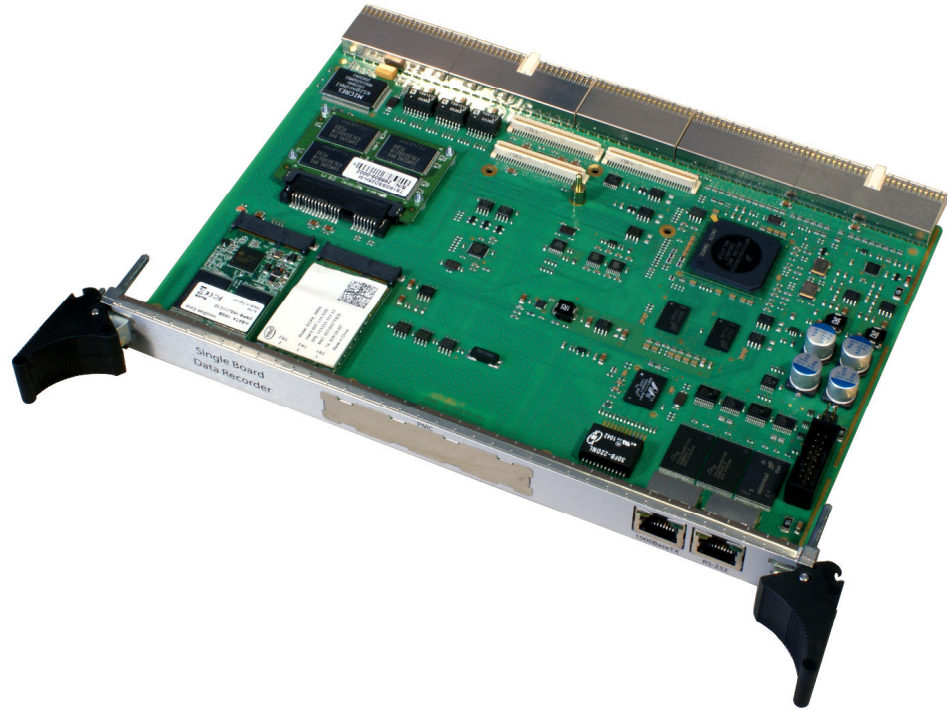# SBDR-6315

SINGLE BOARD DATA RECORDER

Features

- 6U CompactPCI system-slot SBC

- Based on PowerPC e300v3 core architecture

- DDR2 memory support

- Boot capable NOR Flash devices

- NAND Flash devices

- Solid State Disk (SSD) interface

- One Gigabit Ethernet port

- 3-port Fast Ethernet manageable switch

- 3-port USB 2.0 hub

- One 32-bit PMC Slot

- One Mini PCI Express card slot

- Watchdog

- Temperature sensor

- Supplied with U-Boot bootloader

RoHS
2002/95/EC

SBDR-6315 Single Board Computer offers a unique platform for embedded applications requiring a flexible architecture for data acquisition and monitoring with a large non volatile storage capabilities.

As based on the CompactPCI PICMG 2.0 R3.0 specification, the SBDR-6315 can be combined with a large choice of peripheral and acquisition board and building a complex acquisition system for applications including data recorder, monitoring system, Communication monitor, standalone Computer for security access control, etc.

Processor
Based on PowerPC architecture, the SBDR-6315 features an enhanced e300c3 core and advanced features such as DDR2 memory controller, dual Gigabit Ethernet controller, PCI Express and PCI legacy interfaces, IEEE-754 compliant FPU, and integrated Security Engine. On-chip USB2.0 and SATA2.5 controller are available for peripheral and storage devices.

Communication and peripheral
The SBDR-6315 supports one Gigabit Ethernet port, a 3-port Managed Fast Ethernet switch, and a 3-port USB2.0 hub.

