

Model R3080DS Secure Blade Workstation

High-Security Centralized Computing Solution with Intel® Core i5 Dual-Core Power in a Blade Form Factor and Sentral™ Management Software

R3080DS Secure Blade Workstation

Featuring the Intel® Clarkdale Core-i5 660 processor with advanced security features using Nehalem Dual-core 32 nm architecture, DDR3-1333 memory, and PCI-Express® graphics, ClearCube® R3080DS blade workstations offer the highest security and highest performance of any desktop blade computers available.

ClearCube employs the advanced Intel security architecture and ClearCube advanced secure computing architecture in the R3080DS that includes:

Advanced Encryption Standard-NI - Intel® AES instructions are a new set of instructions available beginning with the all new 2010 Intel® Core™ 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 systemsoftware 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) – is a patent pending hardware security layer, offered exclusively by ClearCube, that provides a hardware setting on the blade that eliminates the risk of removeable 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 I/Port or the C7420 Digital Fiber C/Port, R3080D PC blades shatter the distance barrier by supporting two monitors at once with simultaneous full screen, full motion video, and full USB redirection over the network using the PCoIP protocol. The R3080D PC blade, in conjunction with I94xx-series zero clients or the C7420 C/Port, can support standard digital video at resolutions up to 1920 × 1200 on each monitor.



MVX Quad-Monitor Support, High-Quality Video

R3080DS blades offer a multi-video configuration, ClearCube MVX™, for applications demanding advanced graphics and quad-monitor displays. This configuration utilizes a special quad-capable PCI-Express video adapter (a mezzanine video card) based on the NVIDIA® Quadro® NVS graphics processor. The ClearView video driver, based on the award winning NVIDIA nView software, provides the graphical interface for setting up and configuring displays. The MVX multi-video solution can support standard analog input monitors and digital input monitors at resolutions up to 1280 x 1024.

Powerful Performance, Simple and Secure

R3080DS 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 easy and total 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

- General:** Intel Q57 chipset with 6.4GT/sec Quick-path Interconnect, QPI
Dual Ethernet ports (Primary 10/100/1000 Mbps, Secondary 10/100/1000 Mbps)
Local USB 2.0 port on blade front panel (port on R4300 chassis also accessible)
- Components:** **Processors:** Intel Core i5-660 processor, Pentium Dual Core Clarkdale
RAM: DDR3 1333/1066/800, dual-channel or tri-channel depending on configuration, non-registered, non-ECC memory
Hard Disk: SATA HDD
OS: Microsoft Windows XP Pro, Windows 7, Windows 2003 Server or 2008 Server
Linux Ready
Graphics:
Single monitor with NVIDIA NVS290 PCIe Graphics Card with 512MB VRAM
Dual monitor with v5220 remote graphics card w/ S3 4300+, 512MB VRAM
Quad monitor with MVX configuration (NVIDIA Quadro NVS285 PCIe Graphics Card with 128 MB VRAM)
- Power Supply:** 205 W
- Dimensions:** 4.7" H x 23.5" D x 1.9" W (11.9 cm x 59.7 cm x 4.8 cm)
Eight blades fit in single chassis (standard 19" rack width)
- Weight:** 4 to 5 pounds, depending on configuration (1.8 to 2.3 kilograms)
- Environment:** Stationary office installation, 0° to 35° C

Ordering Information

Use the following part numbers to order your R3080DS Blade.

G0900080 – Model R3080DS Blade

Video

G0800082 – v5220 PCoIP remote graphics adapter

G0800078 – NVIDIA Quadro4 PCIe (Not compatible with v5220 option)

Processor

G932308-333 – Intel i5 660 Dual-Core (3.33 GHz, 4 MB Cache, with integrated graphics)

Hard Disk Drive (HDD)

G913080-320 – 320 GB, 7200 RPM 2.5" SATA II 3.0 GBps HDD

Memory Modules (4 DIMM maximum)

G923080-2000 – 2 GB DDR3-1066, Non-ECC SDRAM

Operating System

G0530028 – Windows XP Professional SP3 32-bit, English

G0530037 – Windows 7 Professional 32-bit, English

G0530039 – Windows 7 Ultimate 64-bit, English

G0530042 – Windows 7 Professional 64-bit, English

Without operating system