

## **ASUS K8S-MX**

There aren't very many SiS chipset motherboard products on the market these days. However, SiS chipsets are no worse technologically compared to rival products in many aspects. In fact, in terms of supported functions, SiS chipsets are often ahead of the competition.

ASUS' K8S-MX is an integrated SiS 760GX chipset motherboard - the "X" in the product model number conveying membership in the ASUS X series product lineup, which is often quite competitive in pricing.

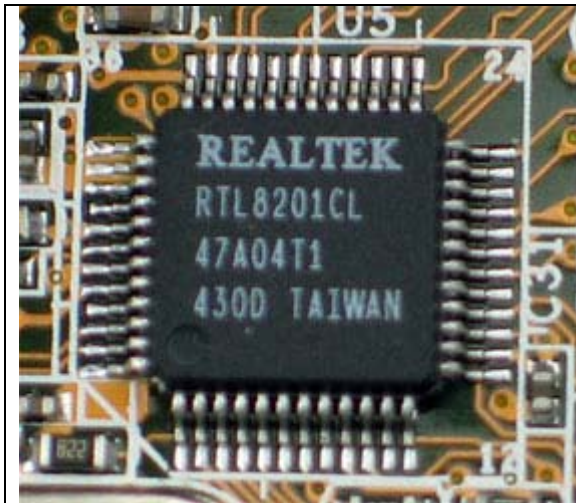
Built from the combination of SiS760GX Northbridge and SiS965L Southbridge, the K8S-MX supports the installation of either a Socket 754 Athlon 64 or Sempron processor. There are also two DIMM slots supporting a maximum of 2GB DDR400 memory. The SiS965L Southbridge's greatest feature is its support for a maximum of 2 PCI Express x1 slots, and the K8S-MX provides 1 PCI Express x1 slot. PCI Express x1 is the newest expansion interface, and it is expected that more and more PCI Express x1 devices will become available in the near future, which gives this motherboard a great potential for upgrade.

As the K8S-MX motherboard is created primarily for price-sensitive users, there is a rather good chance that a buyer will end up installing a Socket 754 Sempron processor. Of course, as mentioned above the motherboard can also be used as the foundation for a Socket 754 AMD Athlon 64 computing platform

The SiS760GX's integrated DirectX 8.1-supporting Mirage2 graphic engine features an MPEG I/II motion compensation decoder and a maximum of 128MB shared system memory.

In essence, the ASUS K8S-MX is best used by price-sensitive users whose scope of usage stay within the bounds of web-browsing, watching DVD movies, and performing office-type work (the Mirage2 graphics engine is more than capable of taking care of these types of usages). These users even don't need to purchase a discrete graphics card.

Of course, the motherboard is also a low-cost solution to building your very own AMD ATHLON 64 (socket 754) computer system as so to experience the cutting-edge 64-bit computing.

