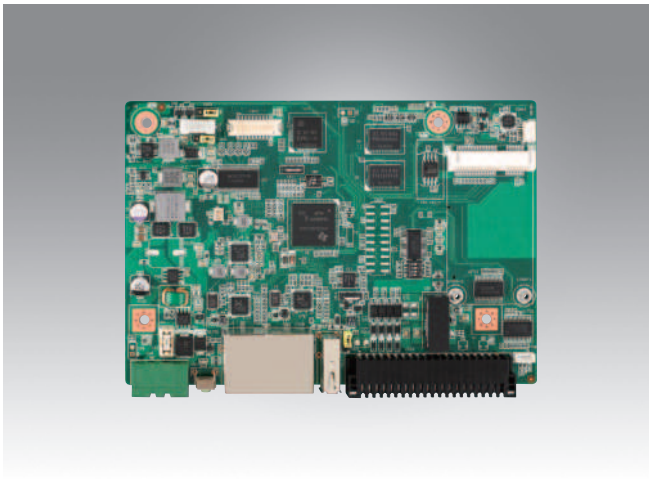
RSB-4220

TI Sitara AM3352 Cotrex A8 3.5" Single board



Features

- TI Sitara AM3352 Cortex A8 1.0GHz
- On-board DDR3 800MHz 512MB & 4MB SPI NOR Flash & 4GB eMMC NAND Flash
- Support 4GPI / 4GPO w/ESD & isolation
- 6x UART w/ESD protection (Contact 4KV / Air 8KV)
- Support 2x Gigabit Ethernet ports and 1x Mini PCIe socket
- Supports Linux Kernel V3.2.0
- Operation temperature 0 ~ 60° C / -40 ~ 85° C
- Support 18bit LVDS resolution up to 1366 x 768
- HW WTD for system protection

Introduction

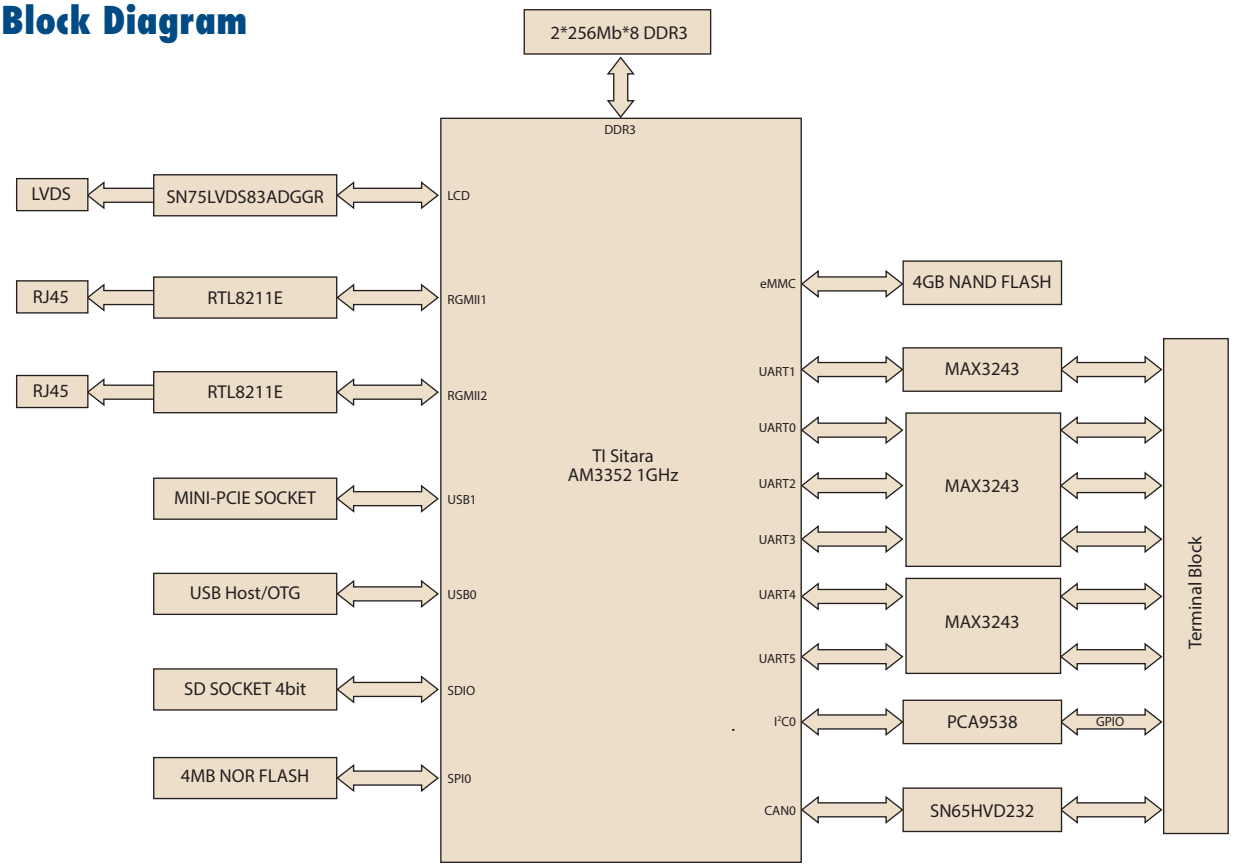
RSB-4220 series are the RISC SBC which integrated TI Sitara AM3352 Cortex-A8 processor. It offers 2x gigabit Ethernets, 6x serials port, 4x GPI and 4x GPO. For the industrial application, the UART & GPIO feature a rugged ESD and isolatoin protection and it can protect system from unstable power damage. Otherwise, RSB-4220 also has multiple power input and operation temperature support,even support a single channel 18 bit LVDS up to 1366 x 768 resolution. It is an ideal solution for automation control such as smart grid, industrial and machinery automation applications.

