

## **Mosaic Supported Workstations**

The Mosaic Computing team makes an extensive assessment, on a regular basis, of different classes of PC workstations. During our testing we build each workstation using our full Mosaic XP build and then perform several different benchmarks to evaluate real-world performance of these systems in the Mosaic XP framework. The tests we conduct measure flat out floating point calculation processing speed, graphics performance, as well as multi-threaded processor performance. Using this data we can then make workstation suitability assessments looking at all factors including ergonomics, maintenance, as well as price vs. performance. When considering which class of workstation is the best one for your application it is important that you consider overall performance, price, extensibility, and graphics in your assessment as well as the operating system. Our systems fall into two basic classes namely the workstation class and the graphics intensive CAD/research machines.

The workstation class machine is the type of machine that is deployed in the majority of our labs. Depending on the location, this machine may or may not be sensitive to footprint. The workstation class machine can support a vast array of engineering applications and is expected to provide quick response to the end user while delivering over 160+ packages. This class of workstation is not designed to support high end CAD cards; however we select the best of class graphics available from the vendor at time of configuration. We typically include the fastest most recent generation processor available as well as ample amounts of memory.

The other class of workstation is geared towards high performance graphics intensive CAD/research machines. These machines typically feature very high end CAD cards, such as the NVIDIA Quadro series. Similar to our standard offering we typically include the fastest most recent generation processor available as well as ample amounts of memory. These machines are also capable of adding additional internal disks used for locally caching research data for evaluation and analysis. Although Windows XP currently limits the amount of system memory available to the end user, the high performance workstation has fewer restrictions on the amount of physical memory that can be added to the system. This limitation may be overcome by considering alternative operating system software such as Linux.

Both classes of workstations are offered with a variety of display configurations including 24 inch displays as well as multi-monitor configurations. The minimum display configuration we purchase currently is a 19" LCD. As a reminder, you should always consult with the Mosaic Computing group before purchasing a system you want to have configured to run as part of the Mosaic System.