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**SERCON816**  
**SERCOS interface Controller**

Reference Manual  
Version 7.4, 04/2003

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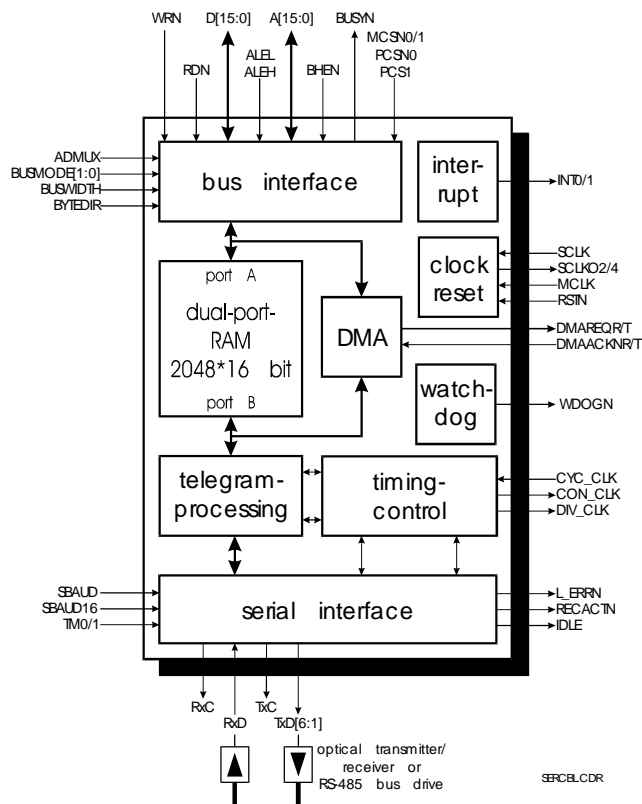


Fig. 1: SERCON816 block diagram

## SERCOS interface™ controller SERCON816

- Single-chip controller for SERCOS interface™
- Real time communication for industrial control systems
- 8/16-bit bus interface, Intel and Motorola control signals
- Dual port RAM with 2048 words \* 16-bit
- Data communications via optical fiber rings, RS 485 rings and RS 485 buses
- Maximum transmission rate of 16 Mbaud with internal clock recovery
- Internal repeater for ring connections
- Full duplex operation
- Modulation of power of optical transmitter diode
- Automatic transmission of synchronous and data telegrams in the communication cycle
- Flexible RAM configuration, communication data stored in RAM (single or double buffer) or transfer via DMA
- Synchronization by external signal
- Timing control signals
- Automatic service channel transmission
- Watchdog
- Compatible mode to SERCON410B SERCOS interface™ controller
- 100-pin plastic flat-pack casing

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