Overview of Chassis Testing

The purpose of this list is to facilitate the identification of third party ATX chassis that are mechanically and thermally compatible with the Intel® C440GX+ server board. The areas of focus for this testing were mechanical fit, chassis thermal performance, and power supply support of 800ma of +5V stand by current.

Intel's extensive computer system and chassis design experience has shown that the thermal characteristics of a server chassis are of far greater importance than commonly considered. The thermal testing information provided in this list is intended as a guide for the integrator/reseller in selecting a chassis that can reliably support their intended server configurations.

Note: The term chassis is used interchangeably throughout this document to describe both pedestal mount and rack mount enclosures.

Chassis Testing Premise

Mechanical Testing – The chassis were tested for ATX 2.02 compliance at the I/O opening and for physical fit with the C440GX+ server board.

Thermal Testing – The chassis were tested to determine whether they provide adequate airflow to keep critical server components within the individual manufacturer's temperature specifications. Components specifically targeted for the thermal monitoring were the Intel Pentium® II Processor, Intel® 82440GX AGP set host bridge chip, and the hard disk drive(s).

Power Supply Testing Premise

The C440GX+ also has a feature called the Emergency Management Port (EMP). The port, in conjunction with a modem on serial port 2 allows remote emergency management of a server – even if the server is powered down. In order to support EMP, it is required that the power supply have 5V standby line (5VSB) capable of delivering >750mA.

Wake-on-LAN* (WOL) allows the ability of a management application to remotely power up a computer. To support this feature, it requires that the power supply have a 5V standby line (5VSB) capable of delivering >720mA.

The only testing performed on the power supplies listed was to verify if they supported 800mA on the 5VSB line. This test was performed with a moderately loaded system under normal operation. Intel has determined that the power supplies listed meet minimal electrical functionality required to support server management features (WOL and EMP) on the C440GX+ server board.