FOXCONN 925XE7AA-8EKRS2 Mobo

Model# 925XE7AA-8EKRS2
Item # N82E16813186023

Those deeply familiar with the PC industry are certain to know that the Foxconn is none other than the world's largest OEM manufacturer of PC components, having a tremendous amount of influence in servers, home computers, gaming consoles, LCD monitors, and various other PC-related components.

In actual fact, "Foxconn" is just the trademark of the Hon Hai Precision Industry Co., Ltd.; a true industry juggernaut.

Much of Foxconn's OEM manufacturing experience has been gained in the area of motherboards, so essentially there is little if anything to worry about in mobo quality. In addition to this, its impressive OEM production capacity and the ability to reach economies of scale, as well as the ability to produce its own components (e.g. CPU socket, PCI slots) allow Foxconn motherboards unprecedented competitiveness (first rate products at very affordable prices).

The brightest of this Intel 925XE motherboard's features is the 1066MHz FSB. Unfortunately, CPUs that can take advantage of it are limited to just a few astronomically-expensive Pentium 4 EE models, so the practical value of this feature is lacking at the moment. This, however, is not quite the way overclocking enthusiasts regard the issue, as a reduction in processor multiplier, followed with a sped-up FSB - to increase both system and memory bandwidth - is just the recipe needed for a serious performance boost!

This motherboard product has a lot going for it in terms of functionality, design, and superb component quality. We have to make a point of the accessories, which are also simply fantastic in terms of design and quality, and are so plentiful that every slot/port/interface is virtually covered. We were particularly enamored of the L-shaped SATA data cable.

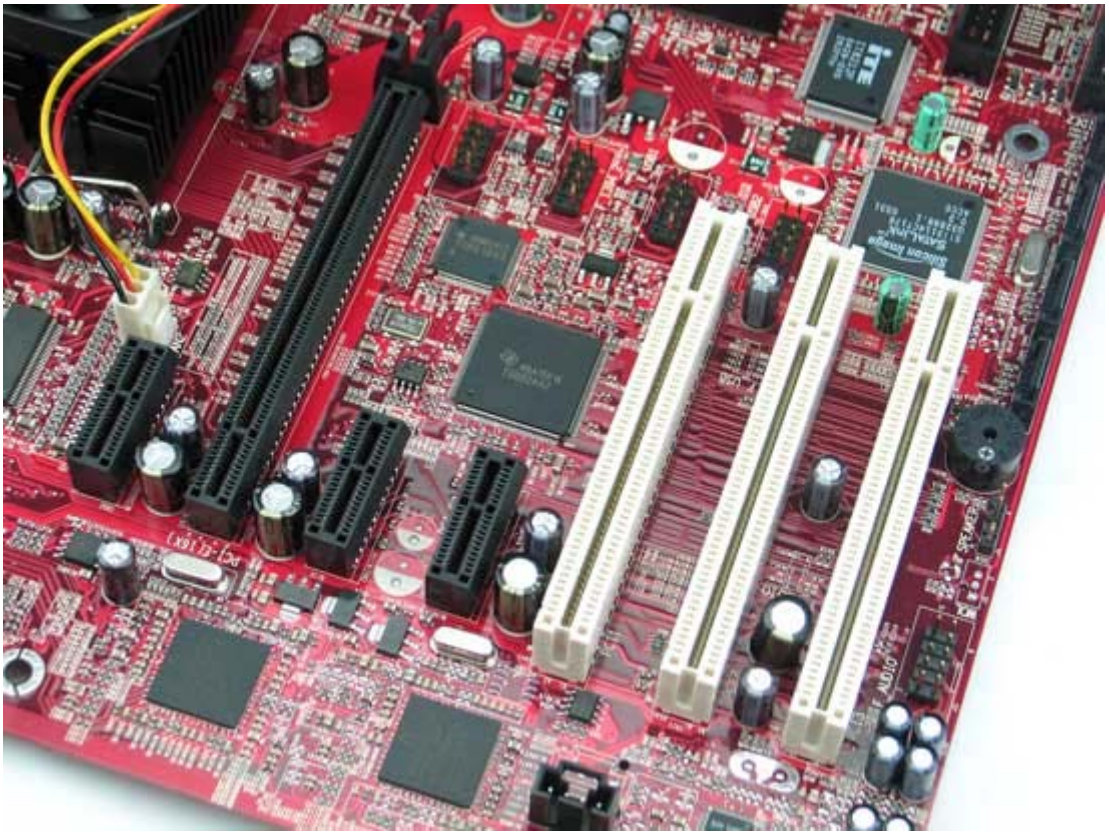
With the exception of the missing Wi-Fi support, the Foxconn 925XE7AA-8EKRS2 comes complete with all the functions of a current ultimate-end motherboard. These include IEEE1394a/b (1394b bandwidth is 800Mbps – almost twice that of USB 2.0), dual Gigabit Ethernet, 3 RAID systems (two from the ICH6R and Silicon Image 3114 provided SATA connectors, and another from the set of two ITE8212F-provided UltraATA133 RAID connectors). All of these are set on a standard-sized ATX motherboard, so the pressure on the motherboard circuitry is considerable. We're very happy to say that Foxconn has not let us down as the motherboard performed very stably during testing. This isn't at all surprising, as the most stable motherboards out there are from Intel, and we all know who manufactures Intel

