Acromag, Incorporated
30765 S Wixom Rd, PO Box 437, Wixom, MI 48393-7037 USA
Tel: 248-624-1541 ♦ Fax: 248-624-9234 ♦ www.acromag.com

Known Difference Between AcPC8630/35 and the AcPC8630A/35A

The AcPC8630A and AcPC8635A have been designed as a drop-in replacement to the AcPC8630 and APC8635. The following are the known differences between the AcPC8630/35 and AcPC8630A/35A. With the exception of movement to compatibility with PCI bus 2.2 and its requirement for 3.3 volt power, our testing indicates that the new AcPC8630A and APC8635A should work in all current customers' applications.

PCI bus Compliance

The AcPC8630/35 were originally designed to meet or exceed PCI Specification Version 2.1 and PICMG 2.0, R2.1 Compliant Slave Carrier. The newly released AcPC8630A/35A has been upgraded to PCI Specification Version 2.2 and PICMG 2.1, R2.0 Compliant Slave Carrier. This assures compatibility with the latest CompactPCI bus backplanes, including those with 3.3V or 5V compliant signaling.

This change now requires that a 3.3 volt power supply be provided on the backplane. This is the norm for most modern CompactPCI-based systems. The original AcPC8630/35 only required a +5 volt and ±12 volt supply. The new AcPC8630A/35A will require +3.3 volt (225 mA) as well as a +5 volt and ±12 volt supply.

Enhanced Features

➢ 8 and 32 MHz Industry Pack compliant

The AcPC8630A/35A is compliant with both 8 MHz and 32 MHz Industry Pack (IP) modules. Per Industry Pack specification, the AcPC8630A/35A will power up with all IP operating at 8MHz. A previously unused register (PCIBar2+0018) will now allow the user to select on an IP by IP basis to communicate to the IP in either 8 MHZ or 32 MHz mode. Please note, to operate at 32 Mhz mode the IP module must also be compatible with 32 MHz operation.

➢ Industry Pack Memory Space Compliant

The AcPC8630A/35A is compliant with the Industry Pack Memory Space option. This allows each IP module to support up to 8M bytes of memory. To ensure compatibility with the original AcPC8630/35, this is a jumper selectable option. The factory default placement of the jumper selects the no memory space support option. This will auto-configure the carrier's base address for a 1K byte block of memory. If the memory jumper is selected the system auto-configures the carrier's base address for an additional 64M byte block of memory.