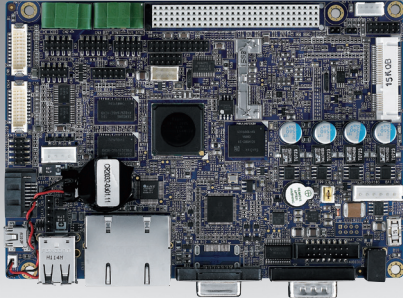


RSB-4210

NXP ARM® Cortex®-A8 i.MX53
3.5" SBC



Features

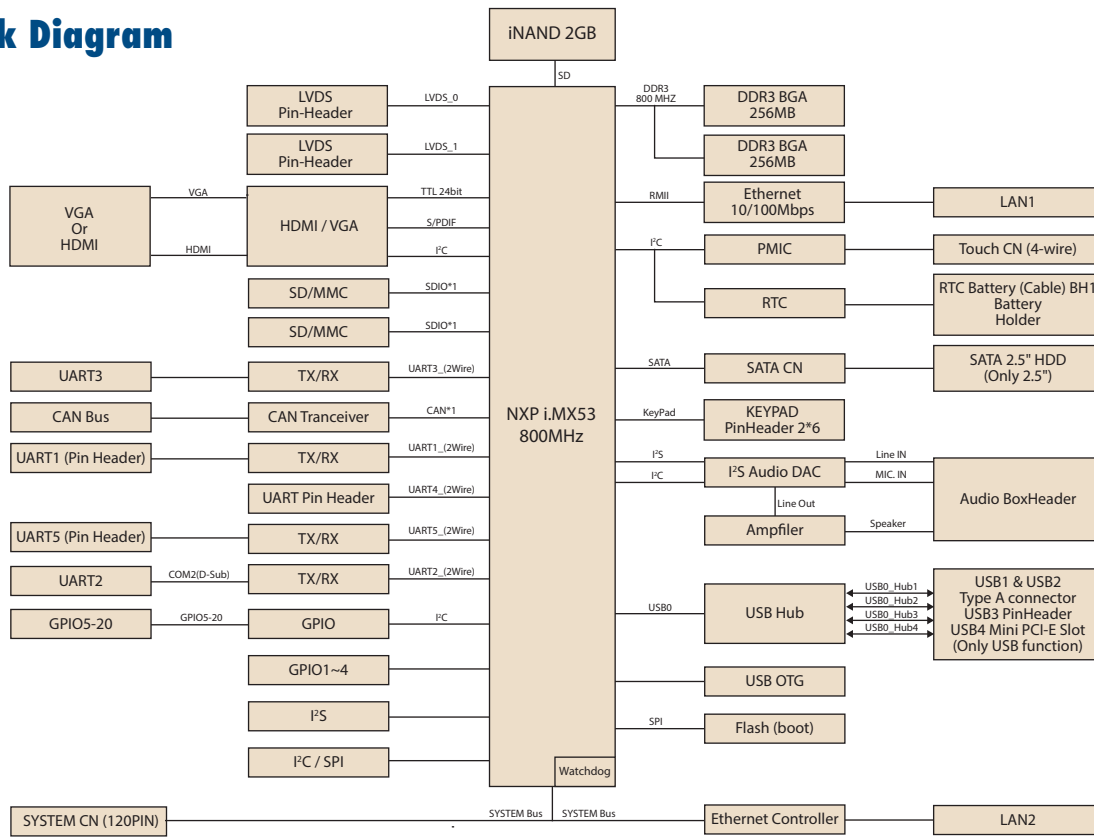
- NXP ARM® Cortex®-A8 i.MX53 800MHz high performance processor
- Onboard DDR3 512MB memory and eMMC 4GB
- Supports OpenGL ES 2.0 and OpenVG 1.1 hardware accelerators
- Supports full HD 1080p video decode and HD 720p video encode hardware engine
- LCD, Touch, UART, I²C, SPI, GPIO, USB, VGA, HDMI I/O interface
- Supports SATA storage interface and CAN-bus for vehicle applications
- Low power consumption, fanless design
- Supports Linux



Specifications

Form Factor		3.5" SBC
Processor System	CPU	NXP ARM Cortex-A8 i.MX53 800 MHz
	Technology	DDR3 800 MHz
	Capacity	On-board DDR3 512 MB
	Flash	4 GB eMMC NAND Flash for O.S. and 4 MB SPI NOR Flash for Advantech boot loader
Graphics	LVDS	2 x 24-bit LVDS, 1280 x 768 for 1ch; 1920 x 1080 for 2ch at 60Hz
	HDMI	-
	VGA	Up to 1600 x 1200 at 60Hz
	Graphics Engine	1 IPU, 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	2x 10/100 Mbps
WatchDog Timer		256-level timer interval from 0~128 sec
I/O	SATA	1
	SATA Power	Yes
	USB	3 USB 2.0 Host 1 USB 2.0 OTG
	Audio	Line-in, Speaker-out, Mic-in
	SPDIF	-
	SDIO	1 SD Slot, 1 Pin header
	Serial Port	2 x 2 wire RS-232 by pin header, 1 x 2 wire RS-232/422/485 by DB9
	SPI	1
	CAN	1
	GPIO	20 GPIO w/o Isolation
	I²C	1
	System Bus	Address : 25 pins Data : 16 pins
	Touch	4-wire resistive type
	Keypad	6 x 6 matrix
Button	-	
Expansion	Mini PCIe	1 x mini PCIe slot (Only USB Signal)
	SD Socket	1 x SD slot
	SIM	1 x SIM slot
Power	Power Supply Voltage	12 V, 19 V, 24 V
	Power Type	DC-in
	Power Consumption	3.8W (Max)
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
Certifications		CE/FCC Class A

Block Diagram



Ordering Information

Part No.	CPU	Memory	Flash Memory	HDMI	VGA	LVDS	LAN	Serial Port	SATA	USB Host	USB OTG	System bus	SD	CANbus	Operating Temperature
RSB-4210CF-A78AAE	NXP i.MX536 Cortex-A8 800 MHz	512 MB	4 GB	-	1	2	2	2 x 2 wire UART, 1 x RS232, 1 x RS485	Yes	4	1	Yes	2	Yes	0 ~ 60 °C
RSB-4210WF-A78AAE	NXP i.MX536 Cortex-A8 800 MHz	512 MB	4 GB	-	1	2	2	2 x 2 wire UART, 1 x RS232, 1 x RS485	Yes	4	1	Yes	2	Yes	-40 ~ 85 °C

Optional Accessories

Part No.	Description
1757003734	Adapter 100-240V 65W 19V 3.42A
1700001524	Power cord 3P UL 180cm
170203183C	Power cord 3P EU 183cm
170203180A	Power cord 3P UK 183cm
1700008921	Power Cord 3P PSE 183cm00000194, Touch cable
1700014418	LVDS cable
1700019577	LCD backlight cable
1700018785	SATA power cable
1700004711	SATA signal cable
1700019546-11	Speaker & audio cable
1700100250	F Cable IDE#2 10P-2.0/D-SUB 9P (M) 25cm cable
1700019129	USB type A Host cable
1700019077	Mini USB cable (Client)
1700019076	Mini USB cable (Host)
1654909900	Terminal connector 9P Female cable
1700019474	RS-232 AND RS-485 cable
1700019476	RS-422 cable
SQF-ISDS2-2G-ETE	SQFlash SD Card SLC 2G, 2CH (-40 ~ 85 °C)
96LEDK-A070WV32RB1	LCD-LED Backlight 7\"/>

Dimensions

Unit: mm