motherboards.

Contributing to that stability are the Sanyo OS-CON solid (aluminum electrolytic) capacitors, as well as Nippon Chemi-con's very best KZJ electrolytic capacitors, which are so very rarely seen outside of high-end motherboards. Of course, the "people's choice" Foxconn slots that we often see on motherboard products from the other top brands are here as well. Overall, this is unquestionably a first-rate motherboard product.

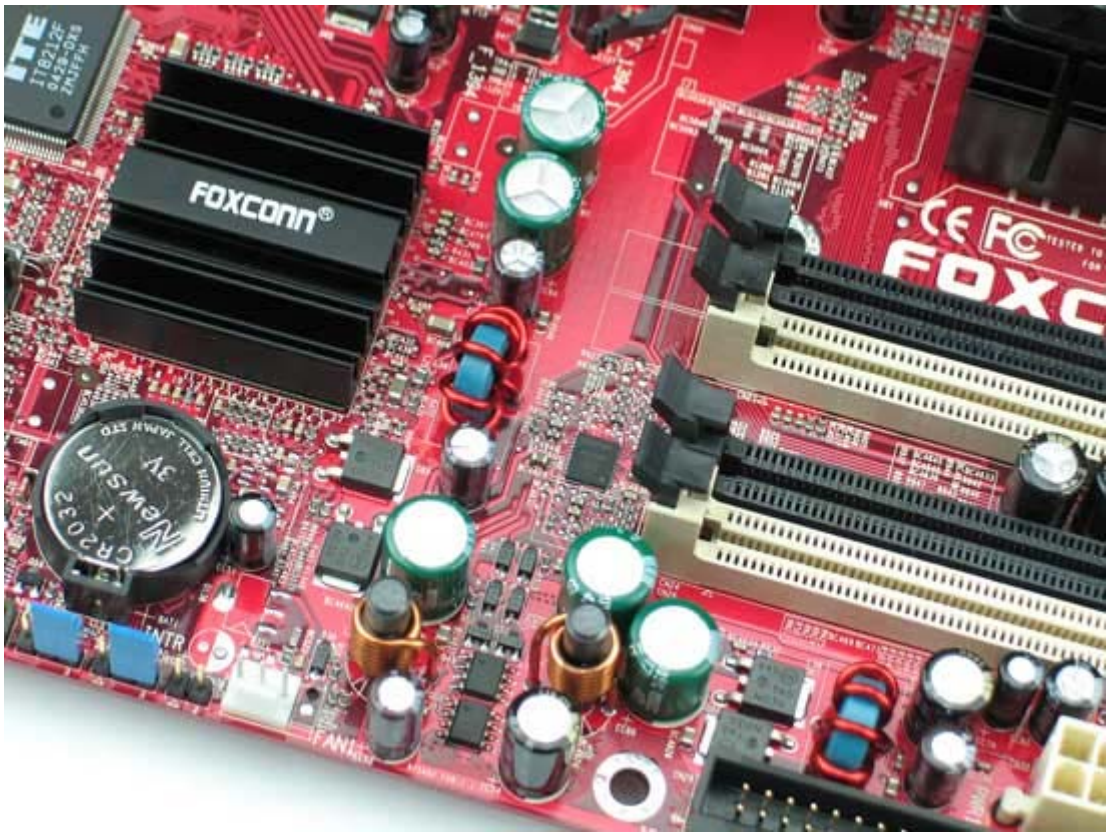
Overclockability, an area overclockers are keenly interested in, is quite good. It is very easy to reach the BIOS host frequency limit (265MHz for non-1066FSB processors), and even 286MHz when using the bundled SuperStep software.

