



## **PRODUCT LINE OVERVIEW**

The Amphus Serial Controllers VG-CD1400 & VG-CD1865 are pin compatible and functional equivalent to the Intel's discontinued Serial Controllers - CD1400 and CD1865 respectively. They offer innovative serial I/O data communications solutions for network applications. These devices provide high-throughput general-purpose multi-channel serial communications solutions for a wide range of applications, including remote access servers, terminal servers, and POS terminals. The flexibility and speed of the Amphus Serial Controllers allow more efficient communications between terminals and central hubs, wide-area communications, management ports, and console ports.

## **PRODUCT HIGHLIGHTS**

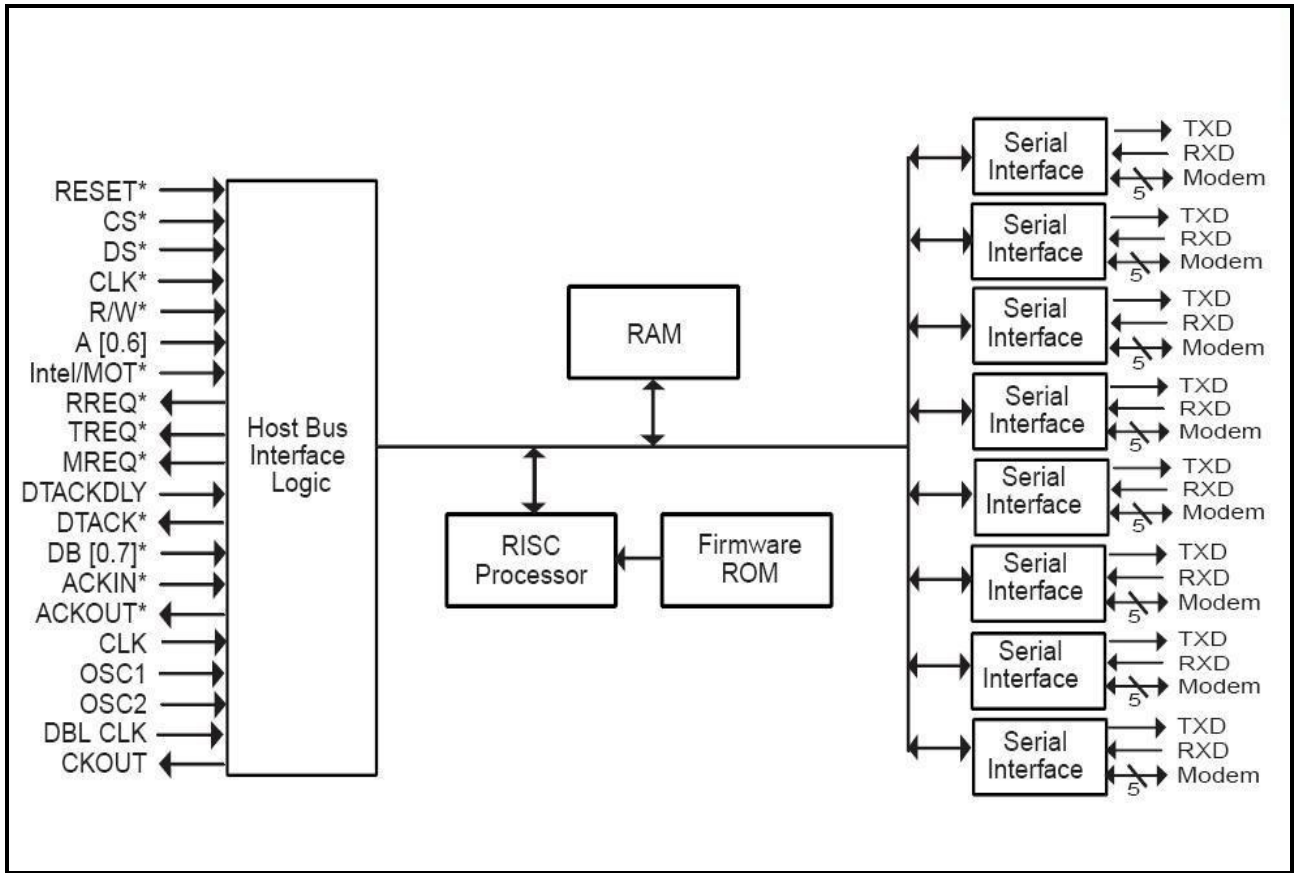
- 8 full-duplex 230.4 Kbit/sec. serial channels
- Independent baud-rate generators for each transmitter and receiver to support data rates up to 115.2 Kbps
- Generation and detection of special characters
- 5 modem/general-purpose I/O signals per channel
- Up to 60 MHz system clock
- 100-pin MQFP package
- Simultaneous interrupt requests for three classes of interrupts: Rx, Tx, and modem state changes
- Sophisticated interrupt schemes, including:
  - Vectored interrupts
  - Fair Share interrupts
  - Good Data\* interrupts for improved throughput
  - Simultaneous interrupt requests for three classes of interrupts: Rx, Tx, and modem state changes
- On-chip FIFO - 8 bytes each for Rx, Tx, and status FIFOs
- On-chip flow control
- In-band (Xon, Xoff generation and detection)
- Out-of-band (DTR/DSR or RTS/CTS)

