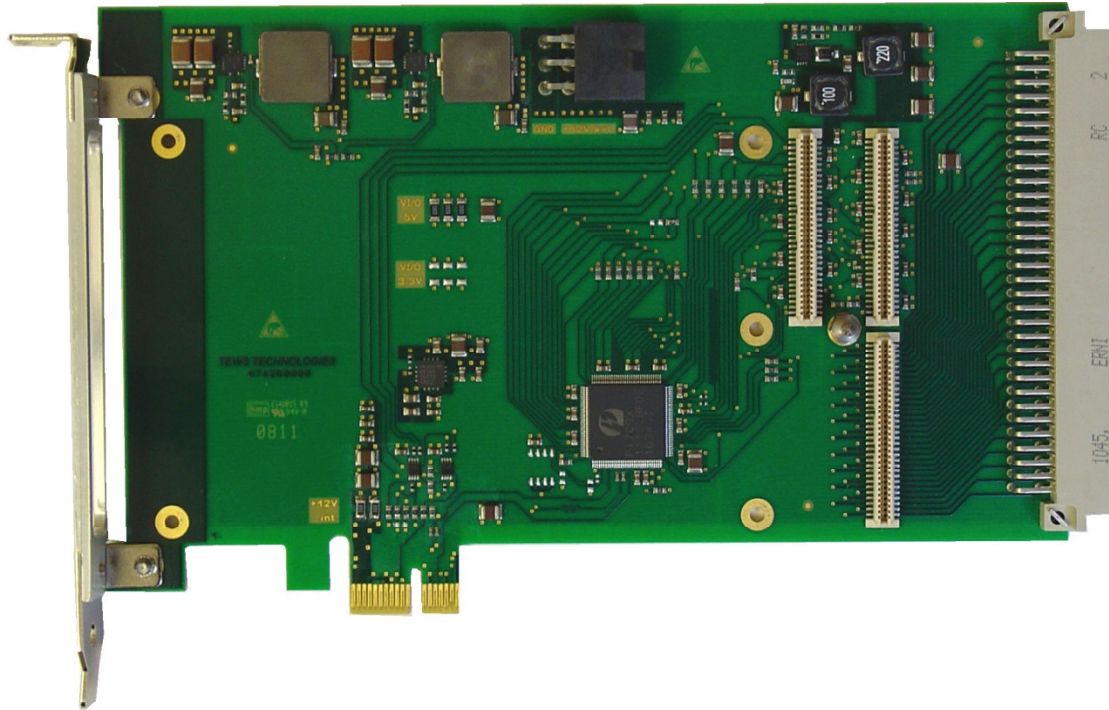


## TPCE260 PCI Express PMC Carrier



TPCE260-10R

### Application Information

The TPCE260 is a standard height PCI Express Revision 1.1 compatible module that provides one slot for a single-width PMC module used to build modular, flexible and cost effective I/O solutions for all kinds of applications like process control, medical systems, telecommunication and traffic control.

The TPCE260 is a versatile solution to upgrade well known PMC I/O solutions to the PCI Express signalling standard.

The bridging between the PCI Express x1 link to the host board and the PCI bus signals to the PMC slot is handled by the transparent PCIe-to-PCI Bridge PI7C9X111SL from Pericom.

The PCI bus side of the bridge allows 32-bit PCI accesses with either 33 MHz or 66 MHz. Both 3.3V (TPCE260-x1R) and 5V (TPCE260-x0R) PCI I/O signalling voltages are supported.

The TPCE260 supports PMC front panel I/O and also PMC P14 Rear I/O through a VME P2 style connector

(IEC 60603-2, Type C). The I/O mapping of P14 complies with VITA-35 ("PMC P4 to VME-P2, Rows A-C mapping").

The PCIe edge card connector provides +12V and +3.3V. All TPCE260-xx variants do use the +3.3V solely to power the PCIe-to-PCI Bridge.

