

# Software Product Description

PRODUCT NAME: **StrataCom® IPX® 12 Frame Relay Software, Version 5.1**

**SPD 38.37.00**

## DESCRIPTION

StrataCom IPX 12 Frame Relay Software is produced by StrataCom, Inc. and distributed and warranted by Digital Equipment Corporation. The StrataCom IPX 12 System Software provides operating system support for the StrataCom IPX 12 System Unit. The IPX 12 Frame Relay Software provides an additional software application layer. Together, the IPX 12 Frame Relay Software, the IPX 12 System Software, and the IPX 12 hardware provide the functionality described below.

The StrataCom IPX 12 is a digital network processing system that is used to interconnect computers, PBXs, and other communications equipment in a private corporate network environment. The IPX 12 is used to build digital networks, integrating data, voice, video, and FAX over high speed digital transmission services.

The IPX 12 is the smallest member of the StrataCom family of FastPacket® bandwidth management systems. It offers a cost effective solution for smaller network locations. The IPX 12 is a single-shelf system available in both table top and rack mount configurations. Each IPX 12 System Unit has twelve card slots, one or two processor cards and one or two AC power supplies with integral cooling. This unit supports up to two T1 trunk lines and up to two T1/D4 circuit lines. Up to nine card slots are available for voice and data ports, allowing up to 48 voice connections and up to 72 data connections.

### *Frame Relay (FR)*

The Frame Relay feature provides a packet mode interface to private digital networks. Together with FastPacket switching, the Frame Relay feature supports an integrated high performance wide area data network. It is designed to provide high speed packet transmission, low network delay, low bit error rates, and efficient use of network bandwidth. A FastPacket switch, together with the Frame Relay feature, is ideal for bursty, high speed data such as found in LAN-to-LAN interconnection applications.

The Frame Relay interface simplifies the interface between customer data equipment and the network so wide area packet switching can be accomplished with

higher levels of performance. Data frames are multiplexed onto a single high-speed line, and the IPX determines where to relay the data frame by means of the frame's address field. Any device can communicate with any other device in the network simply by specifying the address.

Due to bandwidth efficiencies, the network can be implemented with fewer trunks, and the single high speed line between a router and the IPX eliminates the need to provision the router and IPX with multiple lower speed ports. In addition, routers can be less expensive because the router needs only enough processing bandwidth to forward and terminate its own traffic without the need to process other network traffic.

The Frame Relay PAD (FRP) consists of a front card and a back card that provides a V.35 physical interface. The V.35 Back Card provides four ports at speeds up to 256 kbps. A single port can operate at speeds up to 1.024 Mbps. The V.35 interface conforms to CCITT V.35. Refer to Software Product Description (SPD) 38.33.xx for more information on the IPX 12 hardware components.

### *Network Configuration Guidelines*

Data connections using the Frame Relay Feature require, at a minimum, that the StrataCom Frame Relay Software, Version 5.1 be loaded to two IPX System Units, one at each end of the connection. Intermediate IPX System Units within an IPX network need not be loaded with StrataCom Frame Relay Software.

Frame Relay connections in an IPX network require at a minimum two Frame Relay PAD/V.35 FRP Back Card Pairs, one at each end of the connection.

IPX 12, IPX 16, and IPX 32 System Units may coexist in the same IPX network, but all must be operating with Version 5.1 System Software.

Two IPX System Units must be connected via a T1 trunk line to form a minimum IPX network.

StrataCom IPX 12 Frame Relay Software requires PCC-Model D or later, TXR-Model D or later, PIC-Model B or

later as well as FRP-Model A and V.35 FRP Back Card-Model A within the IPX 12 System Unit in which the software is loaded.

## INSTALLATION

The StrataCom IPX 12 Frame Relay Software is factory installed in Flash EPROM, which resides on the Processor Control Card within the StrataCom IPX 12 System Hardware Unit. However, the Frame Relay functionality must be keyed on via a software switch. Digital recommends that StrataCom IPX 12 software installation services be purchased with the product. These services provide for installation of the hardware and software by an experienced Digital specialist.

### *Customer Responsibilities*

Before product installation can be done by Digital, the customer must:

- Install, and demonstrate as operational, the necessary synchronous communication line(s).
- Obtain, install, and demonstrate as operational any modems, CSUs, channel banks, echo cancelers, or other equipment and facilities necessary to interface to Digital's communication equipment.
- Make available for a reasonable period of time, as mutually agreed to by Digital and the customer, all hardware, communication facilities, and terminals that are to be used during installation.

## HARDWARE REQUIREMENTS

One of the following system hardware units is required to run the StrataCom IPX 12 Frame Relay Software Product.

DIXSA-AA	StrataCom IPX 12 System Unit, supports DT13 Digital Trunk Interface Card Group, Processor Control Card Model E, 120V, 600W power supply, StrataCom IPX 12 System Software License
DIXSA-AD	StrataCom IPX 12 System Unit, supports DT16 Digital Trunk Interface Card Group, Processor Control Card Model E, 120V, 600W power supply, StrataCom IPX 12 System Software License

### *Other Hardware Requirements*

#### *Frame Relay PAD Group Modules*

Frame Relay PAD (FRP): DIXFA-AA  
FRP Back Card/4 Port/V.35: DIXFA-BA

As part of Digital's set of software product services, remote diagnostic support of the StrataCom IPX 12 may be available from a Digital Support Center. To receive this remote diagnostic service, a Bell™ 212A compatible modem is required to be connected to the Auxiliary port of the Processor Control Card located in the StrataCom IPX 12 System Hardware Unit. The customer must maintain a dial-in communications line to the modem.

