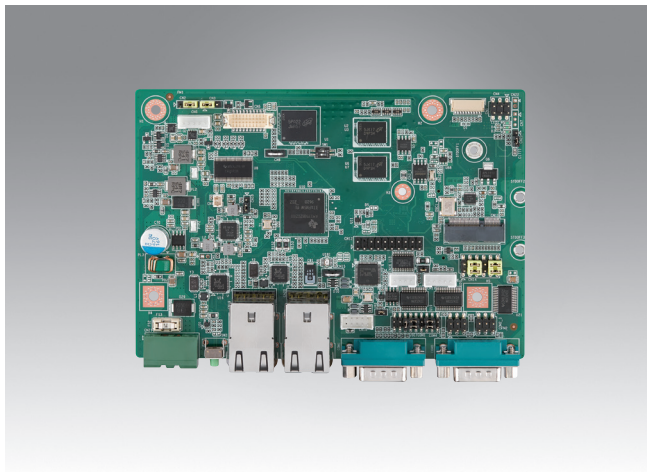


RSB-4221

TI Sitara™ ARM® AM3358 Cortex®-A8 3.5" SBC



Features

- TI Sitara AM3358 Cortex A8 1.0GHz
- On board DDR3 800MHz 1GB memory and 4GB NAND flash EMMC
- Supports 18-bit LVDS with up to 1366 x 768 resolution
- Hardware watchdog timer for system protection
- M.2 E-key slot for Wi-Fi/Bluetooth module
- Operating temperature 0-60°C
- Lower power consumption, fanless design
- Supports Linux and Android BSP



