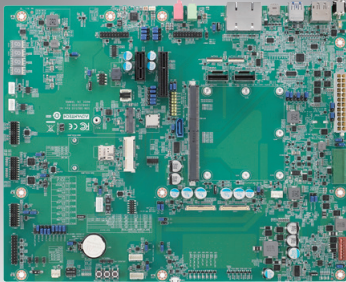


SOM-DB2510

Development Board for SMARC



Features

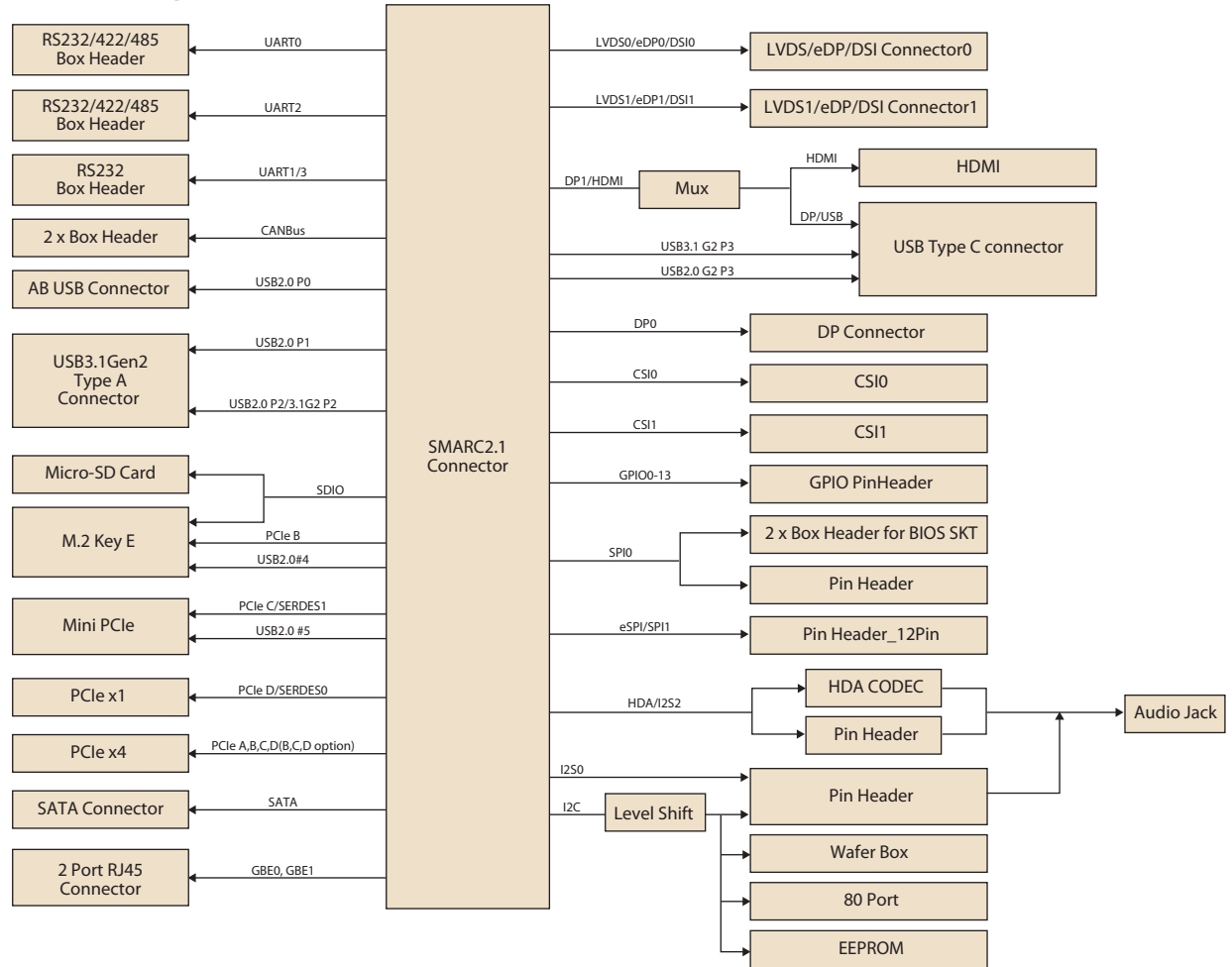
- Support SMARC V2.0/2.1.1 Module
- LVDS/eDP, DP, HDMI
- Support eSPI, CAN-FD, USB3.2 & up to 14 GPIO
- Support 4 types power input. Integrate x86 and ARM power input type
- Visible Debug Utility: BIOS Port 80 and Power State



Specifications

Compatible Models	Advantech SMARC V2.0/V2.1.1 Module Series (82mm x 80mm / 82mm x 50mm)	
Display	LCD (LVDS/eDP)	18/24-bit single or dual channel
	DP	1
	HDMI	1
	Display Port via USB Type-C	1
	PCI Express x4	1
	PCI Express x1	1
	eSPI	Yes
	I2C Bus	1
	CAN Bus	2
Ethernet	Connector	2 Ports RJ45
	Gigabit	10/100/1000m with TSN support
I/O	SATA3.0	1 Port (10 Gbps)
	USB3.2 (Gen2)	1 USB3.2 (TypeA)
		1 USB3.2 (TypeC)
	Audio	Realtek ALC888/897 HDA (Line-out, MIC-in);Level shift TXS0108 I2S
	SPI Bus	2
	GPIO	14
	SD	1 (micro SD card socket / optional to M.2 slot)
	COM Port	2 Ports (1 x RS-232/422/485, 1 x RS-232)
	Port80	1
Fan		2
	Type	ATX: Vin; DC-IN: Vin; USB typeC: Vin; Battery: Vin
Power	Supply Voltage	Vin: 12V, RTC Battery: 2.0V ~ 3.3V
Environment	Operating Temperature	Operating Standard: 0 ~ 60° C (32 ~ 140° F), Extend: -40 ~ 85° C (-40 ~ 185° F) with 0.7m/s air flow. Standard: 0 ~ 60° C (32 ~ 140° F) Storage: -40 ~ 85° C (-40 ~ 185° F) Extend: -40 ~ 85° C (-40 ~ 185° F)
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)
	Humidity	Operating: 40°C@95% relative humidity, non-condensing Storage: 60°C@95%relative humidity, non-condensing
	Vibration Resistance	3.5 Grms
Mechanical	Dimensions	82 mm x 50 mm Standard ATX Form-Factor (305 x 244 mm)

Block Diagram



Ordering Information

Part No.	Description
SOM-DB2510-00A1	SMARC R2.1 Devel. Board Rev. A1
SOM-DB2510A-00A1	SMARC R2.1 Devel. Board Rev. A1 w/eDP
SOM-DB2510-R0A1	SMARC R2.1 Devel. Board Rev. A1 for RISC Module

Packing List

Part No.	Description	Quantity
1700008941	M Cable SATA 7P/SATA 7P 32CM C=R 180/180D W/Lock	1
1701200220	F Cable 2*10P-2.0/D-SUB 9P(M)*2 22CM	3
1960090424T001	IO BRACKET	1
1700018785	A CABLE SATA 15P/1*4P-2.5 35cm	1