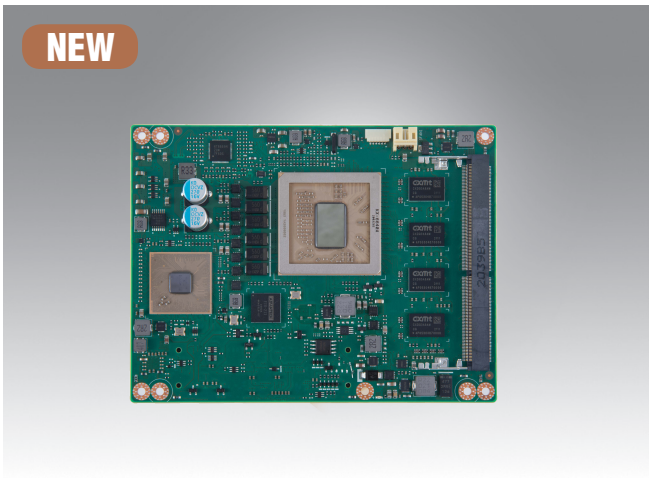
SOM-Z580

中国自主知识产权处理器，Kaixian-6000系列COM Express Basic 模块



Windows Embedded iManager DeviceOn CE FC

特性

- 中国自主知识产权处理器，Kaixian-6000系列处理器
- 支持最高CPU主频：8核2.7GHz
- 国产化率≥95%
- 硬件支持 70W
- 最大支持16G内存（On board 8G + So-DIMM 8G）

