



LIQUIDBLADE™



Relentless Performance

Through Liquid Submersion

The world's first
total-liquid-submersion-cooled server,
Liquid Blade™ offers speed,
stability and savings



Features

- Sustained optimal performance
- Significant savings on data center air conditioning expense
- Easy integration into existing data centers
- Improved density shrinks data center footprint
- Core Coolant™ keeps components cooler, improving reliability



Processor Support

- 2 x FC-LGA 1366 sockets
- Intel® 5500-series Xeon CPUs
- QPI 4.8GT/s, 5.86GT/s and 6.4GT/s

Chipset

- Intel® 5500 chipset
- Intel® ICH10R

Memory

- 6 x DDR3 slots per CPU
- 6 x DIMMs/socket at 1066MHz (nominal)
- 3 x DIMMs/socket at 1333MHz (nominal)
- Registered, unregistered, non-ECC and ECC DIMMs are supported
- 24GB memory capacity with 2GB modules

Network Connectivity

- Embedded Intel® 82574L PHYs with Intel® I/O acceleration technology
- 2 x 1.0Gb/s LAN

Storage

- 4 x 3.0Gb/s SATA II ports
- Mounting area for up to 4 x 2.5 inch SSDs
- 4-drive RAID 0, 1, 5 and 10 possible

Graphics

- Graphics card support via PCIe connector
- Integrated motherboard graphics via embedded Intel® ASPEED AST2050 with integrated 2D video controller and 8MB video memory

Power

- 1 x 680W PSU
- 2 x 6+2-pin supplemental graphics card power connectors

PCI-E 2.0, x16 Expansion Slot

- 1 x PCI-E 2.0, x16 available
- 90 degree riser card allows for full-sized cards
- Support for NVIDIA® Quadro FX or GeForce graphics cards
- Support for ATI® Radian or Fire Pro graphics cards

USB

- 2 x USB 2.0 ports

Management Hardware

- Onboard ASPEED AST2050 with integrated baseboard management controller
- Baseboard management module with IPMI 2.0 serial-over-LAN support via dedicated 10/100Mbps management NIC
- IPMI 2.0 Advanced Encryption Standard (AES)
- Secure Socket Layer (SSL)
- Dynamic Host Configuration Protocol (DHCP)
- Telnet Access, SSH support, SMASH CLP (command line)
- Remote update firmware
- Remote reboot
- Remote power on/off, PEF configuration

Custom Cooling

- Patented full liquid submersion of all active components is 1350 times more effective than air at removing heat
- Core Coolant™ dielectric fluid is clear, odorless, biodegradable and safe
- A variety of remote heat exchange options are possible

Form Factor

- 6.3inch x 16.7inch motherboard
- Liquid submersion 2.6 inch x 7.0 inch x 32 inch custom chassis
- Allows for 7 x blades per 5U shelf