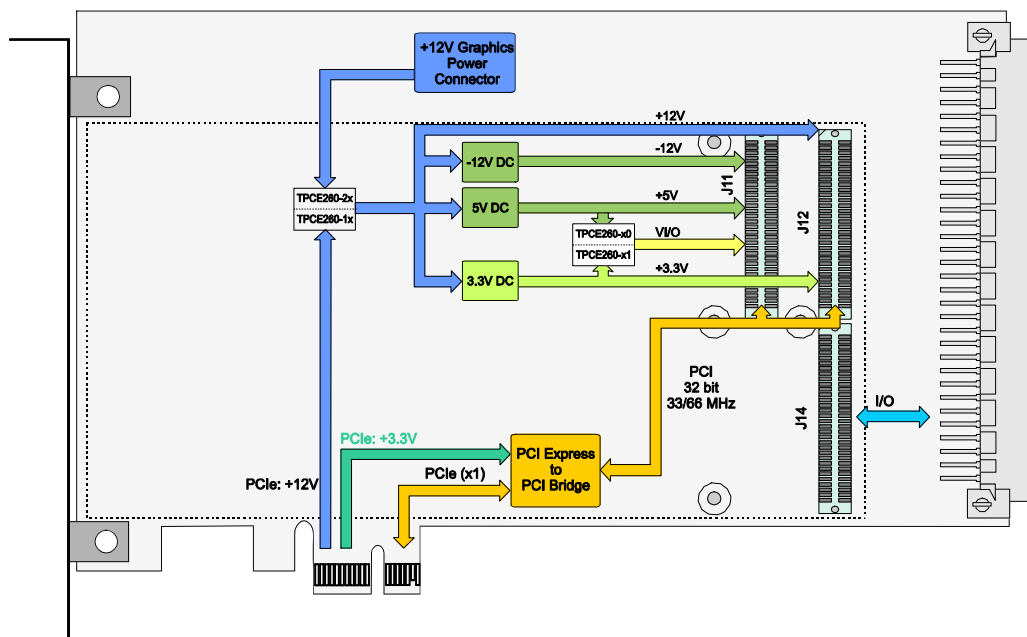
The TPCE260-1xR uses the +12V of the PCIe edge card connector to generate all four power supply voltages for the PMC slot (+3.3V, +5V, +12V and -12V).

According to the PCIe specification, a PCIe x1 card is limited to 6W on the +12V which allows to operate most of the available 32-bit 33/66 MHz PMC modules on the TPCE260-1xR.

For increased power requirements of a PMC module, the TPCE260-2xR offer a PCIe Graphics Power Connector to supply the +12V for generating all the power supply voltages for the PMC slot providing a power of up to 25W.

### Technical Information

- Form Factor: PCI Express x1, Revision 1.1
  - Board size: 178.8mm x 107mm
- One PMC Slot:
  - PCI Interface: 33/66 MHz, 32-Bit
  - PCI I/O Signalling Voltage: 3.3V or 5V (factory build option)
  - PMC Front Panel I/O
  - PMC P14 I/O connected to VME P2 Style Connector (IEC 60603-2 compatible)
- All PMC Power Supplies generated from +12V
  - TPCE260-1xR: +12V from PCIe edge card connector
  - TPCE260-2xR: +12V from PCIe Graphics Power Connector
- Operating temperature: -40°C to +85°C
- MTBF (MIL-HDBK217F/FN2 G<sub>B</sub> 20°C):
  - TPCE260-1xR: 664000 h
  - TPCE260-2xR: 582000 h



### Order Information

#### RoHS Compliant

- |                    |  |
|--------------------|--|
| <b>TPCE260-10R</b> | 1 Slot PMC Carrier, 32 bit, 33/66 MHz, 5V PCI I/O signaling voltage, PCIe x1, 12V from PCIe connector            |
| <b>TPCE260-11R</b> | 1 Slot PMC Carrier, 32 bit, 33/66 MHz, 3.3V PCI I/O signaling voltage, PCIe x1, 12V from PCIe connector          |
| <b>TPCE260-20R</b> | 1 Slot PMC Carrier, 32 bit, 33/66 MHz, 5V PCI I/O signaling voltage, PCIe x1, 12V from PCIe Graphics connector   |
| <b>TPCE260-21R</b> | 1 Slot PMC Carrier, 32 bit, 33/66 MHz, 3.3V PCI I/O signaling voltage, PCIe x1, 12V from PCIe Graphics connector |

For the availability of non-RoHS compliant (lead solder) products please contact TEWS.

#### Documentation

**TPCE260-DOC** User Manual