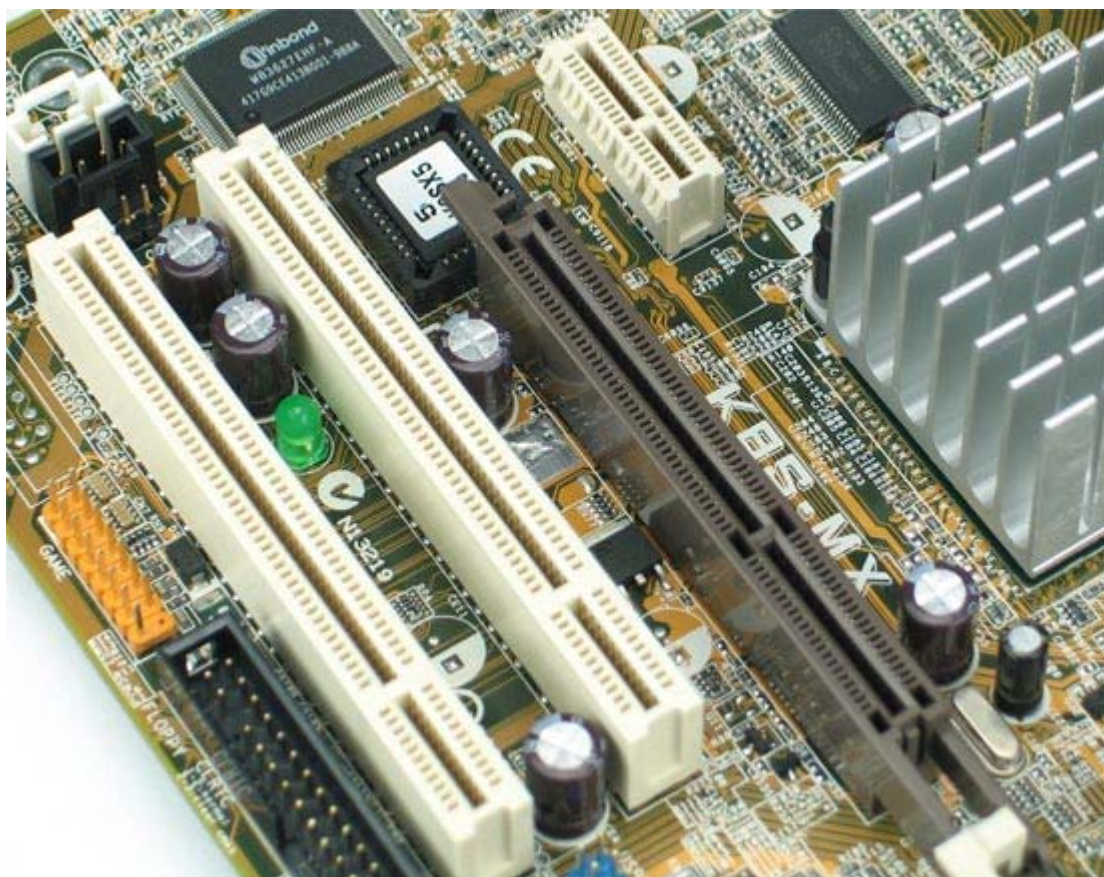


RTL8201 100Mbps Ethernet PHY chip



Onboard AD1888 codec

The motherboard's Realtek RTL8201 PHY chip works in conjunction with the SiS965L's integrated Ethernet controller to provide 10/100Mbps network support. The onboard Analog Devices AD1888 AC'97 codec (image above right) delivers decent 5.1 channel audio output.



There are 3 expansion slots (1 PCIe x1, 2 PCI) present on the motherboard in addition to the AGP graphics slot. This is usually enough for the average user, who is unlikely to have a large collection of expansion cards.



