

QUADRON



# qX25 for Linux

## X.25 communication with ARTIC cards.

Quadron's qX25 for Linux is software that works in conjunction with ARTIC communication cards to provide X.25 protocol processing for Linux workstations or servers.

By offloading X.25 processing onto a PCI-bus ARTIC card, you'll save your CPU from protocol processing overhead and maintain in-house security while you support the CCITT's international standard X.25 protocol.

Our qX25 consists of an X.25 driver, C-language software development tools, and runtime support for the dedicated ARTIC communication cards.

- Supports Linux open source operating system.
- Offloads X.25 processing from the host computer to an ARTIC communications card.
- qX25 operates as a single task on the ARTIC card.
- Multiple qX25 tasks can serve multiple lines on a single ARTIC card.
- Supports up to 64 simultaneous virtual circuits on each qX25 line.
- Packet size up to 1024 bytes.
- Choose from three families of PCI ARTIC cards.
- Use multiple ARTIC cards on one Linux server.
- ARTIC I/O driver provides buffering, interrupt handling, and DMA control.
- Diagnostic display of HDLC activity and frame history.
- Fine tune communication performance with multiple X.25 parameters.

### Who should use qX25 for Linux?

Quadron's qX25 for Linux is the ideal X.25 application development vehicle for OEMs, system consultants, and end users. It frees designers from low-level ARTIC internals, while at the same time it doesn't limit their range of communication options.

### Flexible X25

The flexibility inherent in X.25 packet-switched data has resulted in widespread use. Many use the economies of public packet networks, while others create their own private networks.

### Put smart cards to work

ARTIC cards have their own on-board processors, so each card becomes a computer within a computer. By using Quadron's qX25 software, these computers become dedicated X.25 processors within your Linux system.

### Standard X25 saves you time and money

Quadron's qX25 implements the CCITT standard link and network layer, packet-switching X.25 communications protocol. The I/O-intensive processing required by the X.25 protocol makes it ideal for offloading from the Linux host system onto the ARTIC card. All levels of X.25 operate as a single task on the ARTIC card, and require few external resources after initialization.

# qX25 *for* Linux

## **Match your needs**

Quadron's qX25 software serves a wide range of needs, from simple to complex. You can have as much or as little control over X.25 procedures as you wish.

## **Keep it simple**

For basic applications, qX25 automatically handles various non-data messages used in circuit setup and tear-down. Outgoing data sent as logical records by an application are automatically packetized by qX25. Incoming data are automatically reassembled by qX25 into logical records before being sent on to the application.

## **Control it all**

For more complex needs, qX25 makes X.25 facilities available to Linux programs. You can fine tune parameters for frame, packet, time-out, and application interface levels. If you wish, your application can control data packetization before passing it to qX25.

## **Combine qX25 with Quadron's qCF**

You can use qX25 by itself or combine it with Quadron's qCF for Linux. Use qCF's drivers for async, bisync, or HDLC protocols and develop custom, concurrently-running communication tasks on the ARTIC card. By combining qX25 with qCF, you can run multiple protocols on a single ARTIC adapter.

## **Technical support**

Quadron provides a high level of service and support. If it's needed, free technical support is available during the warranty period.

## **Custom programming**

Quadron engineers are available for custom programming and other support services. Contact us for information.

## **Software requirements**

To develop, test, and run qX25 for Linux, you will need our qX25 for Linux and a Linux workstation or server. Specify the following:

# 5200 qX25 for Linux

## **How to order ARTIC hardware**

Choose one of three PCI-bus ARTIC cards available for qX25 for Linux:

# 6880 ARTIC X.25 ISA/PCI Adapter

# 1203 ARTIC186 8-Port PCI Adapter

# 6650 ARTIC186 Model II ISA/PCI Adapter

Depending on the ARTIC card, different interfaces are available: RS232, RS422, X.21, X.21 bis/V.24, and V.35. Quadron maintains a stock of ARTIC components for sale and immediate delivery. Our technical sales people can help you select what best suits your particular application.

## **Contact us for more information**

Communications has been Quadron's only business since we founded it in 1986. Since then, we've been assisting people with stock and custom software, training, and the finest ARTIC development tools. Fax, email, telephone, or write to us any time. And be sure to visit our Web site at [www.quadron.com](http://www.quadron.com).

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