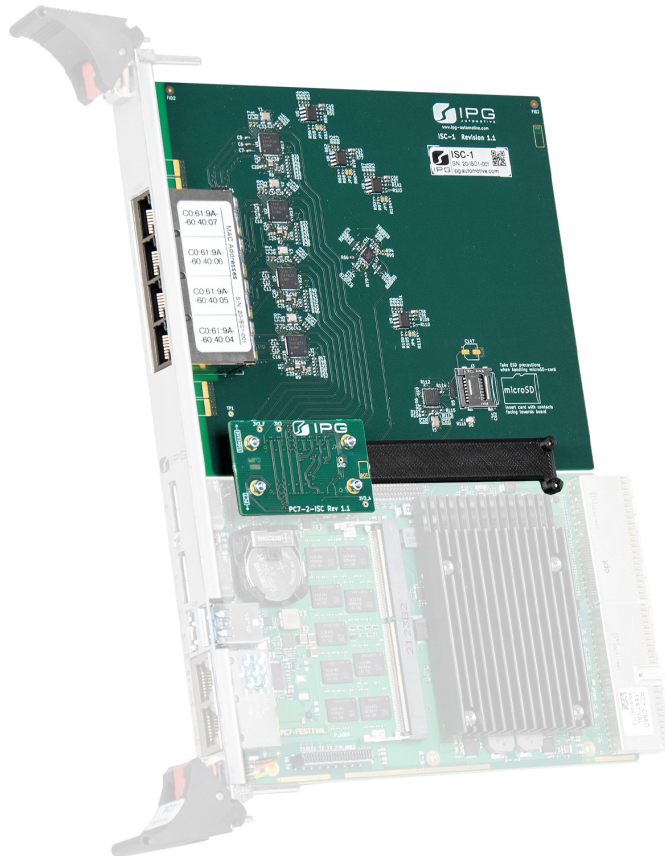


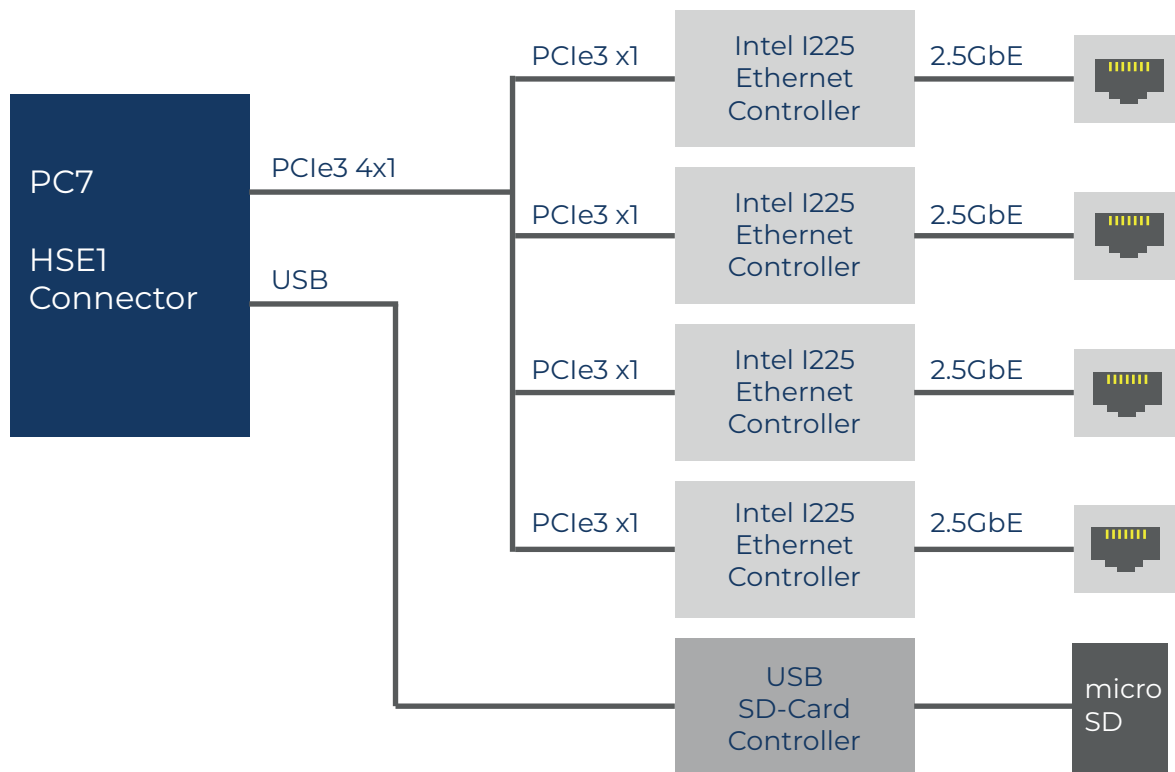
# Internal Side Card 1 (ISC-1)



## Features

- Optional side card expansion for the PC7 Single Board Computer (SBC)
  - 6U height of assembly (side card + PC7 SBC)
  - 4 additional front panel RJ45 ports with 2.5 G Ethernet
  - 4 independent Intel ® i225-IT Ethernet Controllers support 2500BASE-T, 1000BASE-T, 100BASE-TX and 10BASE-TE
  - Time-sensitive networking (TSN) capability support
  - Automatic cross-over detection function (MDI/MDI-X)
  - Additional microSD card reader for mass storage
  - Each Ethernet port has its own MAC address
  - 2 indicator LEDs per Ethernet port (link+speed)
- **Front panel IO:**
    - 4x RJ45 jacks
    - 4 individual Intel ® 225-IT networking interface controllers (NIC)
  - **Available data rates:**
    - 10Mbit/s (10BASE-Te)
    - 100Mbit/s (100BASE-TX)
    - 1000Mbit/s (1000BASE-T)
    - 2500Mbit/s (2500BASE-T)
    - IEEE 802.3 IEEE802.3u/ab
  - **Internal IO:**
    - microSD(HC) card
    - Operating temperature range
    - 0°C – 70°C

## Block Diagram



## Front view



## Note

ISC-1 expands PC7 by additional Ethernet ports that are implemented as RJ45 connectors on the front panel. The Ethernet ports are directly connected to the PC7 via PCIe and enable a data transfer rate of up to 2.5 Gbit/s each. Furthermore, a microSD card reader enables the use of microSD cards, e.g. for storing configuration data.

**Please note that the ISC-1 can only be used in conjunction with the PC7 Single Board Computer!**



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