

## Model R3040SS PC Blade

Dual Intel® Xeon® Quad-core Processors and Advanced Security Architecture Deliver Unparalleled Secure Workstation Performance

Featuring Dual Intel® Xeon® Westmere processors with Hyper-Threading Technology, Turbo Boost Technology, DDR3 memory and NVIDIA® PCI-Express® graphics, ClearCube Technology Model R3040SS PC Blades have the power and speed to satisfy the most demanding workstation requirements. Four integrated gigabit Ethernet controllers ensure rapid, reliable access to network-stored data, while hardware-based RAID capability makes disaster recovery foolproof.

R3040SS blades support direct connect ClearCube C/Port technology as well as the extendable PCoIP™, RDP, PCoE™, and ICA-based remote connection technologies.

ClearCube employs the advanced Intel security architecture and ClearCube advanced secure computing architecture in the R3040SS that includes:



**Advanced Encryption Standard-NI** - Intel® AES instructions are a new set of instructions available beginning with the all new Intel® 5600 series Westmere™ processor family. The architecture consists of six instructions that offer full hardware support for AES. Four instructions support the AES encryption and decryption, and other two instructions support the AES key expansion. The AES instructions have the flexibility to support all usages of AES, including all standard key lengths, standard modes of operation, and even some nonstandard or future variants. They offer a significant increase in performance compared to the current pure-software implementations of AES.

**Trusted Execution Technology** - Intel's technology for safer computing, Intel® Trusted Execution Technology (Intel® TXT), defines platform-level enhancements that provide the building blocks for creating trusted platforms. This enhanced platform helps to provide the authenticity of the controlling environment such that those wishing to rely on the platform can make an appropriate trust decision. The enhanced platform determines the identity of the controlling environment by accurately measuring the controlling software. The platform is a set of extensions designed to provide a measured and controlled launch of system software that will then establish a protected environment for itself and any additional software that it may execute.

**Trusted Platform Module (TPM)** - A Trusted Platform Module is a hardware chip that can generate and store cryptographic keys and perform authentication of hardware devices. It can be used by TXT and is also used by technologies such as Microsoft's BitLocker disk encryption.

**Mass Storage Lockout (MSL)** – A patent pending hardware security layer, offered exclusively by ClearCube, that provides a hardware setting on the blade that eliminates the risk of removable media at the end point. Any unauthorized storage device connected to the zero client, user port or blade will be denied access.

### Full PC Experience over IP

Working with the ClearCube I9400-series zero clients or the ClearCube C7400 series digital fiber zero clients, R3040SS PC blades support up to four monitors simultaneously. Users receive simultaneous full screen, full motion video and full USB redirection over the network using the PCoIP protocol.

### Quad-Monitor Support, High-Quality Video

R3040S blades offer two multi-video configurations for applications demanding advanced graphics and quad-monitor displays. Configurations include the ClearCube V5240 PCoIP quad-capable video card (based on S3 4300+ graphics processor) coupled with our I9440 client. R3040S blades can also use the ClearCube MGA video card (based on the NVIDIA® NVS285 graphics processor) with a ClearCube C/Port and Multi-video eXpander (MVX) accessory at the desktop. All configurations support video resolutions up to 1920 × 1200 on each monitor.

### Desktop Virtualization

A virtualized R3040SS blade gives IT administrators the ability to easily deploy and manage virtual desktops. Leveraging VMware® & Microsoft® Hypervisor products, the ClearCube R3040SS is VMware ESX certified and enables up to 50 users to simultaneously access a single blade to receive a complete, full-featured desktop experience.

### Powerful Performance, Simple and Secure

R3040SS blades provide full desktop performance while increasing security and manageability of assets and data. Powered by ClearCube Sentral™ management software, the solution gives IT administrators complete control of their entire deployment of centralized infrastructure – from PC blades to virtual desktops, locally or remotely, and provides server-level availability (99.9% uptime) for end user computing.

## Specifications

<b>General:</b>	Intel 5600 Westmere series chipset w/ 6.4GT/s Quick Path Interconnect. Four 10/100/1000 Ethernet ports Local USB 2.0 port on Blade front
<b>Processor:</b>	Dual Intel® Xeon® Quad-core processors (up to 2.8 GHz)
<b>RAM:</b>	Tri-channel, DDR3-800/1066/1333, ECC / non-ECC (up to 48 GB)
<b>Hard Disk Drive:</b>	SATA/SSD drives w/ HW RAID (up to 4)
<b>OS:</b>	Microsoft® Windows XP Pro or Windows 7
<b>Graphics:</b>	Single Monitor with NVIDIA NVS290 PCIe Graphics Card w/ 512 MB VRAM Dual-Monitor with v5220 remote graphics card w/ S3 4300+, 512 MB VRAM Multi-monitor Option A: NVIDIA Quadro NVS285 PCIe Graphics w/ 128 MB VRAM Multi-monitor Option B: v5220 & v5240 remote graphics w/ S3 4300+ GPU, 512 MB
<b>Power Supply:</b>	400 W
<b>Dimensions:</b>	4.7" H x 23.5" D x 4.1" W (11.9 cm x 59.7 cm x 10.3 cm) Four (4) Blades fit in single Cage (standard 19" rack width)
<b>Weight:</b>	9 lbs. (4.1 kg)
<b>Environment:</b>	Stationary office installation, 0° to 35° C