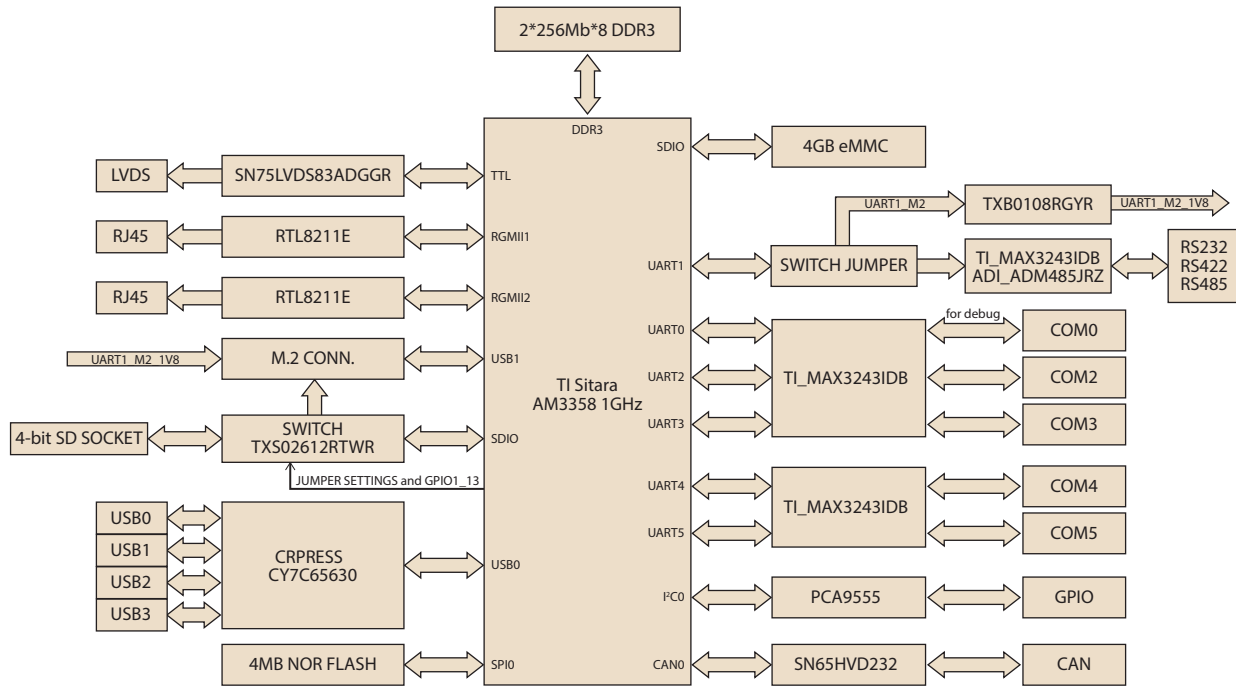
Introduction

RSB-4221 is a RISC single board computer (SBC) integrated with a TI Sitara AM3358 Cortex-A8 processor. This system features two gigabit Ethernet ports, five serial ports, four USB host ports, a hardware watchdog timer, as well as M.2/SD to enable Wi-Fi and Bluetooth. RSB-4221 also supports touch panel control via USB and single-channel 18-bit LVDS with up to 1366 x 768 resolution, providing the ideal automation control solution for smart grid, industrial, and machine automation applications.

Specifications

Form Factor		3.5" SBC
Processor System	CPU	TI Sitara AM3358 Cortex A8 1.0 GHz
	Capacity	Onboard DDR3 800 MHz 1GB
	Flash	4 GB eMMC NAND Flash for OS and 4 MB SPI NOR Flash for ADV loader
Graphics	LVDS	Supports 18-bit LVDS with up to 1366 x 768 resolution
	Touch	Yes, via USB signal
Ethernet	Chipset	TI AM3358 integrated RGMII
	Speed	2 x 10/100/1000 Mbps
WatchDog Timer		MSP430G2202 (time out: 1 ~ 6553 s, default 60 s/power on/off 1 s)
I/O	USB	4 x USB 2.0 hosts (2 x USB ports and 2 x pin headers)
	Serial	1 x 4-wire RS232/422/485 and 4 x 2-wire RS232 ports
	CAN	1
	GPIO	12
	I ² C	1
	Recovery	1 x recovery button (for Android)
Expansion	M.2	1 x M.2 for Wi-Fi and Bluetooth
	SD Socket	1 x SD (optional w/ M.2)
Power	Power Supply Voltage	+12V DC-in
	Power Type	2-pole lockable DC-in
	Power Consumption	TBC
Environment	Operating Temperature	0 ~ 60 °C
	Operating Humidity	5 ~ 95% relative humidity, non-condensing
Mechanical	Dimensions (W x D x H)	146 x 102 x 1.6 mm
Operating System	Android	4.1.6
	Linux	Kernel 3.2.0
Certifications		CE/FCC Class B

Block Diagram



Ordering Information

Part Number	CPU	Memory	eMMC	SPI	LCD	SD	CAN	UART	GPIO	Touch	USB Host	LAN	M.2	Operating Temperature
RSB-4221CS-MDA1E	TI AM3358 1 GHz	1GB	4 GB	4 MB	1	1	1	5	12	1	4	2	1	0 - 60 °C

Packing List

Part Number	Description	Quantity
RSB-4221CS-MDA1E	RSB-4221 TI AM3358 1 Ghz 1GB DDR	1

Optional Accessories

Part Number	Description
1700022161-01	A cable D-SUB 9P(F) 1-to-2 UART cable
96PSA-A36W12R1	A/D 100 ~ 240 V, 36 W, 12 V
1700023575-01	CAN cable
1700023576-01	A cable USB-A 1-to-2 cable
1700019474	D-SUB 9P(F)/D-SUB 9P(F) Debug/RS232/RS485 cable
SQF-ISDS1-4G-82C	SQF SD C6 SLC 4G, 1CH
170203183C	Power cord 3P Europe (WS-010 + WS-083)183 cm
1700023307-01	DC jack/plug-in 1*2P-5.0 10 cm RSB-4220 cable
1700023366-01	Backlight cable
1700024543-01	LVDS cable
170203180A	Power cord 3P UK 2.5A/3A 250 V 1.83 M
1700001524	Power cord 3P UL 10A 125 V 180 cm
IDK-1107WR-40WVA1E	7-inch LCD w/ touch control

Dimensions

Unit: mm

