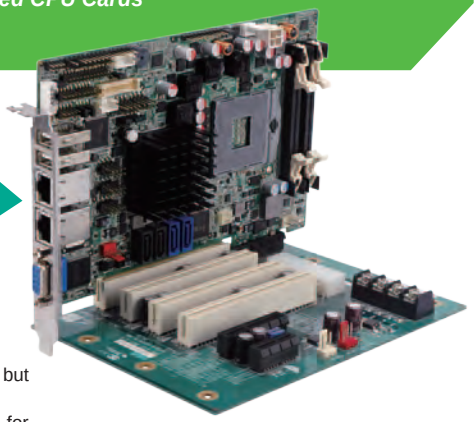
PICOe CPU Card

The Future of Half-sized CPU Cards

ISA→PCISA→PCI→PICOe

1990~	1996~	2013~
ISA	PCISA ISA + PCI	PICOe PCI + PCIe x 4



PICOe-HM650

IEI Patent No CN.: 200986704Y
From SIPO (State Intellectual Property Office of The P.R.C)

The advantages of PICOe

PICOe = PCI + PCIe x4

- PCIe has excellent I/O bandwidth and performance
- Backwards compatible with half-sized CPU cards
- Backplane design for half-size PCIe CPU cards is easy

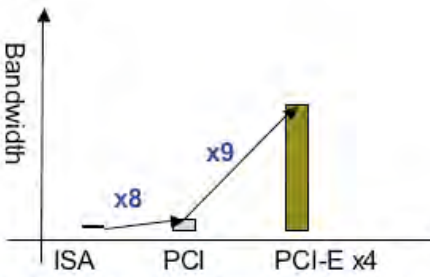
The benefits of PICOe

- Same dimensions, backwards compatible but half the size of PCI SBC
- Higher performance as PCI only solution for the same price
- More configuration options for the same price

The advantages of PICOe

• Increasing I/O bandwidth with leading technology

Specifications	ISA	PCI 33	PCI-e x4
Support	(16MB/s)	(132MB/s)	(1250MB/s)



900% Bandwidth from ISA to PCIe speed

• Backwards Compatible with Half-Sized PCI Backplane and Chassis

1. Dimensions: 185 mm x 122 mm
   = All half-sized CPU cards

Share the same Chassis & I/O design

2. PCI pin definition same as PICMG 1.0 PCI
   = All half-sized PCI CPU cards

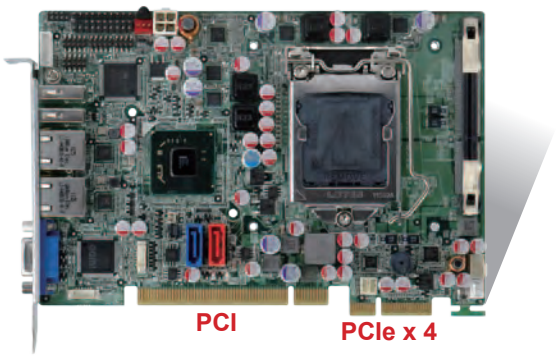
Share all half-sized PCI backplanes

• Quick design backplane

1. Four PCI slots and one PCIe x4 or four PCIe x1 lanes
   More configuration options on the backplane with a PCI and PCIe slot
2. PCIe switches and bridges such as PLX or TI solutions

PCIe to PCI-X
PCIe Bridge PCI-X

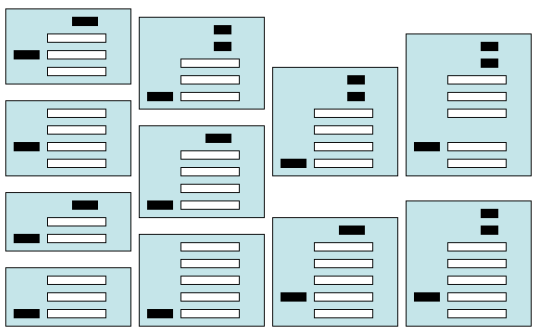
PCIe to PCI
PCIe Bridge PCI



PICOe-B650

IEI PICOe backplane solutions

Complete PICOe backplane solutions fully support all kinds of chassis and power modes. PICOe is the easiest way to upgrade current systems from slow ISA+PCI architecture to the latest high performance PCIe+PCI solution.



CPU card (Located on the right side of the first slot)

Model Name	PCI	PCIe x4	PCIe x1	PSU Type	Note
HPE-3S1	2			ATX/AT	CPU on R1st
HPE-3S2	1	1		ATX/AT	CPU on R1st
HPE-4S1	3			ATX/AT	CPU on R2st
HPE-4S2	2	1		ATX/AT	CPU on R2st
HPE-5S1	4			ATX/AT	CPU on R2st
HPE-5S2	3	1		ATX/AT	CPU on R2st
HPE-5S3	2	0	2	ATX/AT	CPU on R2st
HPE-6S1	4	1		ATX/AT	CPU on R1st
HPE-7S1	4	0	2	ATX/AT	CPU on R2st
HPE-8S0	4	0	2	ATX/AT	Reserved 1 Slot