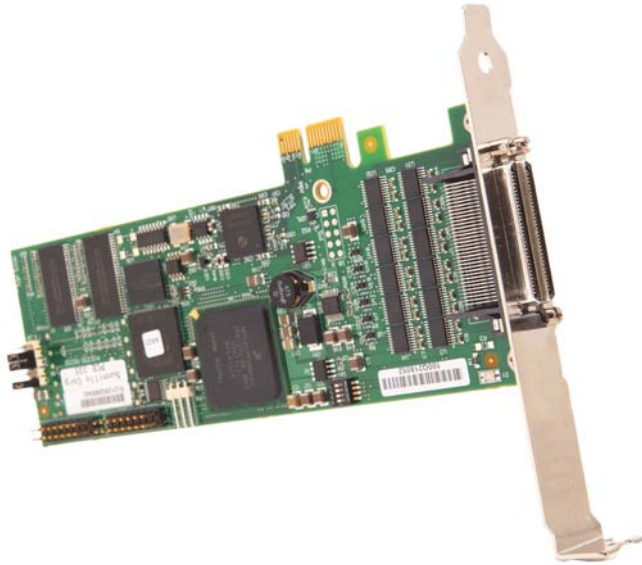# Four Port Synchronous Serial Communications Adapter



## Features

→ **Multipurpose Intelligent PCI Express® Synchronous Serial Communications Adapter**

→ **4 High-Speed Ports Capable of Sustaining 2Mbps Per Port**

→ **128 MB Dedicated Processor DRAM Memory**

→ **Low-Profile and Full Height Faceplate available**

**Sunhillo's PCE335 Intelligent Synchronous Serial Communications Adapter** provides four high-performance synchronous serial ports for connectivity. The adapter is ideally suited for use within radar servers, frame relay access devices, high-speed modems, and other high-speed communications devices. The PCE335 is part of Sunhillo's industry-leading Protocol Software and connectivity solutions.

## Hardware Features

The PCE335 is designed as a fully programmable communications subsystem capable of sustaining high data rates for a variety of protocols used in synchronous data communications. The PCE335 architecture capitalizes on the intelligence of the Freescale™ MPC8270 Quad Integrated Communications Controller (PowerQUICC® II),

enabling it to act as a specialized communications controller.

The PCE335 adapter enhances overall system performance by using its on-board intelligence and 128 MB of SDRAM array to handle much of the low-level communications that typically burden the host system, and relegates most of the serial I/O communication related processing to the PCE335. In addition, the SDRAM eliminates start-up delays associated with application download wait times by enabling the code to be executed directly on-board.

# PCE335

## Protocol Solution Software Support

With a well-defined application programming interface (API), Sunhillo's integrated protocol suite reduces time-to-market by eliminating unnecessary development time at the hardware/protocol level. The protocols for Sunhillo's products enable development engineers to proceed directly to integration and application development efforts. A comprehensive suite of communications protocols provides complete connectivity solutions for Radar, TADIL-B, HDLC, X.25, and Frame-Relay protocols. Operating system support includes Linux®, Windows®, and Solaris™.

# Technical Specifications

### Performance

- Four ports @ 2 Mbps bi-directional
- Simultaneously sustained 8 Mbps maximum line speed

### Processor

- 266 MHz Freescale™ MPC8270 Motorola PowerQUICC II

### Memory

- 128 MB shared SDRAM
- 32 MB Application Flash

### Protocol Support

- Radar, TADIL-B, HDLC, X.25, Frame Relay, Async, and SBSI

### Electrical Interfaces

- RS232
- RS422/RS449/E1A530
- RS232 Console Port
- PCI Express x1 Lane

### MTBF

- PT-PCE335-12204: 358,644 hours per Bellcore SR-NWT-000332 Issue 1
- PT-PCE335-12180: 387,711 hours per Bellcore SR-NWT-000332 Issue 1

### Power

- RS232:
    - Typical 2.4 W (0.200 A @ 12 V)
    - 1.8 W (0.360 A @ 3.3 V)
- RS422:
    - Typical 2.6 W (0.200 A @ 12 V)
    - 2.97 W (0.900 A @ 3.3 V)

### Dimensions

- 68.90 mm x 167.65 mm (2.7 in. x 6.6 in.) (low-profile PCI Express compliant)

### Environmental

- Operating Temperature: 0 to 50°C (32 to 122°F)
- Storage Temperature: -20 to 80°C (-4 to 176°F)

### Agency Certifications & Compliance

- FCC Class A
- CE
- EN 60950-1
- PCI Express revision 1.0
- All currently applicable ANSI/ISO standards
- RoHS