



The control of large network servers begins with embedded controllers. Power up, pre-boot services and blade maintenance are performed by low-cost on board embedded controllers.



"Power control and system maintenance require reliable embedded controller design. Orchid's insight into embedded controller design really helped."

- VP Systems Integration



**ORCHID TECHNOLOGIES
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Embedded Controllers in IA32 Design

A lot of electronics depends upon a small controller to get started. Today's large network servers based upon Intel IA32 single, dual and multicore processors are controlled by a small, low power, low cost on board controller. This is the Embedded Controller. Renesas-based embedded controllers provide out-of-band system services to network administrators. Power sequencing services, load shedding, diagnostic test and maintenance can be performed remotely on large systems for low cost.

Embedded Controller Hardware

Hardware services such as LPC Interface, legacy keyboard and mouse services, legacy serial port services, ACPI power management and pre-boot network services may be administered by an on-board embedded controller. Used in large computer system design, embedded controllers can significantly simplify the implementation of hardware startup. Useful system services may be integrated onto a compact design with low cost and board area impact.

Embedded Controller Software

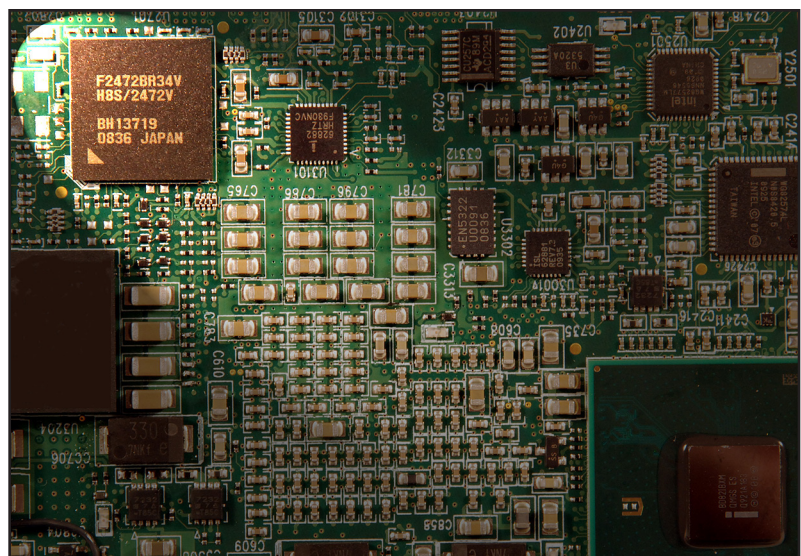
Running our simple non-preemptive real time operating system, embedded controller services such as Port 80 debug, local console, remote console, LPC ACPI power management, PS2 keyboard and mouse emulation, custom keyboard scanning, Port 92 services are available. Customized platforms may implement pre-boot network access, and remote BIOS update procedures.

Embedded Controller for System Debug

During board design, flexibility with the embedded controller can be a significant time-saver. Power up sequencing, power testing, trapping of system status, local console status display can be valuable debug and test tools.

Orchid Technologies: Embedded Controllers

The development of custom electronic products for our OEM clients is Orchid's entire business. The design of Renesas-based Embedded Controllers with rapid design cycles, demanding technical requirements, and unforgiving schedules sets us apart. Call Orchid Technologies today!



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