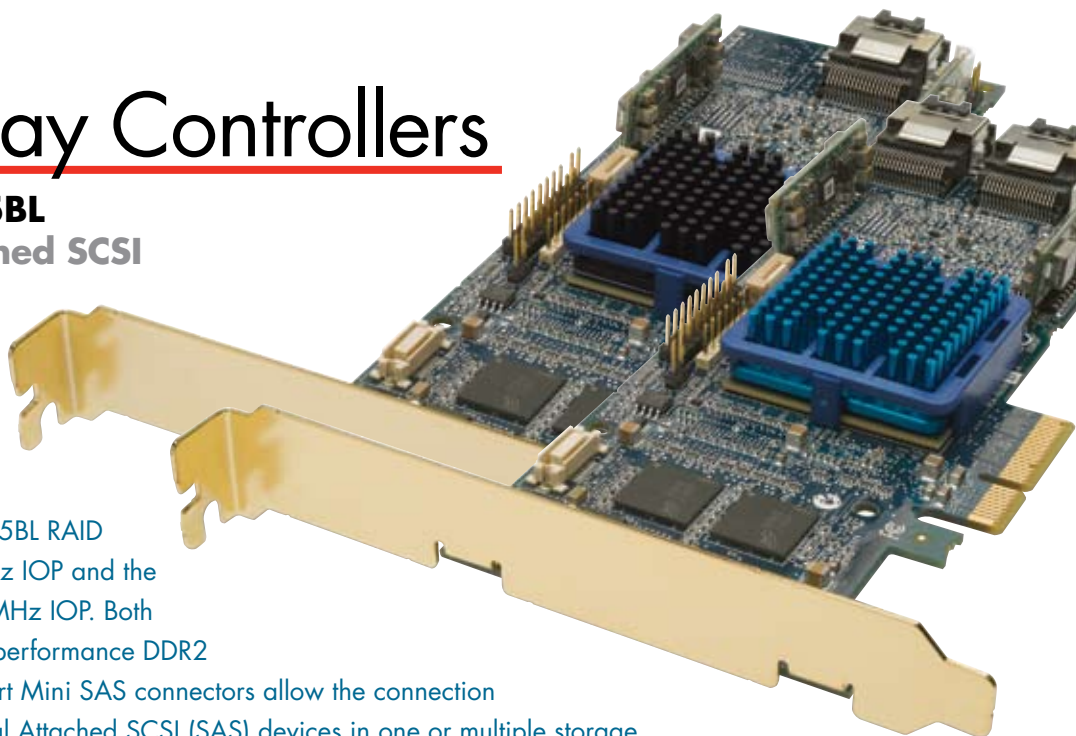


ICP Disk Array Controllers

ICP5045BL and ICP5085BL PCIe 4-lane Serial Attached SCSI

The ICP5045BL and ICP5085BL are the second generation of ICP PCI Express Unified Serial™ RAID controllers optimised for low-profile form factor and the best price/performance ratio. The 4-port ICP5045BL RAID controller is equipped with a 500 MHz IOP and the ICP5085BL is equipped with an 800MHz IOP. Both cards are supported by 256MB high-performance DDR2 memory. The controllers' internal 4-port Mini SAS connectors allow the connection of up to 96 Serial ATA (SATA) or Serial Attached SCSI (SAS) devices in one or multiple storage enclosures. Both cards are optimised for SATA infrastructure (e.g. by direct activity/failure LED connectors) and devices, and support SAS as well. The cards include the graphics-based ICP Storage Manager (ISM) for convenient one-view RAID storage management. ISM offers a unique set of useful functions including Snapshot Backup support, optimised storage utilisation and improved RAID-level management.



Hardware RAID Controller

- RAID 0, 1, 1E, 5, 5EE, 6, 10, 50, 60 and JBOD (single disks)
- Auto hot plug with SGPIO and SES Enclosure Management
- Global or dedicated hot spare (Hot Fix) drives
- Hardware RAID is totally independent from the host and operating system
- Integrated acoustic alarm

Versatile Connectivity Capabilities

- One (ICP5045BL) or two (ICP5085BL) internal 4-port Mini SAS connectors (SFF-8087)
- Connect up to 96 SATA or SAS devices (with expander backplanes)
- Maximum bandwidth of 3Gb/s/port

PCI Express Bus Specification

- PCI Express 4-lane
- 2.5Gb/s per lane

RAID Controller Architecture

- 64-Bit Intel 80333I/O Processor, 500/800 MHz
- Hardware XOR Engine, integrated coprocessor for optimised parity computation
- Completely offloads the host CPU
- Onboard 256MB/64-Bit ECC DDR2 memory

Intelligent Battery Backup Unit (optional)

- RAID cache holds cached data and retains it even in the case of power failure; at system/controller restart, all data in cache will be written to the hard drives
- Lithium ion battery with typical 72-hour cache memory protection

Operating System Support

- Windows Server 2003, 2000, XP, Vista™
- SUSE Linux Enterprise Server, Red Hat Enterprise Linux, open source drivers
- FreeBSD
- Novell NetWare 6.5
- Solaris 10 x86
- SCO OpenServer, UnixWare

High Configuration Flexibility

- ROM-resident set-up for configuration and maintenance (CTRL+<A>)
- Full capacity utilisation of mixed drive sizes
- RAID arrays exceeding 2TB are supported
- Online capacity expansion (with scheduling)
- Enhanced online RAID-level migration
- Complete disk array migration

Integrated RAID Software ICP Storage Manager (ISM)

- ICP RAID Configuration Utility – installation and monitoring software, remote access
- Software updates based on Flash-RAM technology. Latest firmware, drivers and tools available at www.icp-vortex.com.