Specifications

Form Factor		3.5" SBC	
Processor System	CPU	TI Sitara AM3352 Cortex A8 1.0GHz	
	Capacity	On-board DDR3 800MHz 512MB	
	Flash	4 GB eMMC NAND Flash for O.S. and 4 MB SPI NOR Flash for booting code	
Graphics	LVDS	Support 18bit LVDS resolution up to 1366 x 768	
Ethernet	Transceiver	RTL 8211	
	Speed	2 x 10/100/1000 Mbps	
WatchDog Timer		MSP430G2202 (time out:1~6553s,default 60s/power on/off 1s)	
I/O	USB	USB2.0 HOST /OTG (By jumper selection)	
	UART	6 (1x 4 wires RS-232/422/485, 5x 2 wires RS-232) The 6 UART w/ ESD protection (Contact 4KV/ Air 8KV)	
	CAN	1 x CAN bus version 2.0 A and B	
	GPIO	4x GPI/4x GPO (w/ESD & isolation, optional) **GPI:** ESD protection: Contact 4KV/ Air 8KV Isolation: 0 ~ 50Voc input and 10KHz speed	**GPO:** ESD protection: Contact 4KV/ Air 8KV Isolation: 5 ~ 40Voc output and 10KHz speed (200mA max/chanel sink current)
	I^2C	1	
	Button	1x Reset	
Expansion	Mini PCIe	1x mini-PCIe socket (USB signal only)	
	SD Socket	1 x SD slot	
Power	Power Supply Voltage	+ 12/19/24 VDC-In	
	Power Type	Two poles lockable DC-in	
	Power Consumption	2.8W (Idle)	
Environment	Operational Temperature	0 ~ 60° C/ -40 ~ 85° 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		Linux kernel v3.2.0	
Certifications		CE/FCC Class B	

All product specifications are subject to change without notice

Block Diagram



Ordering Information

Part Number	CPU	Memory	eMMC	LCD	SD	CAN	UART	GPIO	Isolation	ESD	USB host/ OGT	LAN	mini-PCIe	Operation Temperature
RSB-4220CS-MCA1E	TI AM3352 1.0GHz	512MB	4GB	1	1	1	6	8	Serial: No GPIO: Yes	Serial: Yes GPIO: Yes	1	2	1	0 ~ 60° C
RSB-4220WS-MCA1E	TI AM3352 1.0GHz	512MB	4GB	1	1	1	6	8	Serial: No GPIO: Yes	Serial: Yes GPIO: Yes	1	2	1	-40 ~ 85° C

Packing List

Part Number	Description	Quantity
1652006830-01	TERMINAL BLOCK 20x2P 2.54mm 180D 0156-1A40	1
RSB-4220CS-MCA1E	RSB-4220 1GHz for 0~60°	Choose Any One
RSB-4220WS-MCA1E	RSB-4220 1GHz for -40~85°	

Optional Accessories

Part Number	Description
1652006830-01	20x2P 2.54mm 180D 0156-1A40
96PSA-A36W12R1	ADP A/D 100-240V 36W 12V
96LEDK-A070WV40NB1	7" LED PANEL 350N 800X480(G) G070VW01 V1
1700022248-02	M CABLE USB-A(M)/USB-A(M) 15CM AMK-V006E
1700021565-11	Debug Cable
SQF-ISDS1-4G-82C	SQF SD C6 SLC 4G, 1CH
170203183C	Power Cord 3P Europe (WS-010+WS-083)183cm
1700023307-01	A cable DC JACK/Plug-in 1*2P-5.0 10cm RSB-4220
1700023366-01	Backlight cable
1700024543-01	LVDS cable
170203180A	Power Cord 3P UK 2.5A/3A 250V 1.83M
1700001524	Power Cord 3P UL 10A 125V 180cm