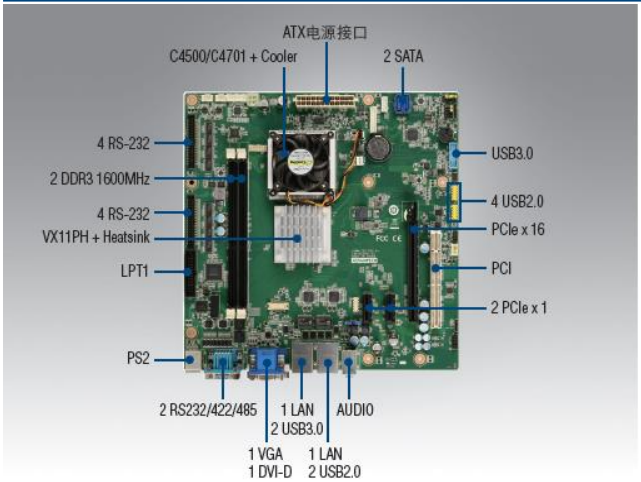
AIMB-C50

Chinese Autonomous Processor, ZX-C+ platform, MicroATX Motherboards



Features

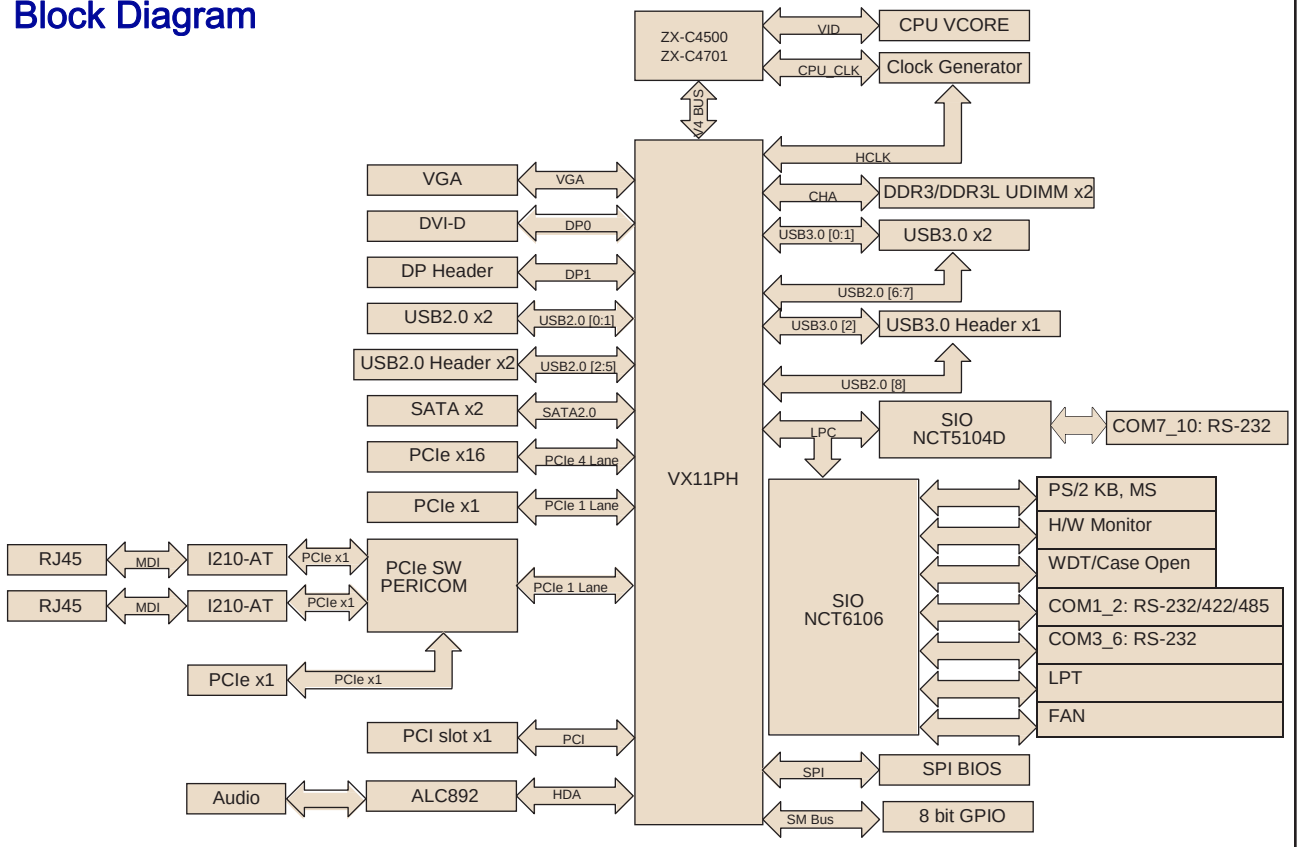
- Chinese Autonomous Processor, ZX-C+ platform, VX11PH Chipset
- x86 32/64 Instruction Compatibility, support Extended instructions SSE.2/AVX
- Support SM3 & SM4 State Secret Algorithms (only C4701 CPU support)
- Support 2 x UDIMM socket up to 32GB DDR3 1600
- Support VGA&DVI-D&HDMI &DP display output
- Maximum support 9 x USB , 10 x COM
- Support PCI, PCIe x1, PCIe x16 slot

