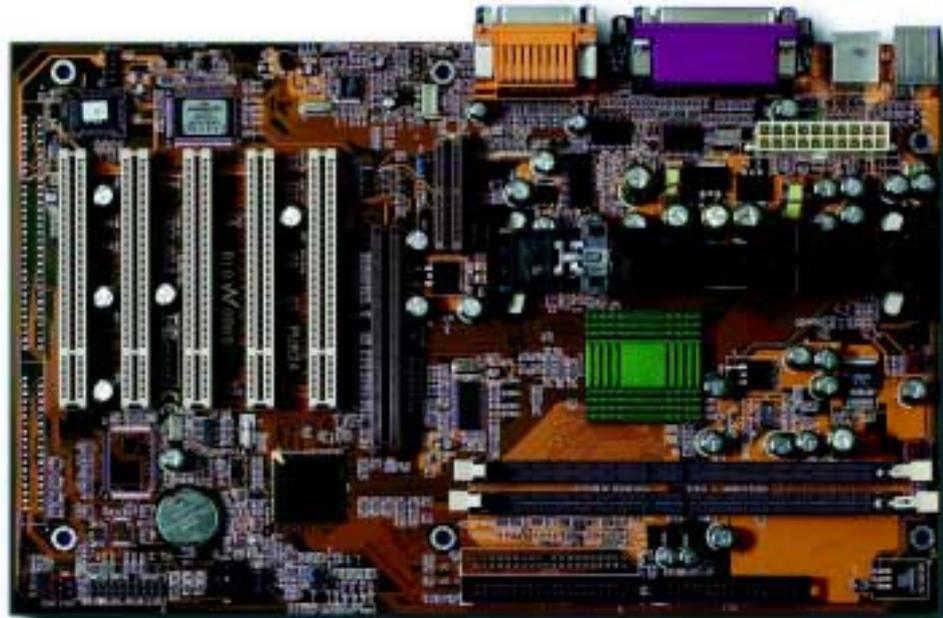# RIOWORKS™

The Reliable Building Block

PU82A
New Era of 133FSB and PC800

- **Intel 820 chipset**
- **Scaleable Coppermine Pentium III processing**
- **133 FSB (Front Side Bus) 100FSB**
- **1.6GB/s RIMM memory bandwith (RDRAM of PC800)**
- **IDE UltraDMA/66 disk**
- **AGP4X**
- **AC 97 Codec Audio on board**
- **Rioworks™ SmartWatch™ server management**

PU82A , *the highly-scaleable desktop server* to the workgroup server needed, provides the solutions of the most advanced processors of Coppermine 133FSB and the backward-compatibility to PIII 100FSB. With the "CPU-converter-card", it can be easily expanded to support the today's price/performance socket Coppermine(FC-PGA). Designed with the RIMM socket, it is the choice as to be your professional workstation needing the high-throughput RAMBUS memory system. With the alternative extension, the "DIMM-riser-cards" shall give your (server) customers the high-capacity/availability solution. AGP4X also doubles the VGA-transfer bandwidth that empowers the professional workstation processing.

For more information, please visit us at
www.rioworks.com

CE Ultra DMA 66 PC '99 AC '97

Features / Benefits

Flex/Upscale CPU Solution

Slot-1 supports both the Coppermine 133FSB (Front Side Bus) and Pentium III 100FSB. Facilitated with the optional " CPU-converter-card "- Slot-1 to FC-PGA, it offers the full-spectrum processing choice as to support the highly-scaleable positioning from PIII,Coppermine and FC-PGA (socket Coppermine).

Flex/Upsize Memory Solution

This two-RIMM will bring in the high-performance RAMBUS solution to support 256MB to 1GB. Adapted in the optional "DIMM-riser-card"-the RIMM to DIMM converter card, it will provide the most available 1GB SDRAM solution.

AGP4X Slot

AGP4X slot will provide the doubled transfer bandwidth of the today's AGP solution, up to 1GB/s. And it shall be the choice of the professional workstation.

Integrated AC'97 Compliant Audio

The cost-effective audio-ready solution leverages the AC'97 link for audio codec from i820's ICH.

PC'99 Compliant Color-coding I/O Connectors

This colored VGA/serial/parallel/USB/audio (line-in/line-out/MIC) connectors will make your system installation and maintenance easier.

UltraDMA/66

UltraDMA/66 will double the transfer bandwidth of today' IDE devices, up to 132MB/s, as well as support the backward compatible UltraDMA/33 IDE devices.

AMR Slot

Designed with this latest i820 ICH chipset, it leverages the AC'97 link of telephony codec, to offer this cost-effective Modem-Riser card vs. PCI card. And it also releases one more available PCI load/slot.

Hardware Monitor and System Management

Integrated hardware monitoring of fans, temperature/thermal, voltage and chassis intrusion, Rioworks™ SmartWatch™ will notify the critical status of system events to prevent from the system data loss.

Specification

Processor
Single Slot-1: PIII450-650 or Coppermine 533-800
Option: CPU-converter-card to support
FC-PGA Socket Coppermine
Integrated VRM complies to spec 8.4

Chipset
Intel 820: 133 Front Side Bus(FSB), RDRAM

System BIOS
AMI BIOS on 2Mb flash
I2O support
Legacy USB support
SMBIOS 2.3 compliant
DMI 2.0 compliant
Wire for Management 2.0/Wake On Lan
APM 1.2/ACPI 1.0
LS-120, iomega zip supported
MO, DVD and CD-ROM supported
Advanced IDE(supports bigger than 8GB HDD with S.M.A.R.T.) features
Soft Power-down
Secure Boot
Multiple boot support
Y2K compliant/PC99 compliant

System/IO-bus
133/100 FSB
Support overclocking 150FSB or higher
AGP4X
RAMBUS(1.6 GB/s bandwith)

System Memory
Two RIMMs, up to 256MB-1GB RDRAM
Option: DIMM-riser-card, up to 1GB SDRAM / 2 DIMMs

Onboard Multi I/O
Winbond super I/O with hardware monitor
Two serial ports with UART 16550
One parallel port with ECP/EPP support
Dual onboard USB connectors
PS/2 mouse and keyboard connectors with Wake-up function

Onboard Audio
S/W audio integrated(the Crystal 4299 Codec)
AC'97 Compliant

Onboard PCI IDE
Dual PCI Bus Master IDE connectors, up to 4 IDE devices
UltraDMA 66/33 IDE

Hardware monitor and System management
Hardware monitor of CPU Thermal Protect, CPU/System Fan monitor,
Voltage Report, Chassis Intrusion
Rioworks™ SmartWatch™ to alert the event of hardware problem
Prevent from abnormal system down/data loss
Header of Wake On LAN to support the power on features via Ethernet LAN

Expansion Slots
 5 PCI slots, 1 AGP4x, 1 AMR, 1 ISA(Option)

Board Size
ATX form factor with size: 12" x 7.48"

Option

| Option 1(1*R2D) | DIMM-riser-card*1 | RIMM to DIMMs |
| Option 2(1*S123) | CPU-converter-card*1 | Slot-1 to FC-PGA |

The specification is subject to change without notice.

The brand and product name are trademarks of their respective companies.