## OPTIONAL HARDWARE

The StrataCom IPX 12 can be uniquely configured to fit the requirements of the customer's network. The following hardware options can be ordered individually depending on the configuration of the customer's network. Refer to StrataCom IPX 12 System Software Software Product Description (SPD 38.33.xx) for more information.

### *Processor Group Modules*

Processor Control Card W/Flash EPROM (redundant):  
DIXCA-CA

### *Digital Trunk Interface Group Modules*

Network Trunk Card Model B: DIXTA-AA  
T1 Back Card/Single Port: DIXTA-BB  
Transceiver Card Model D (TXR/D): DIXTA-CA  
Protection Interface Card/8 Port (PIC): DIXTA-DA

### *FastPacket Voice PAD Group Modules*

Voice Compressor Decompressor (VCD): DIXVA-BA  
Utility Bus (VDP-UB): DIXVA-CA  
Voice Data Pad u-Law (VDP/u): DIXVA-DB

### *FastPacket Data PAD Group Modules*

Synch Data Pad: DIXDA-AA  
SDP Back Card/4 Port/RS232C: DIXDA-AB  
SDP Back Card/4 Port/RS232D: DIXDA-AC  
SDP Back Card/4 Port/V.35: DIXDA-AD  
SDP Back Card/4 Port/RS422/499: DIXDA-AE  
Low Speed Data PAD (LDP): DIXDA-BA  
LDP Back Card/4 Port/RS232C: DIXDA-BB  
LDP Back Card/8 Port/RS232C: DIXDA-BC  
Utility Bus (SDP-UB): DIXDA-CA

### *Power Supplies*

Power Supply IPX 12 600W 110VAC: DIXPA-AA  
Power Supply OEM 600W 110VAC: DIXPA-CA

### *Miscellaneous*

IPX Installation Kit (TYPE II): DIXSA-XA  
IPX 12 Rack Mount Kit 19": DIXSA-XB  
IPX 12 Rack Mount Kit 23": DIXSA-XC  
IPX OEM Equipment Cabinet: DIXSA-XD

**SOFTWARE REQUIREMENTS**

StrataCom IPX 12 System Software License  
(included as part of StrataCom IPX 12 system units  
option number): QL-GKTAA-A7

StrataCom IPX 12 System Software Media and  
Documentation (included as part of StrataCom IPX  
12 system units option number): QA-GKTAA-H7

**OPTIONAL SOFTWARE***Network Management Software*

StrataView/DOS License, Media, and Documentation  
Kit, V5: QB-GKZAA-W7

**SOFTWARE LICENSING**

A separate Frame Relay software license is required for each StrataCom IPX 12 System Hardware Unit that will run the Frame Relay feature within the customer's IPX network at the time of the Frame Relay Software application upgrade. In addition, a StrataCom IPX 16/32 Frame Relay Software License is required for each IPX 16 or IPX 32 System Unit that will run the Frame Relay feature within the customer's network at the time of the Frame Relay Software application upgrade. The software may be copied in its entirety solely for back-up or archival purposes, or for downline loading to all properly licensed StrataCom IPX System Hardware Units within a network.

This software is furnished under the licensing provisions of Digital Equipment Corporation's Standard Terms and Conditions. For more information about Digital's licensing terms and policies, contact your local Digital office.

**ORDERING INFORMATION**

IPX 12 Frame Relay Software License: QL-GKWAX-AA

**SOFTWARE PRODUCT SERVICES**

The following Standard Software Product Services are prerequisite services required for Layered Product Services. These include:

Software Product DECservice System Service (SSS/OS):  
QT-GKTA9-A9  
Software Product DECservice Node Service (SNS/OS):  
QT-GKTA9-N9

The following Layered Product Services (LPS) are available:

Layered Product Service (LPS): QT-GKWA9-L9  
Media and Documentation Distribution Service (MDDS):  
QT-GKWAA-E7  
Software Documentation Update Service:  
QT-GKWAA-KZ

**SOFTWARE WARRANTY**

Warranty for this software product is provided by Digital with the purchase of a license for the product. The software product is warranted to conform to the Software Product Description (SPD). Digital will remedy any non-conformance when it is reported to Digital by the customer during the warranty period.

The warranty period is one year. The warranty period begins when the software is installed or thirty days after delivery to the end-user, whichever occurs first, and expires 360 days later. All warranty related support for this software will end 180 days after release of a subsequent version.

Warranty is provided in the country of purchase in accordance with the provisions of Digital's Standard Terms and Conditions of Sale. Digital will provide the following services if the customer encounters a problem when using licensed software under normal conditions as defined by the SPD:

- a. If Digital also determines the problem to be a defect in the Software Product, Digital will provide remedial service on site if necessary to apply a temporary correction or make a reasonable attempt to develop an emergency bypass if the software is inoperable,
- b. Assist the customer in preparing a Software Performance Report (SPR). If a customer diagnosis indicates the problem is caused by a defect in the Software Product, the customer may submit an SPR to Digital.

Digital will respond to a problem reported in an SPR that is caused by a defect in the current, unaltered release of the Software Product. The response will provide temporary corrections, useful emergency by-passes and/or notice of the availability of the corrected software code.

Telephone support may be available from the Digital Telephone Support Center. Please contact your local Digital office for information on the provision of telephone support as part of the warranty.

DIGITAL DOES NOT WARRANT THAT THE SOFTWARE LICENSED TO THE CUSTOMER SHALL BE ERROR FREE, THAT THE SOFTWARE SHALL OPERATE WITH ANY HARDWARE AND SOFTWARE OTHER THAN SPECIFIED IN THIS SPD, THAT THE SOFTWARE SHALL SATISFY THE CUSTOMER'S

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