

Hardware Platform

Computer Platform Categories (TL1)

Compucon maintains a 2-tiering structure for categorisation of computer system platforms. For example, in the single processor group, there are 4 platforms based on Intel for KW, Intel for PW, AMD for KW and AMD for PW. KW refers to Knowledge Work or Workers. PW refers to Process Work or Workers. In the dual processor group, the combinations come from Intel or AMD, and Server or Workstation. Each of the eight system models is designed with the minimum configuration with generous upgrade options with Fitness For Purpose (FFP) and Total Cost of Ownership (TCO) in mind.

- (a) Single or Dual Processors
- (b) Intel or AMD
- (c) Knowledge or Process
- (d) Server or Workstation

Single Intel Systems (TL1)

Compucon Superhawk is the system for Knowledge Workers and Compucon Diamond is for Process Workers. Superhawk has a higher performance and expansion capacity than Diamond. In essence, Superhawk is based on Pentium 4 and a mid-tower chassis with 300W whereas Diamond is based on Celeron and a micro chassis with 250W. Both models have upgrade options such as for more memory, more storage and faster VGA. Superhawk can even be beefed up to function as a Workgroup Server with dual hard disks for enhancing the integrity of customer data. Workgroup refers to a small group of workers and this Workgroup Server should not be used as a mission critical company central server. As of February 2006, we do not recommend the use of dual core P4 for various reasons. Superhawk is based on Intel 915G chipset and this may change in a couple of months. Diamond is migrating to a VIA chipset

and this may provide better platform longevity.

Single AMD Systems (TL1)

Compucon Thunderbird is the system for Knowledge Workers and Jasper is for Process Workers. Both models are based on AMD K8 architecture that is currently the technology leader in terms of computational performance and Input Output throughput handling. Thunderbird is provided with dual core Athlon64 and dual PCI-Express VGA options. The later is called SLI for Scalable Link Interface. It allows the capability of two VGA cards to be combined to work on one single display. Jasper is based on AMD Sempron processor. Similar to Superhawk and Diamond, Thunderbird and Jasper are housed in the standard Compucon mid-tower and micro chassis respectively. Thunderbird can be beefed up to become a Workgroup Server with a higher workgroup handling capability.



[New Look for Superhawk & Thunderbird, circa March 2006](#)

Dual Intel Systems (TL2)

Compucon Platinum is the series for Dual Intel Xeon based servers. It has 3 flavours of physical form being 1U, 2U and full-tower that can be converted to 5U. All are based on Intel Linderhurst chipset and Intel Xeon processors with Nocona core. On top

of having two processors, these systems have PCI-X provisions for high performance input and output processing. Obviously 1U and 2U are more restricted in expansion but their designs are very compact and the 2U, for example, is capable of supporting 6 hot-swappable SCSI HDD and redundant PSU. As for Pentium 4, we do not recommend the use of dual core Xeon but this may change at a later date.

Compucon Senator is the system for Dual Intel Xeon workstation. It has an AGP slot that provides for high-end graphics capabilities but lacks PCI-X for multi-user input and output handling. It is in full-tower or 5U format. We will evolve to PCI-Express VGA when demand arises.

Dual AMD Systems (TL2)

Compucon Vanadium Server is currently the flagship. It has been dual core capable since the middle of last year reflecting the leadership and consistency of AMD Opteron and K8 technologies. Like its Compucon Intel counterparts, it has 3 flavours in 1U, 2U, full tower or 5U. All have PCI-X capabilities.

Compucon Vanadium Workstation is an extreme performance machine. At its extreme, it can have dual core dual Opteron giving a total of 4 cores, 16GB (8 slots) of dual channel direct access Registered ECC DDR memory, dual PCI-Express Quadro with SLI and 8 SATA 300 HDD on RAID-10. These 4 capabilities are leading edge and are powered by dual nVidia engines with dual hyper transport links. The machine has allowed for surplus PCI Express and PCI slot I/O expansion. There is no PCI-X slot though (note: Adaptec has released a 4805S SAS/SATA RAID card on PCIE).