



KIRA100

Reduce end user costs and increase IT management productivity with a single chip.

A core part of the KIRA100 ASIC is based on industry-leading structured ASIC technology which enables easy customization of function blocks according to customers' demands or new industry standards.

The first KVM-over-IP chip that supports Virtual Media, IPMI and more

The Raritan KIRA100 baseboard management controller (BMC) is a fully-integrated "system-on-a-chip" microprocessor that incorporates all the functions and interfaces needed for complete and cost-effective remote management of server architecture.

The Industry's First Single Chip Solution

KIRA100 is the first single chip solution for high-quality platform control and remote server access that combines KVM-over-IP technology with all the key platform management access methods available today, including IPMI (Intelligent Platform Management Interface), SSH (Secure Shell), WS-MAN (Web Services for Management) and SMASH-CLP (Systems Management Architecture for Server Hardware-Command Line Protocol).

In addition to its excellent KVM-over-IP redirection, KIRA100 provides virtual media support that covers the industry's broadest range of mass storage emulation variations – including virtual floppy emulation, CD/DVD-drive emulation – even direct mass-storage redirection. Plus, it offers a wide array of advanced features that improve manageability and help prevent downtime, including IPMI 2.0-based server hardware monitoring.

Features

- IPMI 2.0-compliant BMC
- Virtual Presence with KVM-over-IP
- Mouse/Keyboard emulation via USB
- Virtual CD/DVD/Floppy via USB
- Serial-over-IP
- Remote power management
- Complete platform control
- Control via Web browser
- No additional client software needed

Applications for the KIRA100

The KIRA100 offers OEMs (especially motherboard manufacturers) a powerful, modular and flexible way to design server platforms that meet the needs of their customers. Raritan supports all current popular efforts to create common platform interface standards, such as Open Platform Management Architecture (OPMA) and Advanced System Management Interface (ASMI). KIRA100 is flexible enough to serve as the manageability engine for daughter cards that support these standards, helping customers reduce cost and time-to-market.

For end customers, the multi-standard, high-performance KIRA100 chip minimizes server downtime and increases IT productivity by enabling tasks like operating system installation and power cycling on a server to be done remotely. In addition, the ASIC-based chip helps Tier-One server partners and server OEMs save board space and reduce system costs.

Technical Data

- ARM V4-compliant RISC CPU with 16kb Data/Instruction cache, running at a maximum clock speed of 200MHz
- Video Sampling Controller (VSC2) function block to accelerate video processing and compression for outstanding KVM-over-IP performance (30fps)
- Supporting maximum video resolutions of up to 1600 x 1200 @ 75Hz
- 2X integrated USB high-speed device and OTG interfaces with build-in USB-PHY to support keyboard, mouse and mass storage emulation without additional external components

- 2X integrated MII LAN interfaces (one of them RMII capable) and 1 x FML interface to support dedicated as well as shared NIC server architectures
- Flexible high-performance memory controller to support a variety of static and dynamic memory components, including serial flash components (SPI)
- Integrated AES/3DES-compliant encryption controller to ensure secure remote management sessions
- IPMI 2.0-compliant BMC interfaces, which include UART, LPC (Master/Slave), I2C, Tacho, PWM and GPIO interfaces
- Low single 3.3V power consumption and 1.8V for core
- Dimensions (DxWxH): 0.906" x 0.906" x 0.088"; 23 x 23 x 2.23mm

Security

- Up to 256 bit SSLv3/TLSv1 encryption of all data
- Support of SSL certificate management
- Logging of all important events

Software Development Kit

- SDK - OEMizer
- SDK - complete GNU toolchain for KIRA100 (compiler, assembler, linker, debugger, build script)

**When you're ready to take control,
do it with Raritan's KIRA100.**

Call 1.800.724.8090 or visit Raritan.com/KIRA100

Raritan is a leading supplier of solutions for managing IT infrastructure equipment and the mission-critical applications and services that run on it. Raritan was founded in 1985, and since then has been making products that are used to manage IT infrastructures at more than 50,000 network data centers, computer test labs and multi-workstation environments around the world. From the small business to the enterprise, Raritan's complete line of compatible and scalable IT management solutions offers IT professionals the most reliable, flexible and secure in-band and out-of-band solutions to simplify the management of data center equipment, applications and services, while improving operational productivity. More information on the company is available at Raritan.com.

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