

EVB-PCI12000 Evaluation Board

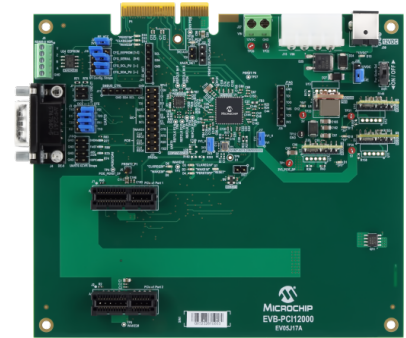
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DESCRIPTION

Microchip Technology EVB-PCI12000 Evaluation Board is a demonstration and evaluation platform for the PCI12000 single-chip PCIe switch with programmable I/O. This evaluation board includes two downstream PCIe Gen 3 switch ports (1 lane at 8 GT/s) and implements one channel of RS-232/485 connectivity. The EVB-PCI12000 evaluation board demonstrates its PCIe and I2C/SPI/UART/GPIO driver compatibility in Linux® and Microsoft® Windows® 10. This evaluation features a six-layer RoHS-compliant PCB. The kit facilitates understanding and quick integration of the PCI12000 into designs. Typical applications include embedded systems requiring higher bandwidth PCIe subsystems, systems needing multi lane or multi port PCIe expansion, and industrial and embedded computing platforms.



FEATURES

- 72-pin single-row QFN (VQFN) RoHS-compliant package
- 2x downstream PCIe Gen 3 (1 lane * 8GT/s) ports on PCIe x4 slot connectors
- 1x channel of RS-232/485
- Onboard I²C serial EEPROM for EVB system configuration and function customization
- 1x optional I²C or SPI target configuration bus
- Operates from a single voltage (+12.0V, regulated) external power supply
- Onboard 25MHz crystal
- Single onboard +5V, regulator
- Single onboard +3.3V, regulator
- Single onboard +1.1V, regulator
- Regulator LED indicators for 5V, 3.3V, and 1.1V outputs

APPLICATIONS

- Embedded systems requiring higher bandwidth PCIe subsystems
- Systems needing multi lane or multi port PCIe expansion
- Applications requiring programmable I/O integration
- Industrial and embedded computing platforms
- Systems integrating USB, Ethernet, or other peripheral interfaces through PCIe fanout
- Evaluation and development environments using PCIe Gen 3 switch fabrics

APPLICATIONS

[Schematic](#)

MOUSER PART NUMBER

[View Part](#)

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