**Product Brief**  
**Amplus VG-CD1865**  
**Serial Communication Controllers**



**PRODUCT OVERVIEW**

The Amplus VG-CD1865 is a universal asynchronous receiver/transmitter with eight full-duplex serial channels, each has separate 8 byte transmit and receive FIFOs. By moving data efficiently from the serial channels to the host system, the Amplus VG-CD1865 reduces overhead and yields an eight-fold improvement in system throughput.



Amplus VG-CD1865 Internal Block Diagram



## ORDERING INFORMATION

Contact an authorized Amphus distributors or Amphus for complete ordering details.

## PRODUCT ORDERING CODES:

|  |                |
|--|----------------|
| Amphus VG-CD1400 Serial Controller                           | VG-CD1400-QCJ  |
| Amphus VG-CD1865 Serial Controller                           | VG-CD1865-QCB  |
| Amphus VG-PD6722 ISA-to-PC Card Controller (MQFP)            | VG-PD6722-QCCE |
| Amphus VG-PD6722 ISA-to-PC Card Controller (LQFP)            | VG-PD6722-VCCE |
| Amphus VG-PD6729 PCI-to-PC Card Controller (MQFP) C-stepping | VG- PD6729-QCC |
| Amphus VG-PD6729 PCI-to-PC Card Controller (MQFP) E-stepping | VG- PD6729-QCE |
| Amphus VG-PD6729 PCI-to-PC Card Controller (LQFP) E-stepping | VG- PD6729-VCE |

## LITERATURE INFORMATION

|   |           |
|---|-----------|
| Amphus CD1400 Serial Controllers Product Brief              | 821633-01 |
| Amphus CD1400 Serial Controllers Product Data Sheet         | 821633-02 |
| Amphus CD1865 Serial Controllers Product Brief              | 821634-01 |
| Amphus CD1865 Serial Controllers Product Data Sheet         | 821634-02 |
| Amphus PD6722 ISA-TO-PC Card Controllers Product Brief      | 821635-01 |
| Amphus PD6722 ISA-TO-PC Card Controllers Product Data Sheet | 821635-02 |
| Amphus PD6722 PCI-TO-PC Card Controllers Product Brief      | 821636-01 |
| Amphus PD6722 PCI-TO-PC Card Controllers Product Data Sheet | 821636-02 |

## PRODUCT CROSS REFERENCE TABLE

| <b>Intel</b> | <b>Amphus</b>  |
|--------------|----------------|
| CD1400-10QCJ | VG-CD1400-QCJ  |
| CD1865-10QCB | VG-CD1865-QCB  |
| SPD6722-QCCE | VG-PD6722-QCCE |
| SPD6722-VCCE | VG-PD6722-VCCE |
| SPD6729-QCC  | VG-PD6729-QCC  |
| SPD6729-QCE  | VG-PD6729-QCE  |