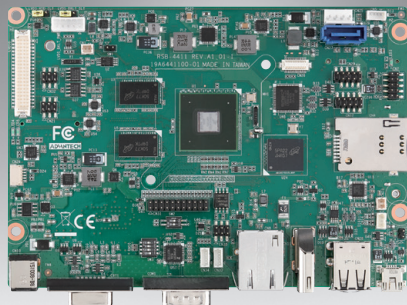


# RSB-4411

## NXP ARM® Cortex®-A9 i.MX6 3.5" SBC



## Introduction

RSB-4411 is a RISC 3.5" single board computer (SBC) powered by a high-performance NXP ARM® Cortex®-A9 i.MX6 processor that supports full HD video encoding/decoding and Gigabit Ethernet networking. RSB-4411 also features mini PCIe, M.2, and SIM card slots for integrating Wi-Fi, Bluetooth, and 3G/4G/LTE modules. Equipped with complete Linux and Android BSPs, this system enables customers to easily develop unique application software for specific OS.

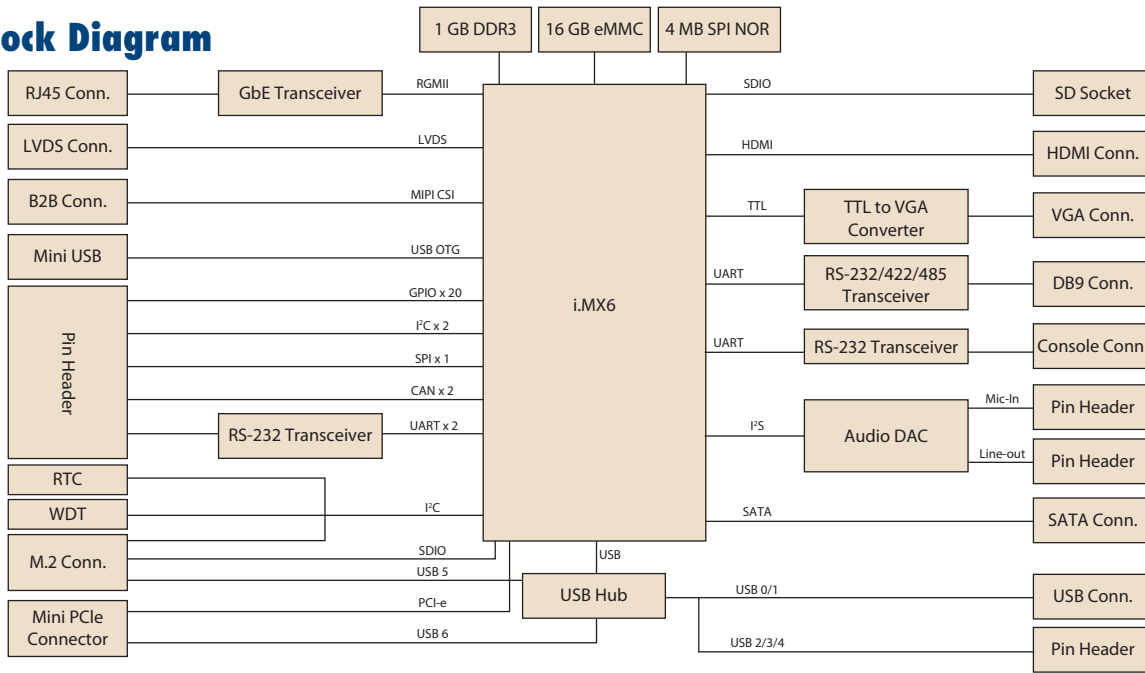
## Specifications

Form Factor		3.5" SBC
Processor System	CPU	NXP ARM® Cortex®-A9 i.MX6 Dual/Quad-core up to 1.0 GHz processor
	Technology	DDR3 1066 MHz
	Capacity	1 GB of DDR3 onboard
	Flash	16 GB of eMMC NAND Flash for OS and 4 MB of SPI NOR Flash for Advantech's boot loader
Graphics	LVDS	1 x 18/24-bit LVDS with 1366 x 768 resolution for 1 channel; 1920 x 1080 resolution for 2 channels at 60Hz
	HDMI	1 HDMI, 1920 x 1080 at 60Hz
	VGA	1 VGA, 1920 x 1080 at 60Hz
	Graphics Engine	3 IPUs, OpenGL ES 2.0 for 3D, BitBlit for 2D and OpenVG 1.1
	H/W Video Codec	Decoder: MPEG-4 ASP, H.264 HP, H.263, MPEG-2 MP, MJPEG BP Encoder: MPEG-4 SP, H.264 BP, H.263, MJPEG BP
	Ethernet	Chipset
Speed		1 x 10/100/1000 Mbps
WatchDog Timer		1~6553s, power on/off 4s
I/O	SATA	1
	SATA Power	1
	USB	1 x USB OTG, 2 x USB Type A, and 3 x USB pin headers
	Audio	1 x line-out, 1 x mic-in via a pin header
	SPDIF	-
	SDIO	-
	Serial Port	2 x 2-wire RS-232 pin header 1 x 4-wire RSB-232/422/485, DB9
	SPI	1
	CAN	2
	GPIO	20-pin 3.3V TTL level GPIOs
	I²C	2
	System Bus	-
	Touch	-
	I/R	-
Button	-	
Expansion	Mini PCIe	1 x mini PCIe slot
	SD Socket	1 x SD slot
	SIM Slot	1 x SIM slot
	M.2 Socket	1 x M.2 slot
Power	Power Supply Voltage	12 V, 19 V, 24 V
	Power Type	DC-in
	Power Consumption	-
Environment	Operating Temperature	0 ~ 60 °C/-40 ~ 85 °C
	Operating Humidity	5 ~ 95% relative humidity, non-condensing
Mechanical	Dimensions (W x D)	146 x 102 x 20 mm
Operation System		Linux and Android
Certifications		CE/FCC Class B

