
"Applications of PCI Express Cards"

QUICK INDEX:

- Brief Overview of PCI Express**
- Common Applications of PCI Express Cards**
- Using PCI Express cards in modern day ATMs**
- Using PCI Express cards in Building automation systems.**

BRIEF OVERVIEW OF PCI EXPRESS:

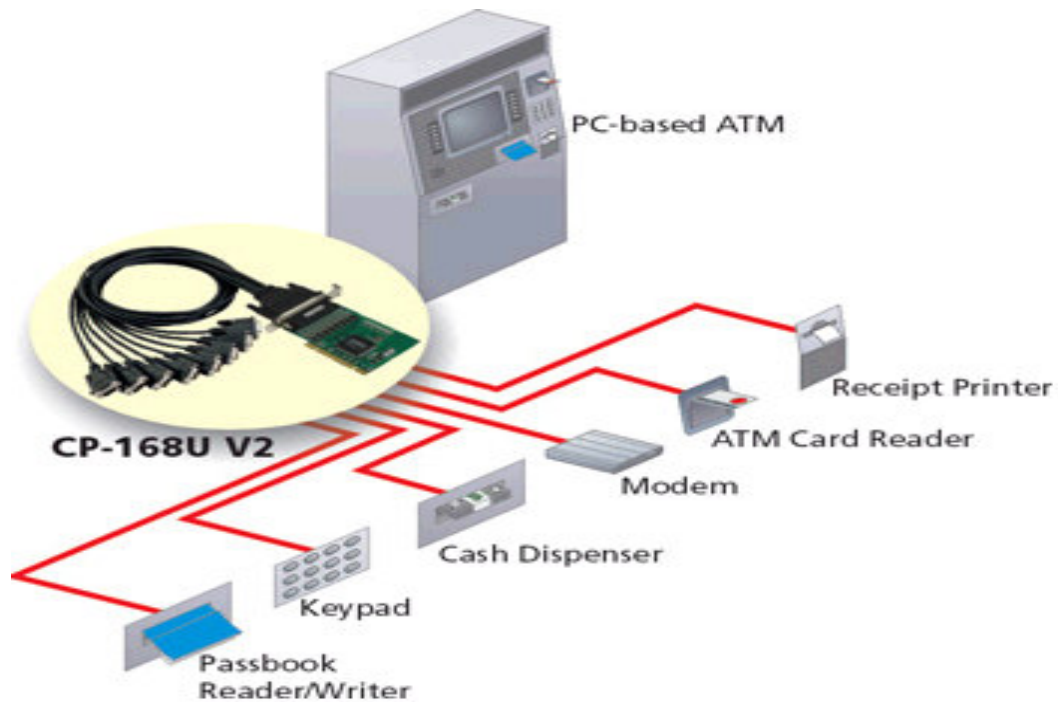
PCI Express, abbreviated as PCI-E or PCIe, is a computer expansion card interface format introduced by Intel in the year 2004. Its main purpose was to replace the old formats such as the general purpose PCI expansion bus, the high-end PCI-X bus and the AGP graphics card interface. Unlike previous PC expansion interfaces, the PCI-E was structured around point-to-point serial links called lanes.

The PCI-E physical layer consists of a layer of serial interconnects. A hub on the mainboard acts as a crossbar switch allowing point-to-point device interconnections to be rerouted on the fly. Therefore, this dynamic point-to-point connection behaviour enables multiple devices to communicate with each other at the same time. This is due to the fact that there is no need of arbitrating on the bus i.e. for communication to take place devices do not wait for the bus to be free. Hence, this provides for much better performance as compared to previous PC expansion cards.

COMMON APPLICATIONS OF PCI EXPRESS CARDS:

- Point-of-sale (POS)
- ATMs
- Industrial automation systems manufacturers
- Applications requiring greater internal system bandwidth
- Embedded and communication applications
- System integrators
- Building automation systems

APPLICATION OF PCI EXPRESS CARDS IN BANK ATMs:



APPLICATION OF PCI EXPRESS CARDS IN BUILDING AUTOMATION:

