Product Brief

OXPCIe200, PCI Express multi-port bridge

Highlights

- **General Features**
  - o Dual USB 2.0 host ports or USB 2.0 host port & SPI/SRAM port, both with UART port configuration
  - o PCIe x1 end-point
    - Integrated 2.5 GT/s SerDes
  - o 9 x 9mm^2, 156-pin TAPP package
  - o Typical Power: 300 mWatts

- **Key Features**

  - o **Standards Compliant**
    - PCI Express Base Specification, r1.1 (backwards compatible with PCIe r1.0a)
    - PCI Power Management Spec, r1.2
    - ExpressCard, Mini Card & AIC compatible
    - MSI/MSI-X compatible
    - ASPM (L0S, L1) Link power management

  - o **High Performance**
    - EHCI/OHCI compliant USB 2.0 ports
    - Integrated USB2.0 full speed Phy
    - Master or slave mode SPI or SRAM port
    - Data rates of 60Mbps (SPI) & 25MB/s (SRAM)
    - 8KB slave memory with direct access or 16 channel FIFO modes
    - PLX's Oxford 950 UART
    - DMA/bus mastering of both UARTs
    - Asynchronous baud rates up to 15 Mbps
    - 128-byte deep transmit/receive FIFO
    - 9, 8, 7, 6 & 5-bit data framing
    - Automated in & out-of-band flow control
    - Advanced FIFO fill management

  - o **Flexibility**
    - RS232, RS422, RS485 and IrDA operation
    - Flexible clock pre-scaler from 1 to 31.875
    - Programmable RS485 Turn-around delay
    - 450 through 950 software compatibility
    - 8 user-configurable GPIOs/PWMs
    - Device parameters configurable via EEPROM
    - 1.8V, 2.5V or 3.3V UART & GPIO I/O voltage

  - o **Robust Operation**
    - Operation from a single 3.3 V supply
    - Industrial temperature range -40°C to 85°C

  - o **Broad Device Driver Support**
    - Windows 7/Vista/XP/2K
    - WinCE 4.2/5.0/6.0
    - Linux 2.4/2.6

Part of the **Expresso** family of high performance PCI Express devices, the OXPCIe200 is a single chip multi-port bridge with a rich set of connectivity ports and advanced system management to maximize data throughput while substantially reducing CPU and system loading.

A fully integrated, single lane PCI Express endpoint controller and SerDes enables host system access to USB2.0 host, SPI and SRAM ports, a PLX Technology's ultra high performance Oxford 950 UART, plus user defined GPIOs/PWMs. The device is configurable as dual USB host ports or one USB2.0 host port & one SPI or SRAM port providing a high throughput communication path from a PCI Express host system to a slave processor or peripherals.

Complete with the Oxide development tools and certified device drivers, the OXPCIe200 is easy to design-in and the ideal connectivity solution for a diverse range of products including: inter-processor communication, device control, I/O expansion and multi-modem ExpressCard modules.

Accelerate your product development and time to market with Oxide and PLX Technology's easy to design-in, high performance serial connectivity solutions that just work.

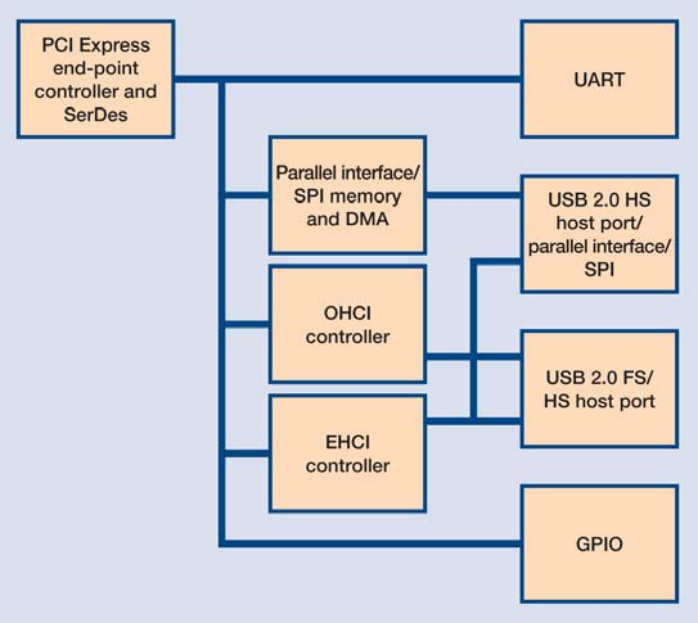


Outstanding Performance

The OXPCIe200 achieves ultra high performance by combining the class leading connectivity interface technology, with advanced MSI interrupt handling on-board memory and bus master DMA for maximum throughput, minimum CPU overhead and optimal system performance.

With a compact footprint, comprehensive power management and industrial temperature range as standard, the OXPCIe200 is perfect for power and temperature sensitive ExpressCard and miniCard designs and is *the* perfect choice for high performance systems.

To support these advanced connectivity options, the OXPCIe200 uses operating system native USB drivers and dedicated PLX device drivers that are quality assured, exhaustively tested and WHQL approved; saving development time and providing peace of mind.



OXPCIe200

Development Support



Design and evaluation of the OXPCIe200 couldn't be easier with this comprehensive reference design kit (RDK). The RDK includes everything you need for PC installation and evaluation including Hardware, Oxide Development Tools and software device drivers. Simply plug the half length PCI Express or ExpressCard evaluation board into any PCI Express or ExpressCard slot, install the software and its ready to go.

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Changing the dynamics of device customization, Oxide development tools enable customization of the OXPCIe200 in minutes. No more complex, time consuming, error prone manual editing of programming files and driver source code; Oxide's intuitive graphical user interface provides simple 'point and click' feature selection and text box entry for fast, error free customization with minimal software expertise as well as instant access to up to date documentation, software and reference designs. Check the PLX website for details.

Ordering Information

Part Number	Description
OXPCIe200-TAAG	PCI Express Multi-Port Bridge
EK-OXPCIe200	Reference Design Kit