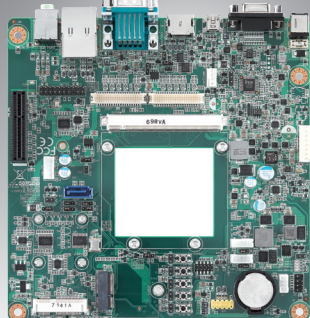


ROM-DB7502

Development Board for Qseven V2.0/V2.1 RISC Module

Preliminary



Features

- Supports Qseven V2.0/V2.1 module
- Mini-ITX form factor
- Dual display outputs, HDMI, 24-bit LVDS
- Smart battery support
- Supports 1 PCIe, 1 GbE, 4 USB 2.0, 1 USB OTG2.0, 1 SATAII, 1 I²C, 1 I²S, 1 CANbus, 8 GPIOs
- Support AT/ATX mode, Input power +12V
- Cable pack included
- Evaluative image & test utility built-in

Introduction

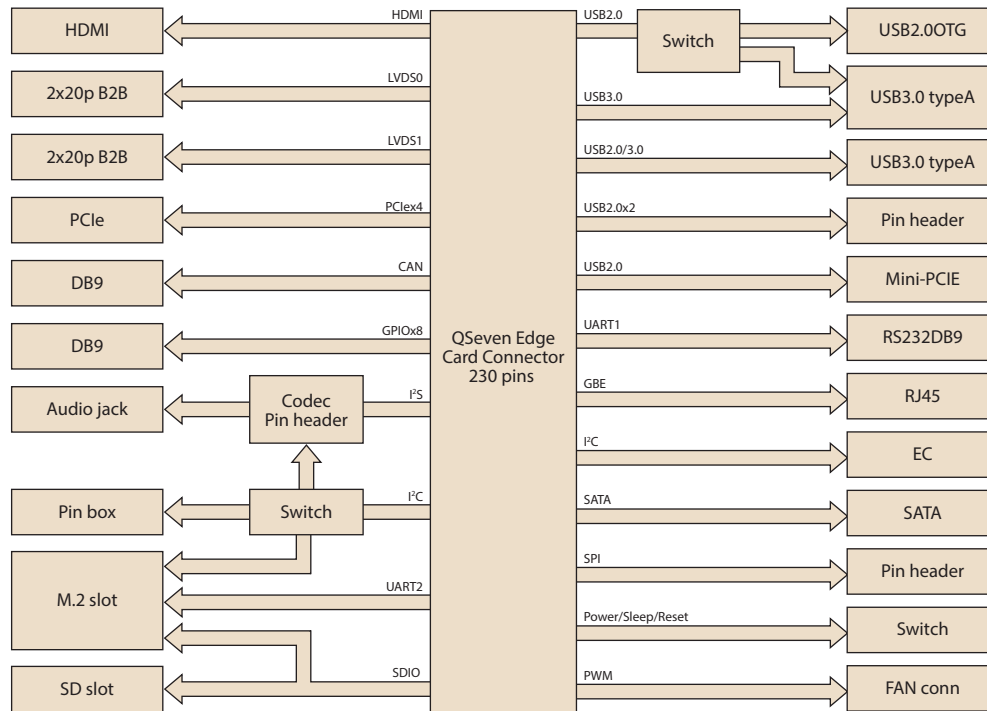
ROM-DB7502 is an Referenced Carrier Board designed for Advantech's RISC Qseven 2.0/2.1 module. It provides a thorough environment for module board evaluation with its complete function support. It also supports 12V power input through AC/DC power adapter and with smart battery design, it's more easier for the end user to design portable devices by referring ROM-DB7502 design.

ROM-DB7502 is offered along with several carrier board design documents: Carrier Board Design Guide, layout checklist, schematics checklist and the refer schematics are all ready for you to start your own carrier board design. With ROM-DB7502, you can quickly start evaluating your Qseven 2.0/2.1 module and design your own carrier board.

Specifications

Compatible Modules		Qseven v2.0 (default)/2.1 CPU module
Graphics	HDMI	1 HDMI TypeA
	LVDS	2 Single 24-bit LVDS
Ethernet	LAN	1 GbE with RJ45 connector
Storage	Flash	-
	SD	1 SD card slot
	SATA	1 SATAII Connector
I/O	USB	2 USB 3.0 Type A (Host), 1 min USB Type A (OTG), 2 USB 2.0 Pin header
	COM	1 4-wire RS-232 DB9
	Audio	1 2 port phone jack, support Line-in, Audio-out
	CAN	1 CAN bus 2.0B DB9, Differential mode +5V
	GPIO	8 DB9 female
	I ² C	1 pin header
	SPI	1 pin header
	Camera Input	-
	Keypad	-
	I ² S	1 pin header
	Fan	1 Pin header
Expansion	PCIe Slot	1 PCIe x4
	M.2 slot	E-Key, SDIO/1 UART/I ² C single
	Mini-PCIe	1 USB single only
	SIM slot	1
Power Input	Power	2 Power Inputs (+12V DC-Jack, Lithium-ion battery)
Environment	Operating Temperature	0 ~ 60 °C
	Operating Humidity	0% ~ 90% relative humidity, non-condensing
Physical Characteristics	Dimensions	170 x 170 mm
Certifications		CE/FCC Class B

Block Diagram



Ordering Information

Part No.	Description
ROM-DB7502-SCA1E	Development board for RISC Qseven Module series
ROM-7510CD-PEA1E	ROM-7510 Q7 TI AM5728DC 1.5GHz 0 ~ 60 °C
ROM-7510WD-PEA1E	ROM-7510 Q7 TI AM5728 1.5GHz -40 ~ 85 °C
ROM-DK7510-F0A1E	ROM-7510 Qseven 2.0 Development Kit

Packing List

Part No.	Description
96967502001	Qseven 2.0/2.1 Carrier Board Assembly
9696ED2000E	Debug adapter board
1700022373-01	Debug port cable
1700002204	USB pin header to USB Type A
1700004711-11	SATA signal cable
1700021941-01	SATA power cable

Optional Accessories

Part No.	Description
96PSA-A36W12R1	ADAPTER 100-240V 36W 12V 3A
1700001524	Power Cord 3P UL 10A 125V 180cm
170203183C	Power Cord 3P Europe (WS-010+WS-083)183cm
170203180A	Power Cord 3P UK 2.5A/3A 250V 1.83M
SQF-ISDS1-4G-82C	SQF SDHC C10 SLC 4G, 1CH (0 ~ 70 °C)
SQF-ISDS1-8G-82C	SQF SDHC C10 SLC 8G, 1CH (0 ~ 70 °C)
SQF-ISDS1-8G-82E	SQF SDHC C10 SLC 8G, 1CH (-40 ~ 85 °C)
968AD00039	Quectel 4G module EC20-CEFA kit w/antenna