Specifications

Processor System	CPU	C4500			C4701		
	Speed	1.67GHz			2.0GHz		
	L2 Cache	2MB					
	Socket	BGA On board					
	Chipset	VX11PH					
	BIOS	AMI 32 Mbit SPI					
Expansion Slot	PCI	32-bit/33 MHz,1 slot					
	PCIe x 1	Gen2, 2 slots					
	PCIe x 16	Gen2, 1 slot (only PCIe X4 signal)					
Memory	Technology	Single Channel DDR3 1600					
	Max. Capacity	32G					
	Socket	2 x 240-pin UDIMM					
Graphics	Controller	VX11PH integrated C-640/645 DX11 3D/2D graphic processor					
	VRAM	Maximum 512M					
Ethernet	Interface	10/100/1000 Mbps					
	Controller	2 x Intel I210-AT GbE LAN					
	Connector	2 x RJ45					
SATA	Max Data Transfer	300 MB/s					
	Channel	2					
Rear I/O	VGA	1					
	DVI-D	1					
	Ethernet	2					
	USB	4 (2 x USB 3.0, 2 x USB 2.0)					
	Serial	2 (RS-232/422/485)					
	PS2	1 x Key Board, 1 x Mouse					
	Audio	1 x Speaker-out, 1 x Line-in, 1 x MIC-in					
Internal Connectors	USB	5 (1 x USB 3.0, 4 x USB 2.0)					
	Serial	4 (RS-232)			8 (RS-232)		
	LPT	1					
	Front audio	1 (MIC-in, Speaker-out)					
	SPDIF	1					
	GPIO	1 (8-bits)					
Power Requirement	Power on	ZX-C+ C4701@2.0GHz,DDR3 1600 16G x 2					
	Voltage	+12V	+5V	+3.3V	+5VSB	-12V	-5V
	Current	2.875A	4.112A	0.91A	0.048A	0.02A	0.03A
Environment		Operating (With HDD)			Non-Operating		
	Temperature	0 ~ 60 ˚C (32 ~ 140 ˚F)			-40 ~ 85 ˚C (-40 ~ 185		
Physical Characteristics	Dimensions (L x H)	244 x 244 mm (9.6" x 9.6")					

All product specifications are subject to change without notice.

Block Diagram



Ordering Information

Part Number	CPU	Chipset	Memory	Display	USB 3.0	USB 2.0	COM	GbE LAN	SM3/SM4
AIMB-C50-00A1	C4500	VX11PH	DDR3 1600 up to	VGA + DVI-D	3	6	6	2	NA
AIMB-C50-00A2	C4701	VX11PH	DDR3 1600 up to	VGA + DVI-D	3	6	10	2	Yes

Packing List

Part Number	Description	Quantit
1700003194	SATA HDD cable	x 2
1700022749-11	SATA power cable	x 2
1960086913N000	I/O port bracket	x 1
20430C5000	Startup manual	x 1
2190000902	Warranty card	x 1

Note: Driver CD is not provided. Please visit Advantech support website for driver download

Optional Accessories

Part Number	Description
1700002204	2-port USB 2.0 cable w/ BKT(27 cm)
1700020277-01	2-port USB 3.0 cable w/ BKT
1700020294-01	Printer port cable kit (42 cm)
1700008876	COM Port cable, 1 turn 4

Riser Card

Part Number	Description
AIMB-R4104-01A1E	1U riser card with 1 PCIex4 expansion
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion

I/O View



AIMB-C50-00A1 & AIMB-C50-00A2