Close Ups

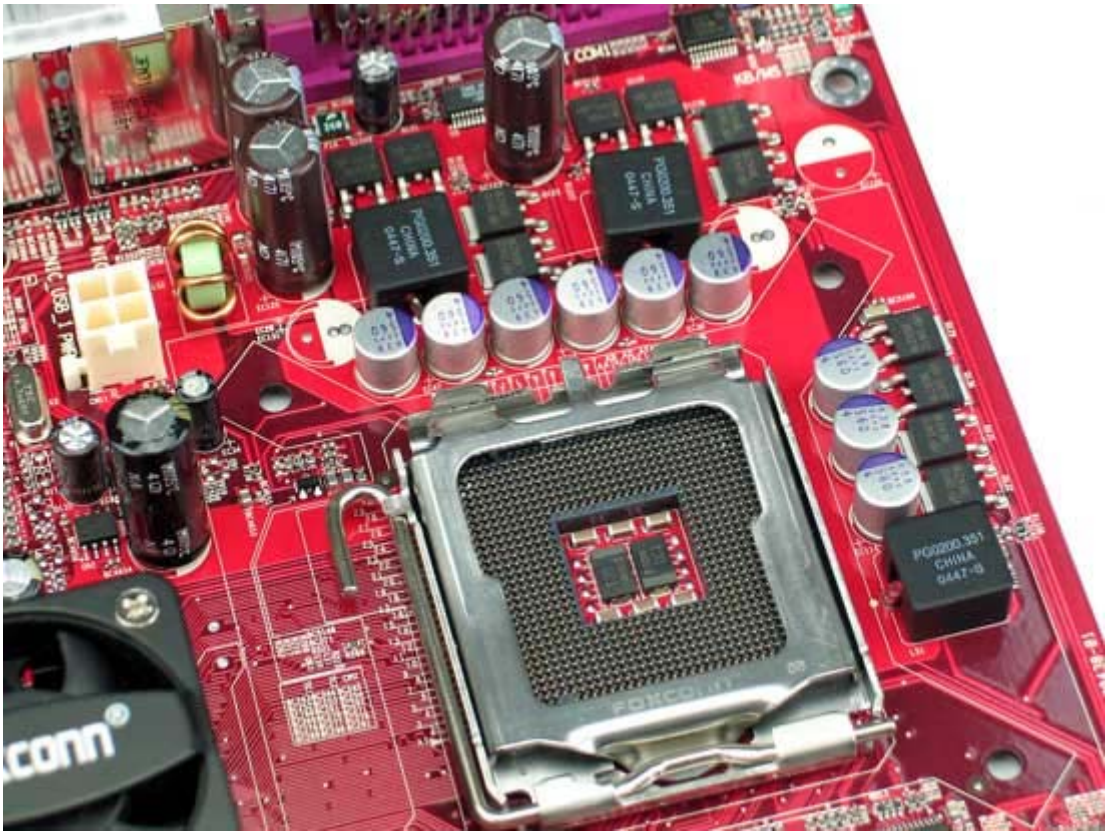


Here we see 1 PCI Express x16 graphics slot being flanked by 3 PCI Express x1 slots. A PCI Express network card means that all 20 of the available PCI Express lanes have been fully utilized. Joining them are 3 PCI slots for standard PCI expansion devices.