Solid State Disk (SSD)
The SBDR-6315 introduces a SATA2.5 based on SSD interface supporting mSATA industry standards form factor defined by Jedec and SATA-IO organizations.
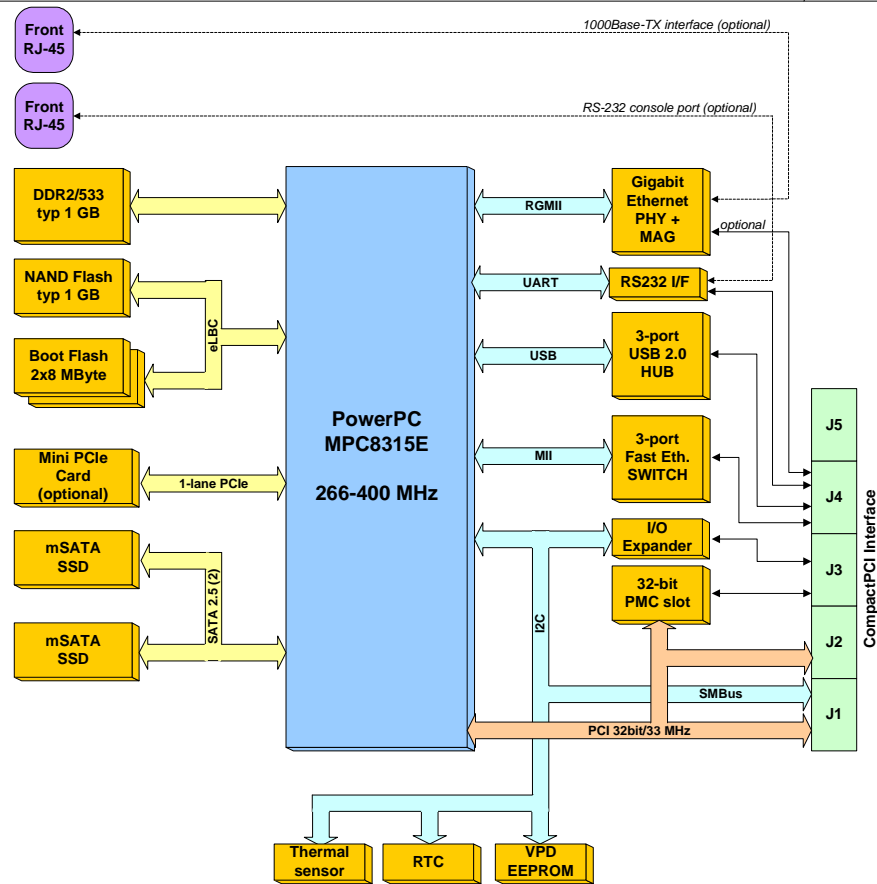
Mezzanine extension slots
As a flexible platform, the SBDR-6315 has two mezzanine extensions based on both IEEE 1386.1-2001 PMC and PCI-SIG mini PCI Express card specifications.

Enhanced power management
The MPC8315E supports a range of power management states that significantly lower power consumption under the control of the power management controller.

Software
Developers can take advantage of the SBDR-6315's power and performance when running major real-time operating systems (RTOS) or when deploying applications based on the low-cost, open-source Linux™ operating system. RTOS supported by the SBDR-6315 include VxWorks® and others on request.

Local Processor

- PowerPC e300c3 core
- IEEE754 Floating point unit
- Security Engine

Memory

- DDR2/533 memory
- Boot capable NOR Flash device
- NAND Flash device for large storage

Communication ports

- 1 Gigabit Ethernet port
- 3-port Fast Ethernet manageable switch
- 3-port USB2.0 Hub
- 2 RS-232 serial ports
- 1 I2C bus

Peripheral interfaces

- 8-bit general purpose I/O controller
- 1 Thermal sensor

Solid State Disk (SSD)

- One mSATA slot

Extension mezzanine

- 1 IEEE1386.1-2001 PMC slot
- 1 PCI-SIG mini PCI Express card slot

CompactPCI Interface

- PICMG 2.0 R3.0 compliant
- 32-bit, 33MHz
- 3.3V environment
- System-slot mode

Environmental

Commercial	0 to +55℃
Relative Humidity	0 to 90 % (non-cond.)
Altitude	0 to 50,000 ft

Power Requirements

+3.3V	900 mA typ

Mechanical

Dimension	233.35 x 160 mm
Vibration	3G RMS, 2-35 Hz random
Shock	15G, 11 ms, ½ sine
MTBF	232'016 hours

ACTIS Computer SA
42 Route de Satigny
CH – 1217 Meyrin, Switzerland
Tel: +41 (22) 706 1830
Fax: +41 (22) 794 4391

ACTIS Computer Inc
1898 E. Southern Ave.
Tempe, Arizona 85282, USA
Tel: (480) 838 1799
Fax: (480) 838 4477

Distributed by:

For ordering information, please visit our web site at www.actis-computer.com