SPARCengine™ ULTRA™ AXi

Industry-Standard UltraSPARC™ i-Series Motherboard for High-performance OEM Solutions

Powered by the UltraSPARC IIi processor, the SPARCengine™ Ultra™ AXi motherboard offers a high-performance, scalable, low-cost solution for embedded applications. This robust motherboard uses a standard form factor and is the latest member of Sun's standards-based family of PCI-based platforms. Engineered for quality and compatibility, the Ultra AXi is an ideal platform for applications in telecommunications, medical imaging and visualization, data analysis, and networking systems. The outstanding combination of flexibility and scalability provided by the UltraSPARC architecture prepares OEM customers to address future performance-enhancement requirements. The Ultra AXi's extensive feature set includes up to one gigabyte of memory, onboard dual channel ultrawide SCSI, integrated 10/100 Mbps Ethernet, and six 32-bit/33-MHz PCI slots.

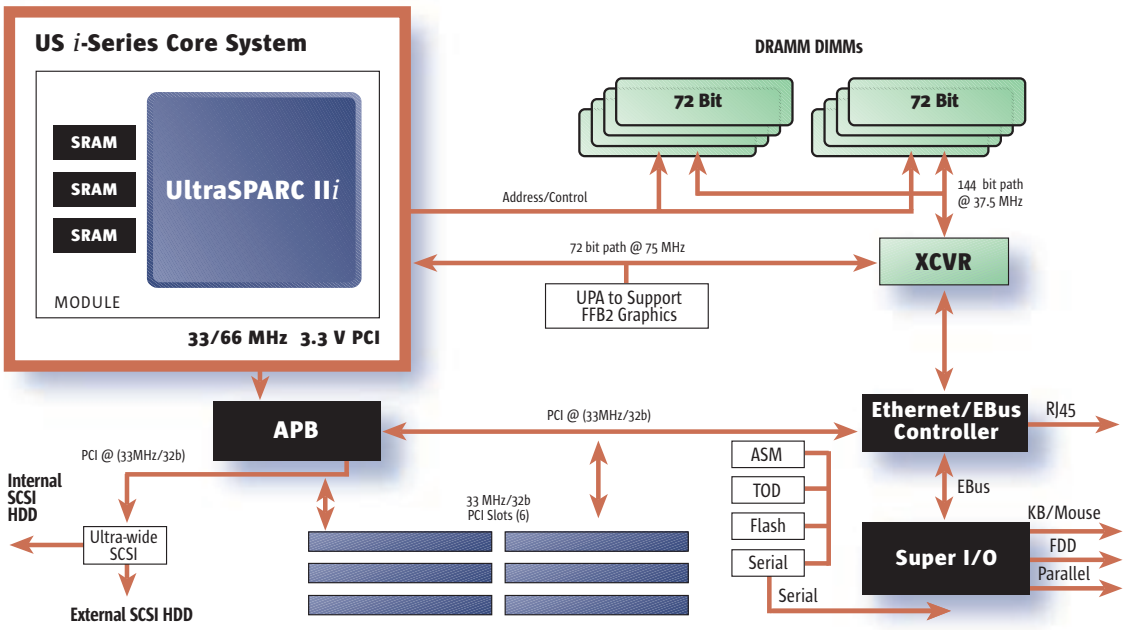
HIGHLIGHTS

- SPARC™ V9 UltraSPARC IIi processor module with speeds from 270 MHz to 440 MHz and cache sizes from 256 KB to 2 MB
- Binary compatibility with all Solaris™ operating environment applications
- High-performance and high-bandwidth graphics interface for imaging-intensive applications along with Sun's unique Visual Instruction Set (VIS)™
- Up to six industry-standard PCI slots available for I/O expansions
- Onboard fast Ethernet and two ultrawide SCSI interfaces
- Advanced System Monitoring (ASM) for intelligent fault detection
- OS support of Solaris 2.6 and Solaris 7 operating environments

TYPICAL APPLICATIONS

- High-performance Embedded Controllers
- Telecom Adjunct Server
- Medical Imaging and Visualization
- Network Infrastructure Devices
- Internet/Intranet Server

SPARCengine ULTRA AXi SCHEMATIC VIEW



SPARCengine ULTRA AXi SPECIFICATIONS

ARCHITECTURAL FEATURES

CPU	UltraSPARC-II i-series modules
	270 MHz, 256 KB cache
	300 MHz, 512 KB cache
	333 MHz, 2 MB cache
	360 MHz, 2 MB cache
	360 MHz, 256 KB cache
	440 MHz, 2 MB cache
PCI bus	6 slots: 32bit@33 MHz
Graphics slot	1 UPA-s for FFB card
Memory	DRAM, 168 pin DIMMs, 3.3V, EDO 60nS
	144 bits wide, 32 MB min, 1 GB max in 8 slots
Boot ROM	1 MB Flash with OBP
TOD/NVRAM	RTC, 8 KB RAM

ON BOARD I/O

Serial	2 sync/async ports on 1 DB25P connector
	"Y" splitter cable needed to access second port
Parallel port	IEEE1284 1 port DB25S connector
SCSI	Dual Channel Ultra wide, 68 pin mini SCSI
	Internal and external connectors
Ethernet	10/100 Mb/sec RJ45 connector
Floppy drive	Standard 3.5" FD on Internal connector
Keyboard/Mouse	Sun Keyboard/Mouse port Type5
	PS2 Keyboard/PS2 Mouse on additional adapter

SYSTEM POWER SUPPLY (TYPICAL)

Power Supply	DC 250 W
+3.3V	13.0 A
+5V	20.0 A
-5V	0.5 A
+12V	8.0 A
-12V	0.8 A

ENVIRONMENTAL	Operating	Non-operating
Temperature (ambient)	0°C to 55°C	-40°C to 70°C
Air flow requirement	300 LFM at CPU heatsink	
Humidity	5% to 95% RH	5% to 95% RH
	non-condensing	non-condensing
Shock	6 G's, 11 ms	15 G's, 11 ms
	half sine wave, 10 shocks	half sine wave, 3 shocks
Vibration	0.20 G's, 5~500Hz	1.0 G's, 5~500Hz
	1 Octave/min, 2 sweeps	1 Octave/min, 2 sweeps
Altitude	10,000 ft (3,408 M)	40,000 ft (12,192 M)

MECHANICAL

Board style	Standard ATX
Board size	12" (wide) x 9.6" (length)

HEADQUARTERS **SUN MICROSYSTEMS, INC.,** 901 SAN ANTONIO ROAD, PALO ALTO, CA 94303-4900 USA
PHONE: 800 681-8845 INTERNET: http://www.sun.com/microelectronics

SALES OFFICES

FRANCE: +33 1 30 67 53 95 • **GERMANY:** +49-89-46008-474 • **ITALY:** +39 039 60 55 266 • **JAPAN:** +81-3-5717-5060 • **KOREA:** +82-3-469-0298 • **PEOPLE'S REPUBLIC OF CHINA:** +86-10-6803-5588 x28882 • **RUSSIA:** +7-095-935-8411 • **SINGAPORE:** +65-438-1888 x58677 • **SWEDEN:** +46 8 623 9250 • **TAIWAN:** +886-2-2514-1181 **UNITED KINGDOM:** +44-1276-416944

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