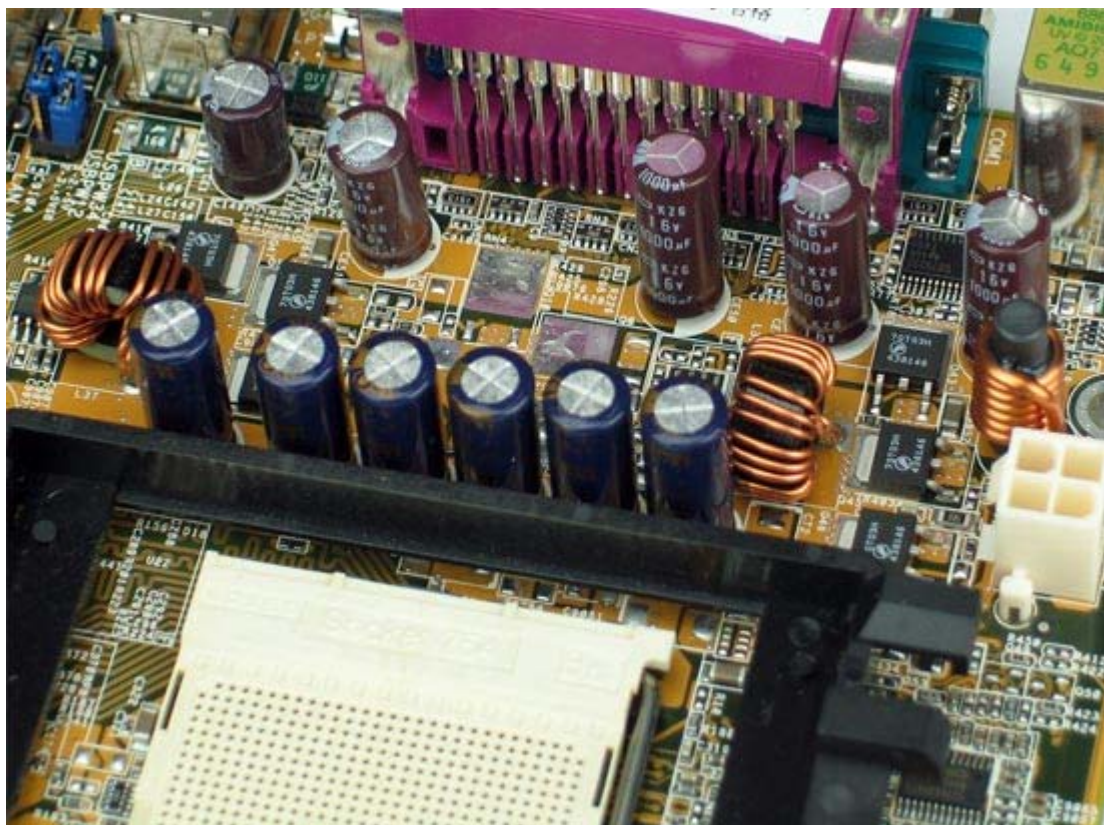


SiS965LSouthbridge



CPU power supply area

It is quite clear in the image below that this is a 2-phase power supply design. Each phase is equipped with 3 MOSFETs. Furthermore, power supply quality is guarded by the presence of high-quality Japanese KZG capacitors installed in the company of more average Taiwanese OST capacitors.



## Test Platform

Hardware Platform	
CPU	AMD Athlon 64 3200+ (2.0GHz, 1MB L2 Cache, Socket 754)
Motherboard	ASUS K8S-MX (SiS760GX, Socket 754)
Memory	A-DATA DDR500 256MB x2
Hard Drive	Maxtor DiamondMax Plus 9 160G SATA (8MB Cache)
Graphics card	Power Color 9800XT(ATI Radeon 9800XT 256MB DDR)
Software Platform	
Operating System	Windows XP Professional + SP2
DirectX	9.0c
Chipset drivers	SiS AGP(GART) Driver v1.19a SiS IDE Driver v2.04a SiS RAID Driver v3.02a
Graphics driver	ATI Catalyst 5.2
Desktop resolution	1280 x 1024@32bit
Test Software	
Business Winstone 2004 1.0.1	
Multimedia Content Creation Winstone 2004 1.0.1	
PCMark04 build 130	
SPECviewperf 8.01	
AquaMark3	
3DMark03 Pro build 360	
3DMark05 Pro build 120	

## Benchmark Results

Winstone 2004	Business Winstone 2004	Business Winstone 2004 Multitasking	Multimedia Content Creation Winstone 2004	
	25.5	2.6	30.2	
PCMark04	Overall	CPU	Memory	
	4081	3769	3693	
SPECviewperf 8.01	3dsmax-03	catia-01	ensight-01	light-07
	12.95	10.63	12.75	9.616
	maya-01	proe-03	sw-01	ugs-04
	14.31	13.40	10.86	13.01
AquaMark3	Overall	CPU		
	9207	49864		
3DMark03	Overall	CPU		
	910	6719		
3DMark05	Overall	CPU		
	3970	2967		