Overview

The VT6065 is a C-size VXIbus compatible serial interface module, available in four or eight channels, and is an ideal general purpose serial communications module for applications with baud rates under 125 kbaud. For applications that require faster baud rates, DLC protocols or custom serial interfaces, the VM6068 module should be considered.

Configuration

The VT6065 is available in two versions: Model VT6065-4 4-channel and Model VT6065-8 8-channel. Each individual channel can be configured under software control to be an RS-232, RS-422, RS-423 or RS-485 interface. Any combination of interface standards can be user-configured on the same card without opening the unit.

Software handshaking (XON/XOFF) or hardware handshaking with RTS/CTS is selectable under program control. Data Terminal Ready (DTR)/Data Set Ready (DSR) control lines are also provided.

In addition, each individual channel can be looped back on itself at the line driver/receiver level under program control in order to perform a full self test of the Model VT6065.

Software Control

The Model VT6065 is a message-based module that can accommodate transmitting and receiving on all eight channels simultaneously.

All key protocol parameters (baud rate, word length, parity checking and handshaking) are software-programmable on each channel. The baud rate is programmable to standard and custom baud rates up to 125 kbaud. The VT6065 supports baud rates to 38400 with no “dead” time. These configurations can then be stored in non-volatile memory for added flexibility and ease of setup. Device-dependent commands meet Standard Commands for Programmable Instruments (SCPI) specifications.

Flexible Memory Eases Data Throughput

512 kB of transmit and receive memory may be allocated by user among the eight channels, allowing complete flexibility for all interface applications. Transmit buffers can be unloaded under program control in either a repetitive loop mode controlled by an internal timer or in a burst mode.

Each receive buffer is supported by a programmable input buffer to prevent overflow conditions.
VT6065-4 4-channel C-size Serial Interface Module
VT6065-8 8-channel C-size Serial Interface Module

Specifications

Buffer Size: 512 kB input and/or output

Serial Port Baud Rate (Programmable): From 1.7 baud to 125 kbaud

Minimum Receive Jitter Tolerance: ±4.5%

Data Length: 5, 6, 7, 8

Parity: None, odd, even, and mark or space

Stop Bits: 1, 2

Handshaking:

Software: XON/XOFF
Hardware: DSR and CTS for output pacing

Power Requirements (Ipm):

+5 V 2 A
±12 V 100 mA
±24 V 200 mA

Weight: 2.20 lb (1 kg)

Dimensions: Single-slot, C-size

VXIbus: Message-based, Revision 1.4

Ordering Information

VT6065-4 4-channel Serial Interface Module
VT6065-8 8-channel Serial Interface Module