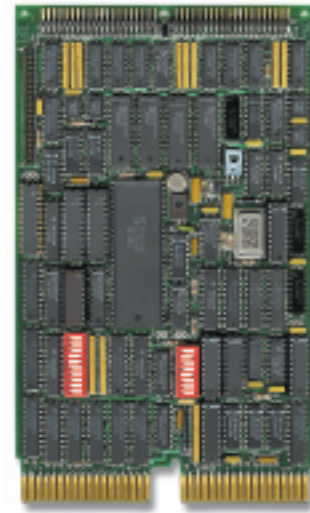


CCQ-1100

Eight-Line Q-bus Communication Controller



The CCQ-1100 offers eight line RS-232/423 asynchronous communication lines with full modem control for Digital's Q-bus computer systems. The controller emulates Digital's DHV11 and is operating system and diagnostic compatible.

Each communication line can be programmed individually to specify character format, line speed, and DMA or program control transfers. The CCQ-1100 supports a comprehensive set of standard rates ranging from 50 to 38,400 baud and a set of software compatible alternate rates for special applications.

The CCQ-1100 is cable compatible with Digital's DHV11 panels and is available with two panel options. One panel option offers four DB-25 connectors for full Digital compatibility. For use with the CCQ-1100, an eight-line panel option uses DLV11-J compatible connectors on a single panel. Both panels have an LED for easy verification of operation and a switch for selecting the alternate baud rate set.

High Performance. DMA capabilities can reduce character overhead and improve system performance. Character receive silos with user selectable timers reduce character interrupt overhead also enhancing system performance. The CCQ-1100 maintains an aggregate throughput that is approximately four times the throughput of the DHV11.

Space Savings. The CCQ-1100's eight lines on a dual-width module require half the space of a DHV11. Eight line panels provide twice the number of lines on a panel.

Easy to use and maintain. The CCQ-1100 controllers are software compatible with DHV11 diagnostics and RSX, RSTS/E, VMS, DSM, and ULTRIX operating systems. The controllers operate in 16, 18, and 22 bit Q-bus systems including MicroVAX, MicroPDP-11, and LSI-11 systems. The controllers also use internal diagnostics to automatically verify module operation and conveniently display the status at the panel.

High baud rate support. An alternate baud rate set allows 38,400 baud operation for special applications when it would otherwise be blocked by the operating system software.

Description

Compatibility

The CCQ-1100 is an operating system compatible with RSX, RSTS/E, VMS, DSM, and ULTRIX. It is diagnostic compatible with DHV11-CVDHA, CVDHB, CVDHC, CXDHV.

Interrupt Vector

The interrupt vector is set via on-board switches. The CCQ-1100 requires two consecutive interrupt vectors in the range 000-770.

I/O Addresses

The Unibus addresses are set via on-board switches. The CCQ-1100 requires eight consecutive word locations in the Q-bus floating address space.

Interrupt Priority

The interrupt priority level is factory set to BIRQ4 and can be user modified via jumper to level BIRQ5.

Ordering Information

The CCQ-1100 is supplied with a user manual and optional panels and cables. Part numbers are:

Controller

CCQ-1100 Eight-line, asynchronous, dual-width module with full modem.

Panels

CPX-1100 Four line DB-25 panel. Two required for all eight lines.

CPX-1101 Eight line 10-pin AMP DLV11-J style connectors.

Cables

CAB-1100-12 12-inch controller-to-panel cable. For use in Digital's BA23 pedestal enclosure.

CAB-1100-20 20-inch controller-to-panel cable. For use in Digital's BA123 office enclosure.

CAB-1100-36 36-inch controller-to-panel cable. For use in Digital's H96XX cabinet.

Specifications

Physical

Dimensions Standard dual-width module measuring 5.3 in by 8.4 in (13.3 cm by 21.3 cm)

Electrical

Power Required

+ 5 volts 4.2 amps
+ 12 volts 0.35 amps
- 12 volts not used

Q-bus loading:

DC loads 1.0 DC load, 3.0 AC loads

Throughput

Receive Silo: 55K characters per second

Size

Two 256-character silos

Timer

Switch selectable, 0 and 16msec

EIA Interface

Communications:

Type Data Terminal Equipment (DTE)

Ports 8 with full modem control

Interface Standards:

Data RS-423/232

Modem RS-232

Signals Supported

PGND, SG, TX, RX, RTS, CTS, DSR, DCD, DTR, RI

Programmable Line Parameters

Character Length 5, 6, 7 or 8 bits

Stop Bits 1, 1.5 or 2

Parity Odd, even, or no parity

Breaks May be generated and detected on each line

Standard Baud Rates 50, 75, 110, 134.5, 150, 300, 600, 1200, 1800, 2000, 2400, 4800, 7200, 9600, 19.2K, 38.4K bits/sec

Switch Selectable

Alternate Baud Rates 50, 110, 134.5, 200, 300, 600, 1200, 2400, 4800, 9600, and 38.4K bits/sec

Environmental

Operating Conditions:

Temperature 5° to 50° C (41° to 122° F)

Relative Humidity 20% to 80% noncondensing

Storage Conditions:

Temperature -40° to 66° C (-40° to 150° F)

Relative Humidity 10% to 95% noncondensing