



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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VSC7216-02

VITESSE

VSC7216-02 Low Power Quad 1.25Gb/s Backplane Transceiver



FEATURES:

- ▶ Compatible to Industry Standard VSC7216-01
- ▶ Redundant Transmit and Receive Serial I/O's
- ▶ LVTTTL Parallel Data I/O
- ▶ Rate Matching Between Upstream/Downstream VSC7216-02's
- ▶ Selectable High Speed Input Termination
- ▶ Multi-channel and Multi-chip Aggregation Capability
- ▶ Serial Output Swing Reduction Control
- ▶ Transmitter Pre-Distortion and Receiver Equalization
- ▶ Multiple Clocking Options
- ▶ Internal Serial and Parallel Loopback Modes
- ▶ JTAG and BIST Enabled
- ▶ Optional 8B/10B Encoder/Decoder
- ▶ Fast Lock for use in Asynchronous Switching Applications
- ▶ Adjustable Latency and Deskewing for Varied System Environments
- ▶ Analog Signal Detect for each PECL Input

SPECIFICATIONS:

- ▶ REFCLK: 24.5 - 136MHz
- ▶ Tx/Rx REFCLK Offset: 200 ppm
- ▶ Serial Input Differential Terminations Adjustable Between 100Ω and 150Ω
- ▶ Fast Lock CRU: <128 DataTransitions
- ▶ Up to 90 Bit Periods of Inter-channel Deskew
- ▶ Tolerates +/- 5 Bit Times of Clock Drift Between Resynchronizations
- ▶ 2.5V Supply, Internal 1.8V Regulator
- ▶ 700 mW Power Dissipation
- ▶ 21 x 21mm, or 27 x 27mm 256-pin Thermally Enhanced Ball Grid Array (TBGA)
- ▶ Maximum Case Temperature: 110°C
- ▶ Offered Extended Temperature Range as VSC7216-06

APPLICATIONS:

- ▶ Backplane Interconnect for Data Communications
- ▶ Serial Bus Extension
- ▶ Gigabit Ethernet Transceiver
- ▶ Fibre Channel Transceiver
- ▶ Serial Link Redundancy

SERIAL DATA TRANSFER RATES FOR EACH CHANNEL:

	Full Rate Mode	Half Rate Mode
VSC7216-02	0.98 - 1.36Gb/s	0.49 - 0.68Gb/s

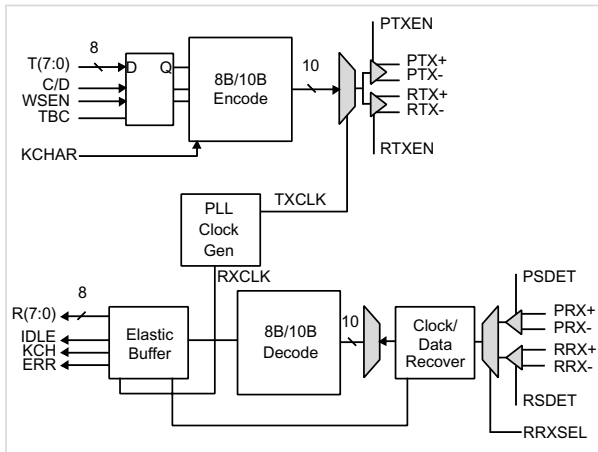
GENERAL DESCRIPTION:



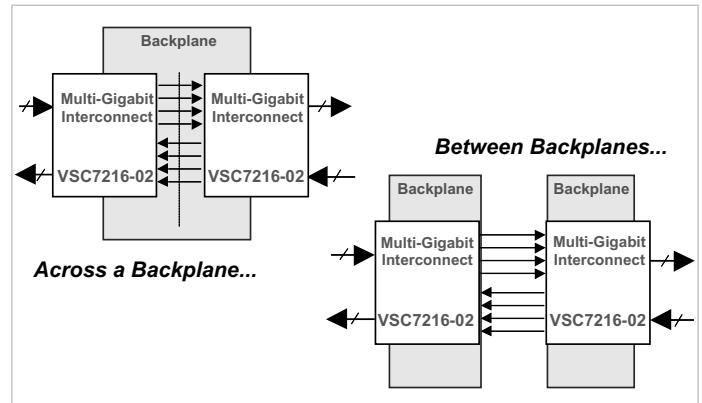
The VSC7216-02 is a quad channel parallel-to-serial and serial-to-parallel transceiver chip designed for use in high bandwidth data transmission between busses, backplanes and other subsystems.

Each channel's transmitter section contains parallel 8-bit or 10-bit input circuitry, an 8B/10B encoder, serializer and a pair of serial PECL output drivers and additional control inputs. Each channel's receiver section contains a pair of PECL inputs, clock and data recovery circuitry, a deserializer, an 8B/10B decoder, elastic buffers, 8-bit or 10-bit output drivers and additional control outputs. Each transmitter may be supplied 8-bit data which will be encoded into 10-bit characters for transmission, or may be supplied pre-encoded 10-bit data in which case the internal encoder is bypassed. The four channels may operate independently or in a synchronized mode transferring data that is word-aligned across 16 or 32 data inputs.

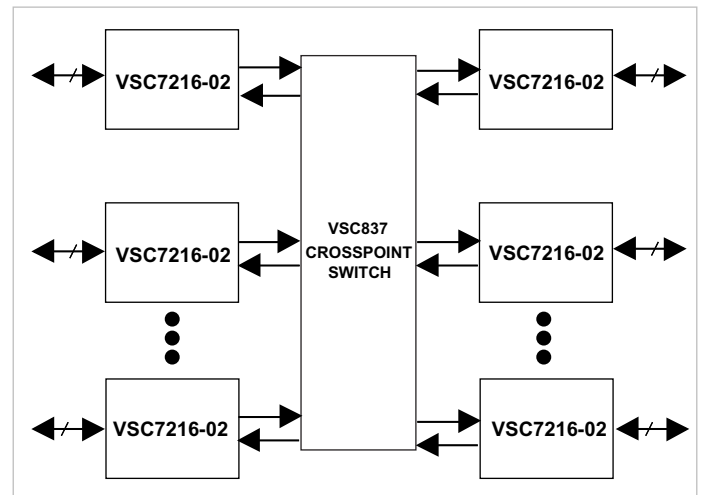
VSC7216-02 BLOCK DIAGRAM: (Single Channel Shown)



VSC7216-02 TWO APPLICATIONS:



VSC7216-02 CONNECTION TO VITESSE'S CROSSPOINT PRODUCTS:



Your Partner for Success.

For more information on Vitesse Products visit the Vitesse web site at www.vitesse.com or contact Vitesse Sales at (800) VITESSE or sales@vitesse.com

VITESSE

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