In this picture there are two IDE RAID connectors, 8 SATA RAID connectors, but not the single ATA100 IDE connector that is hidden from view. Together they support a maximum of 14 hard disks/optical drives. That'll definitely be enough for most users.



No lack of protection is offered for the PCI Express graphics slot and DIMM slot circuitry as witnessed by the installation of Nippon Chemi-con KZE electrolytic capacitors. This is definitely a power supply level that is sufficient for the PCI Express graphics slot.

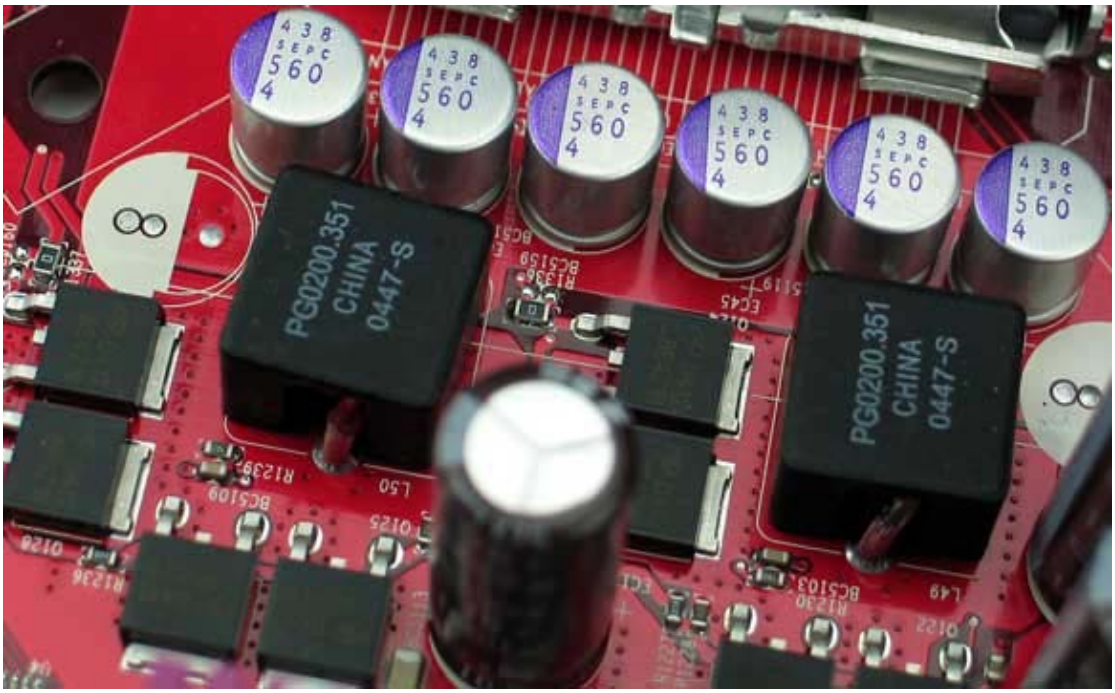


3 phase power solution though it is (hey! Intel's own 925XE motherboards are the same!), each phase is provided with 4 MOSFET so that each MOSFET heats up to a lesser degree. This is a power supply sufficient to deal with the massive demand of Prescott CPUs.

An area of particular note is that the CPU socket is surrounded by 9 Sanyo OS-CON solid (aluminum electrolytic) capacitors. These serve as another highlight of the motherboard, as these particular capacitors are found attached almost exclusively to high-end graphics cards. Also found in this area are Nippon Chemi-con KZG capacitors as well as superior KZJ electrolytic capacitors.

In all, there are a total of 14 KZJ capacitors (the black ones on the left in the above image) that are so rarely found on motherboards and are superior even to the above-mentioned KZGs, spread about on this Foxconn motherboard (also found near the DIMM slots and PCI and PCI Express slots).