Software APIs: Watchdog, I²C, SMBus, H/W Monitor, GPIO, Brightness

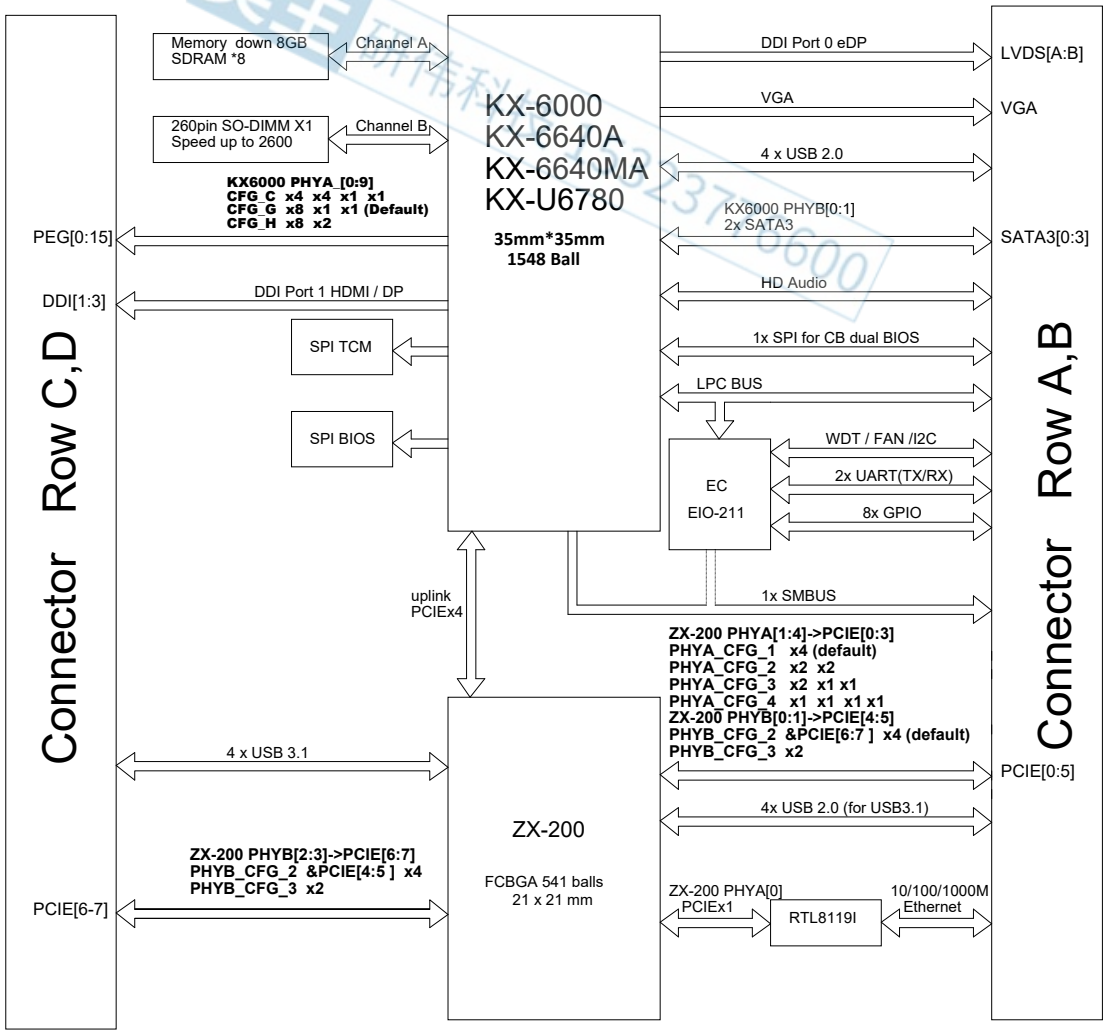
规格

产品类型	Form Factor	COM Express Basic Module COM		
	Pin-out Type	Express R3.0 Type 6 pin out		
处理器	CPU	KX-6640A	KX-6640MA	
	Base Frequency	2.6GHz	4 Core@2.2GHz 2 Core@2.6GHz	8 Cores@2.7GHz
	Cores	4	4	8
	TDP	35W	25W	70W
	L2 Cache Memory	4MB		8MB
	BIOS	AMI		
芯片组	PCH	ZX-200		
内存	Technology	DDR4		
	Max. Capacity	16GB (On Board 8G+So-DIMM 8G) 1		
	Socket	260P SO-DIMM(1 on front side)		
显示	VGA	1 1920 x 1200@60Hz		
	Edp	1		
	DP/HDMI	1		
扩展	PCI Express Config	KX-6640A&KX-6780A PEG Config C: x1, x1, x4, x4; PEG Config G: x1, x1, x8 PEG Config H: x2 x4 x4 KX-6640MA: PEG Config C: x1, x1, x4; PEG Config F: x2， x4 ZX-200:PCIE[0:7] PHYA_CFG_1: x4 PCIE[0:1]+PCIE[6:7] PHYA_CFG_2: X2 PCIE[0:1] x2 PCIE[6:7] PHYA_CFG_3: x2 PCIE[0:1] x1 PCIE[6] x1 PCIE[7] PHYA_CFG_4: x1 PCIE[0] x1 PCIE[1] x1PCIE[6] x1 PCIE[7]	PHYB_CFG_2: x4 PCIE[2:5] PHYB_CFG_3: x2 PCIE[2:3] x2PCIE[4:5]	
	Audio Interface	HD Audio Interface		
	LPC	Yes		
串行总线	SMBus	1		
网络	Speed	1 *10/100/1000M		
接口	SATA3.0	2		
	USB3.1	4		
	USB2.0	8		
	SPI Bus	2(BIOS,TCM)		
	GPIO	8bits(4进4出)		
	Watchdog	Yes(65536 Level,0~65535 sec)		
	COM Port	2 Ports(2-wire)-		
	TPM	Optional (COMe 预留信号)		
	Smart FAN	2 Ports; 1 port on COM module. Support 12V Fan, 1 port on carrier board		

All product specifications are subject to change without notice.

电源	Type	Type: ATX: Vin, VSB; AT: Vin
	Supply Voltage	Supply Voltage: Vin: 8.5V (9V-5%) ~ 20V (19+5%); VSB: 5 +/-5%,
环境	Operating Temperature	TBD
	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	3.5Grms
物理特征	Dimensions	125mm*95mm(4.92" x 3.74")
ESD		Contact ±6kV by air ±8kV
操作系统 Operating System		Windows 7/Windows 10/国产Linux/国产Win10 (神州网信 win10) 麒麟，凝思
Others	物料要求	1.目标国产化率:≥95% 3.硬件support 70W

Block Diagram



Ordering Information

Part No.	CPU	Freq.	Cores	CPU TDP	PCH	Thermal Solution	Operating Temp.
SOM-Z580-D00A1	KX-6640A	2.6	4	35	Z200	Active	TBD
SOM-Z580-L00A1	KX-6640MA	2.4/2.6	4/2	25W	Z200	Active	TBD
SOM-Z580-D00A2	KX-6780A	2.7	8	70	Z200	Active	TBD