Delivery Contents

- Quick Installation Guide
- CD-ROM with tools, drivers and comprehensive manual
- Three-year warranty for controllers



About the ICP5045BL and ICP5085BL

Technical Specifications

Form Factor

Low-profile MD2

Bus compatibility

PCIe

PCIe bus width

x4

PCIe bus speed

2.5 Gb/s per lane

PHYs

ICP5045BL: 4

ICP5085BL: 8

Standard cache

256 MB DDR2

Connectors, internal

ICP5045BL: 1 SAS x4 (SFF-8087)

ICP5085BL: 2 SAS x4 (SFF-8087)

RAID levels

0, 1, 1E, 5, 5EE, 6, 10, 50, 60, JBOD

Simple Volume

Yes

Disk Drives

SATA, SATA II, SAS

Maximum number of disk drives

ICP5045BL: 4 (up to 96 for SAS and 48 for SATA with expanders)

ICP5085BL: 8 (up to 96 for SAS and 48 for SATA with expanders)

Hot spares

Yes

Enclosure Support

SES 2 (over SAS or I2C) and SGPIO

Automatic Failover

Yes

Onboard speaker

No

Audible alarm

Yes

Battery Backup Module

Adaptec Battery Module 800 (sold separately)

Environmental Specifications

Forced air cooling recommended

Ambient temperature without forced airflow

0°C to 40°C

Ambient temperature with forced airflow

0°C to 55°C

Relative humidity

10% to 90%, non-condensing

Altitude

Up to 3,000 metres

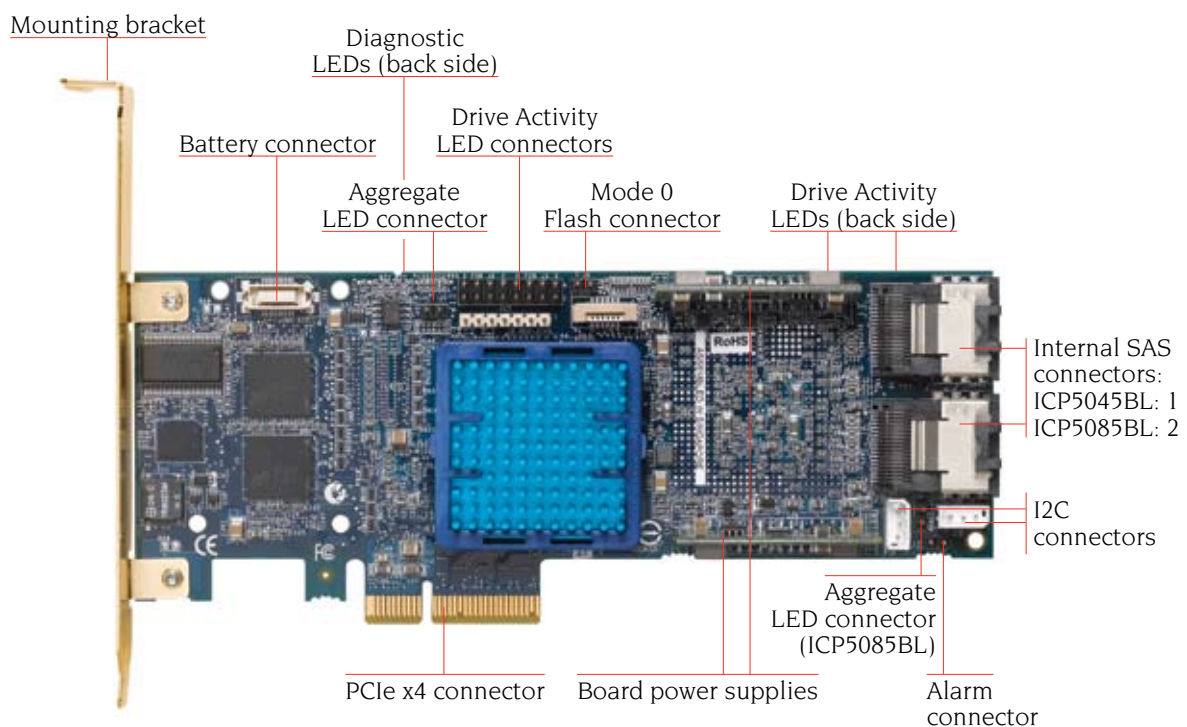
DC Power Requirements

Ripple and noise

50 mV peak-to-peak (max)

Voltage/Amperage

1.0A @ 3.3VDC and 1.0A @ 12.0VDC



ICP vortex Computersysteme
Konrad-Zuse-Str. 9
D-74172 Neckarsulm
Germany

German: +49 (0) 89 456 40621
French: +44 (0) 1276 85 45 55
English: +44 (0) 1276 854528

www.icp-vortex.com

Ask Us: http://register.adaptec.com/ask_us.html

See also: http://www.icp-vortex.com/english/support/supp_e.htm