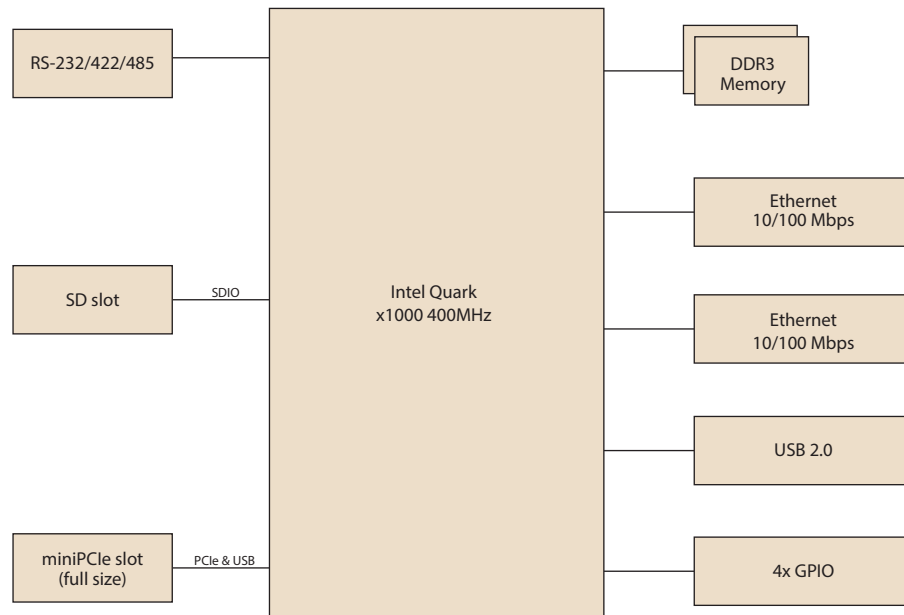
Introduction

RSB-3851 is a SBC solution powered by Intel Quark X1000 400MHz CPU. With onboard 512MB DDR3 memory and expandible SD card storage, it's a cost efficient solution for an IoT gateway. RSB-3851 is targeted on data collection and information analysis applications, it's also suitable for remotely controlling your devices from the cloud server as it supports Advantech WISE-Pass/RMM and provides a compact, flexible Yocto Linux operation system for application development.

Specifications

Form Factor		2.5" SBC
Processor System	CPU	Intel Quark x1000 400MHz
	Technology	DDR3 800 MHz
	Capacity	On-board DDR3 512 MB
	Flash	4 MB SPI NOR Flash for Advantech boot loader
Ethernet	Chipset	Intel Quark Integrated RMII
	Speed	2 x 10/100 Mbps
WatchDog Timer		1~6553s, power on/off 4s
I/O	USB	1 USB 2.0 Host
	SDIO	1 SD Slot
	Serial Port	1 x RS-232/422/485
	CAN	-
	GPIO	4 GPIO
	LED	1 Power LED 1 Programmable LED
	Button	-
Expansion	Mini PCIe	1 x mini PCIe slot\
	SIM	1 x SIM slot
	SD Socket	1 x SD slot
Power	Power Supply Voltage	+5V
	Power Type	DC-in
	Power Consumption	1.97W (Max)
Environment	Operating Temperature	0 ~ 60 °C (32 ~ 140 °F)
	Operating Humidity	5%~95% Relative Humidity, non-condensing
SBC	Dimensions (L x W)	100 x 72 x 21 mm
Operation System		Linux
Certifications		CE/FCC Class B

Block Diagram



Ordering Information

Part Number	CPU	Memory	Flash Memory	LAN	GPIO	miniPCIe	Serial Port	CAN Bus	USB Host	USB OTG	SD	Operation temperature
RSB-3851CS-GNA1E	Intel Quark x1000 400MHz	DDR3 512MB	-	2 x 10/100	4	1	1	-	1	-	1	0 ~ 60 °C

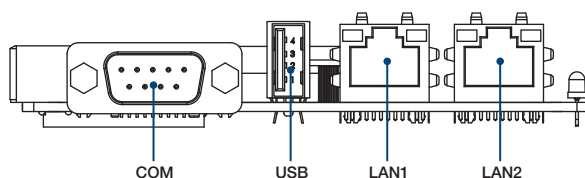
Packing List

Part Number	Description
RSB-3851CS-GNA1E	RSB-3851 Single Board Computer

Optional Accessories

Part Number	Description
XRISC-ADP-10HW-AG	Power adapter 100-240V 10W 5V USB interface
1700025371-01	USB to DC-in cable
1700021565-01	Debug cable
SQF-ISDS1-2G-86E	SQFlash SD card SLC 2G (-40 ~ 85 °C)

External I/O



Mouser Electronics

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