## Features

- NXP ARM® Cortex®-A9 i.MX6 Dual/Quad up to 1 GHz
- Onboard 1GB DDR3 memory and 16GB eMMC
- HDMI and VGA 1920x1080 at 60Hz, Dual Channel 18/24 bit LVDS
- 3 UART, 1 GbE, 5 USB 2.0, 20 GPIO, 2 I2C, 1 SPI
- M.2 for WIFI/BT support , mini-PCIe for WIFI/3G support
- Low power consumption, fanless design
- Supports Linux and Android

### Block Diagram



### Ordering Information

Part Number	CPU	Memory	Flash	HDMI	VGA	LVDS	LAN	Serial Port	SATA	USB Host	System Bus	SD	CAN Bus	Operating Temperature
RSB-4411CD-PNA2E	NXP i.MX6 Dual-core, 1 GHz	1 GB	16 GB	1	1	1	1	1 x 4-wire RSB-232/422/485 2 x 2-wire RSB-232	1	5	-	1	2	0 - 60 °C
RSB-4411CQ-PNA2E	NXP i.MX6 Quad-core, 1 GHz	1 GB	16 GB	1	1	1	1	1 x 4-wire RSB-232/422/485 2 x 2-wire RSB-232	1	5	-	1	2	0 - 60 °C
RSB-4411WD-ONA2E	NXP i.MX6 Dual-core 800MHz	1 GB	16 GB	1	1	1	1	1 x 4-wire RSB-232/422/485 2 x 2-wire RSB-232	1	5	-	1	2	-40-85 °C
RSB-4411WQ-ONA2E	NXP i.MX6 Quad-core 800MHz	1 GB	16 GB	1	1	1	1	1 x 4-wire RSB-232/422/485 2 x 2-wire RSB-232	1	5	-	1	2	-40-85 °C

### Packing List

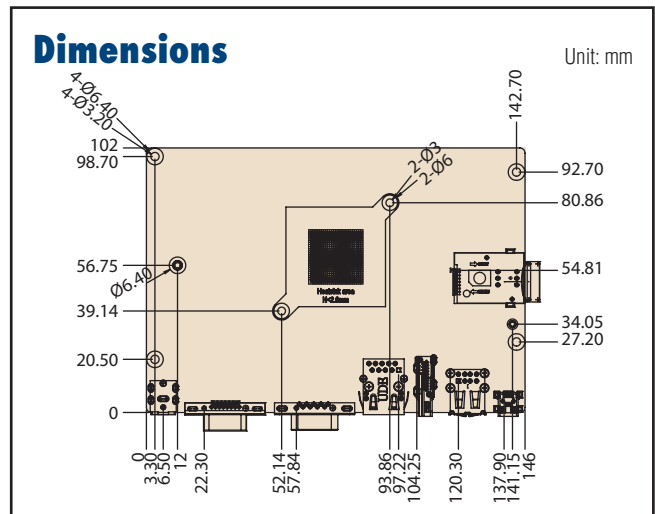
Part Number	Description
RSB-4411	RSB-4411 3.5" SBC

### Optional Accessories

Part Number	Description
96PSA-A36W12R1-3	Adapter 100-240 36W 12V 3A 9NA0362308
1700008921	Power Cord 3P PSE 183cm
1700019146	Power Cord CCC 3P 10A 250V 183cm
170203183C	Power cord 3P Europe (WS-010+WS-083) 183 cm
170203180A	Power cord 3P UK 2.5A/3A 250 V 1.83 M
1700001524	Power cord 3P UL 10A 125 V 180 cm
1700021565-01	Debug cable
1700018730	USB cable
1700026878-01	Mic-in cable
1700026879-01	Line-out cable
1700026880-01	CAN bus cable
1700026881-01	RS-232 cable
SQF-ISDM1-8G-21C	SQF SDHC C10 UHS-I MLC 8G, 1CH (-25-85°C)
EWM-W194M201E	IEEE 802.11ac/a/b/g/n, 2T2R, WiFi M.2 2230
AIW-344FQ-J01*	LTE 4G, 3G WCDMA/DC-HSPA+, 2G module, MPCII-L280H
1750008717-01	Dipole Ant. D.B 2.4/5G WIFI 3dBi SMA/M-R BLK
1750008303-01	Antenna AN0727-64SP6BSM
1750007965-01	Antenna Cable R/P SMA (M) to MHF4, 300mm
1750006009	Antenna Cable SMA (F) to MHF 1.32 25cm

\* Please contact us to get suitable cellular module for your region.

### Dimensions



### External I/O