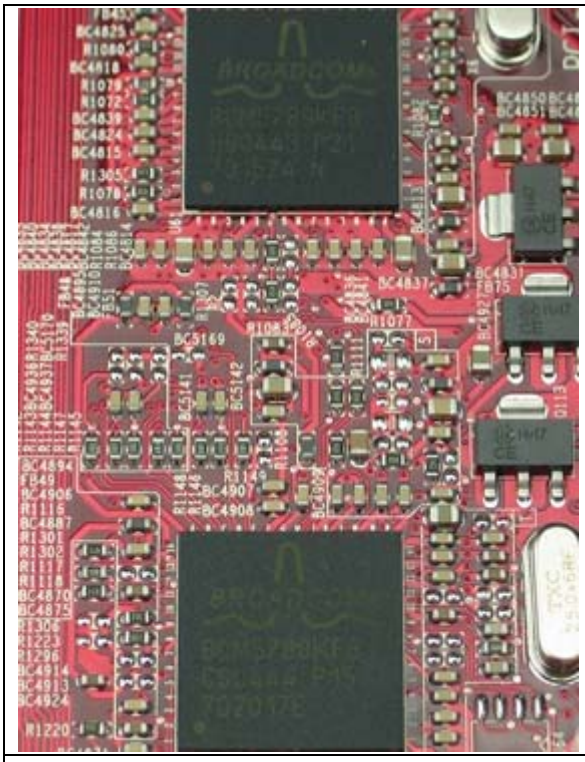
In the image below we get a closer look at the CPU power supply module that is formed by the sealed inductors, the MOSFET, and the high-grade capacitors mentioned above.



	
ITE 8212F IDE RAID controller	Silicon Image 3114 SATA RAID controller

The ITE 8212F controller supports the UltraATA 133 standard and provides two IDE connectors for the support of four IDE devices. Of course, RAID 0/1/0+1 is supported.

The Silicon Image 3114 SATA RAID controller is a mainstay of high-end motherboards and provides support for RAID 0/1/0+1 as well as software RAID 5 using the Silicon Image 3114 RAID BIOS built in this mobo. However, the practicality of software RAID 5 is questionable due to the high CPU usage rates involved.

	
Broadcom 5788 & 5789 Gigabit Ethernet controllers	TSB81BA3 & TSB82AA2 IEEE1394b controllers

In the left image we have the BCM5788 PCI Gigabit Ethernet controller and the BCM5789 above it, which is a PCI-SIG certified PCI Express Gigabit Ethernet controller that allows heavy bandwidth users to experience the benefits of full-blown Gigabit Ethernet.

To the right is a snapshot of the Texas Instruments TSB81BA3 and TSB82AA2 controllers that enable the motherboard to provide three IEEE1394 ports – one 400Mbps IEEE1394a port and two 800 Mbps IEEE1394b ports (compatible with 1394a). Spoken with greater precision, the TSB81BA3 Three-Port Cable Transceiver/Arbiter chip is a physical layer data transmitter, while the TSB82AA2 OHCI-Lynx Controller is a link layer controlling chip.

Screen Shots

This motherboard comes not only with a 90 day trial OEM version of Norton Internet Security, but Foxconn's own SuperUtility bundle containing the SuperUpdate, SuperLogo, and SuperStep applications.

The SuperUpdate application is a BIOS update program capable of BIOS backup and flashing in Window environment. The LiveUpdate can connect directly to the Foxconn server and download the latest BIOS update file.

To define your own startup logo look no further than the SuperLogo app that allows users to add his/her preferred images to BIOS.

Foxconn's SuperStep app is a monitoring tool plus overclocking tool rolled in one. A one-stop shop where fan, temperature, and voltages can be viewed and warning setting defined.

Overclocking, the real value of this program, can be done via direct input of host frequency (see image below). It is, however, less polished compared to software from ASUS and Gigabyte due to the lack of voltage control mechanism.

In the image below, we see that the "Overclocked!" warning has appeared. This occurs whenever CPU frequency is boosted beyond the default level.


FAN
Voltage
Temperature
Clock
Alarm
CPU
PCI
PCIe
3794.00
33.33
100.00
Frequency setting
Ratio:
14.0
Ext. CPU Freq. :
271
Overclocked!!
Default
Apply
SuperStep