

# Software Product Description

**PRODUCT NAME:** X.25 Network-Level Developer's Toolkit™ for Windows™, **SPD 39.79.00**  
Version R1.00

## DESCRIPTION

The X.25 Network-Level Developer's Toolkit for Windows is a Digital Distributed Software product from Eicon Technology Corporation. It allows programmers to write end-user applications that can communicate through either the OSI PC Gateway™ for DOS (described in Software Product Description (SPD) 38.93.xx) or the OSI LAN Gateway™ for DOS (described in SPD 38.76.xx).

The X.25 Network-Level Developer's Toolkit supports PVCs and SVCs including incoming only, outgoing only, and two-way connections. It can control up to 254 virtual circuits.

The toolkit supports optional user facilities such as NUI (Network User Identification), reverse charging, Call User Data, CUGs (Closed User Groups), throughput class negotiation, and window size negotiation.

The X.25 Network-Level Developer's Toolkit also offers support for X.25 M-bit, Q-bit, D-bit, interrupt packets, and reset packets.

## Features

The X.25 Network-Level Developer's Toolkit includes the following features:

- Full support for the CCITT recommendation X.25 (1980 and 1984) including Extended Format and ISO 8208

- Supports up to 254 virtual circuits
- Window size configurable from 1 to 127
- Packet size 64, 128, 256, 512, 1024, 2048, or 4096 bytes
- Supports permanent virtual circuits and three types of switched virtual circuits: incoming only, outgoing only, and two-way
- Support for X.25 M-bit, Q-bit, and D-bit
- DTE/DCE addressing
- Internal/External clocking
- Support for interrupt and reset packets

The toolkit also provides the following user facilities:

- Flow control parameter negotiation including packet size and window size
- Throughput class negotiation
- Closed User Group (CUG) selection
- CUG with outgoing Access selection
- Bilateral CUG selection
- Reverse charging
- Fast select
- Network User Identification (NUI)

**Table 1**  
**Toolkit Functions**

**x25accept()** Generate a CALL ACCEPTED packet from the application

**x25listen()** Accept an incoming call

**x25alloc()** Allocate buffer space to send and receive data using the *x25send()* and *x25recv()*

**x25mkconn()** Dynamically obtain a connection identifier for an already existing connection

**x25call()** Set up a virtual circuit to a specified DTE, allowing limited use of parameters

**x25packetstats()** Return packet-level statistics for a specified connection

**Table 1 (Cont.)  
Toolkit Functions**

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<b>x25cancel()</b> Cancel a pending request	<b>x25pcause()</b> Display an X.25 library clearing cause message
<b>x25cause()</b> Return an appropriate X.25 networks library clearing cause number	<b>x25pdiag()</b> Display an X.25 library diagnostic message
<b>x25causemsg()</b> Return an appropriate X.25 library clearing cause message	<b>x25perror()</b> Display an X.25 library error message
<b>x25delconn()</b> Delete a connection identifier without completing a hangup	<b>x25pvccall()</b> Set up a virtual circuit to a specified DTE via a PVC
<b>x25diag()</b> Return an appropriate X.25 library diagnostic number	<b>x25recv()</b> Receive data from a remote DTE
<b>x25diagmsg()</b> Return an appropriate X.25 library diagnostic message	<b>x25reset()</b> Reset a virtual circuit
<b>x25done()</b> Get request status	<b>x25resetconfirm()</b> Acknowledge a reset indication
<b>x25error()</b> Return an appropriate X.25 library error number	<b>x25send()</b> Send data to a remote DTE
<b>x25errormsg()</b> Return an appropriate X.25 library error message	<b>x25sendconfirm()</b> Acknowledge a packet received with the D-bit
<b>x25exit()</b> Clear all connections used by the application program	<b>x25sendexp()</b> Send expedited data (interrupt data) to the remote DTE
<b>x25flowctl()</b> Enable/Disable flow control for incoming data at the networks level	<b>x25sendexpconfirm()</b> Send an expedited data confirmation packet
<b>x25free()</b> Free buffer space allocated by the <i>x25alloc()</i> function	<b>x25status()</b> Get the status of a session
<b>x25getconn()</b> Get the logical session number and port number of a connection	<b>x25version()</b> Return the X.25 Network-Level Developer's Toolkit version number
<b>x25hangup()</b> Terminate a call and any associated pending request	<b>x25xcall()</b> Set up a virtual circuit to a specified DTE, allowing extended use of parameters
<b>x25hangupconfirm()</b> Generate the CLEAR CONFIRMATION packet	<b>x25xhangup()</b> Terminate a connection using the extended packet format
<b>x25init()</b> Initialize the X.25 library functions	<b>x25xhangupconfirm()</b> Confirm the reception of clear indication using extended packet format
<b>x25linkstats()</b> Return link-level statistics for a specified connection	<b>x25xlisten()</b> Accept an incoming call and establish a virtual circuit, allowing extended use of parameters

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**HARDWARE REQUIREMENTS**

**Processors Supported**

An 80286-, 80386-, or 80486-based Digital personal computer

**SOFTWARE REQUIREMENTS**

- MS-DOS® Version 3.3 or higher
- Microsoft® Windows Version 3.0 or 3.1
- OSI PC Gateway for DOS Version V2R2 (see SPD 38.93.xx)  
or  
OSI LAN Gateway for DOS Version V2R2 (see SPD 38.76.xx)

The use of a "C" or a Pascal compiler is required (where applicable) to develop application programs.

**GROWTH CONSIDERATIONS**

The minimum hardware/software requirements for any future version of this product may be different from the requirements for the current version.

**ORDERING INFORMATION**

Software License, Documentation, and Media (5.25-inch and 3.5-inch floppy disks): QB-MNWAA-WW

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