

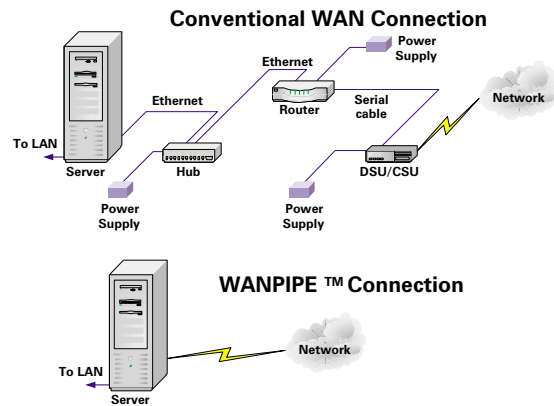
## Product Types

- Reliable and inexpensive WAN routing adapters;
- High performance and reliable communications platforms for OEM projects involving Frame Relay, X.25, HDLC, PPP, SDLC, BSC, SS7 and other protocols;
- Technology licensing to OEM manufacturers;
- Private-label (OEM) communications cards;
- POS (Point-of-Sales) interface cards for use in retail environments.

## Solutions Catalogue

### WANPIPE™

WANPIPE™ replaces external routers. It is a combination of S-Series WAN cards, drivers and utilities that allows you to add the functionality of a powerful WAN router to any existing server or firewall. WANPIPE™ supports Linux®, SUN® Solaris, FreeBSD®, Windows® NT, Windows® 2000, NetWare®, Unix® and other operating systems, leveraging your server investment.



### WAN CONNECTIONS BY WANPIPE™

- provide superior functions at a lower cost;
- are more reliable because there are fewer active components;
- leave less clutter in the server room: Plug your network server or firewall directly into the Telco demarc;
- eliminate the learning curve: WANPIPE™ is configured and managed using the same server tools and utilities that manage the rest of the network;
- improved network management and debugging: WANPIPE™ management tools leverage your server's resources to provide powerful and easy-to-use tools for network management and for solving network problems.

### APPLICATION PROGRAMMER INTERFACES

Sangoma's intelligent, coprocessor based S-Series cards and APIs provide the high-level interfaces to WAN protocols you need to support your communications project. Sangoma development tools provide common APIs under all popular PC operating systems.

- Frame Relay, X.25, HDLC, PPP, SDLC, SS7, BSC and more.
- Coprocessor runs protocols on the card.
- RS232, V.35, RS422, X.21 and EIA530 interface, or optional T1/E1 or 56/64kbps DDS interface.
- Optional self generated clocking.
- Extensive statistics, monitoring and debugging tools.
- Certified for ISO and ITU compliance.
- Complete development environment.
- Development kits and software licenses included with the Sangoma hardware.



### SNA CONNECTIVITY

The PCI S514 and ISA S508 and S503 cards support SDLC and QLLC/X.25 connections for Microsoft's® Host Integration Server and SNA Server as well as Novell® NetWare® for SAA. The Sangoma debugging and maintenance tools are an important supplement to the standard Microsoft and Novell line management tools. These include a driver-level event log and the LinkView line and status monitor.

### POINT OF SALE (POS)

The S515/S509 cards read POS traffic transmitted between registers and store controllers, then filters the data before passing it to a host PC. The cards can be configured to read the loop data of most store POS systems.



They are used throughout the Point-of-Sale industry for coupon printing, store promotion, security systems and for gathering sales and customer data.

### Support

Sangoma's support begins with our industry leading diagnostic and utility software, which provides unrivaled assistance in problem resolution. To help you further, our Help Desk is staffed by experienced engineers whose first priority is to support your business. Just call 1-800-388-2475, or email helpdesk@sangoma.com.

## Sangoma WAN Products - Best of Class

Sangoma Technologies develops, manufactures and markets connectivity hardware and software products for Wide Area Networks and Internet infrastructure.

Since 1984, Sangoma has been providing the best in communication equipment to our customers. We are dedicated to producing and supporting the most reliable and cost effective WAN products on the market. And that means your networks will work the way you want them to.



Your Sangoma dealer

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ROCK-SOLID

WAN CARDS,

SOFTWARE

& SERVICE

## Product Specifications

Card	S514/FT1	S5141	S5142	S514/ET1	S514/56	S508/FT1	S5080	S515
<b>Bus</b>	PCI 2.2 5v 32 bit	PCI 2.2 5v 32 bit, 3.3v optional	PCI 2.2 5v 32 bit, 3.3v optional	PCI 2.2 32 bit 5v, 3.3v optional	PCI 2.2 32 bit 5v, 3.3v optional	ISA 16 bit	ISA 16 bit	PCI 2.2 5v 32 bit
<b>Ports</b>	RJ45 supporting: 1 x T1 port 64kbps to 1.54Mbps  RJ48 cable included	DB37 supporting : 1 x 4Mbps serial 1 x 512kbps serial	DB37 on card and second DB37 on attached bracket supporting: 2 x 4Mbps serial 2 x 512kbps serial	RJ45 supporting: 1 x T1/E1/J1 port 64kbps to 1.54Mbps  RJ48 cable included  DB9 supporting:1 x RS232 secondary port	RJ45 supporting: 1 x 56/64kbps DDS port  RJ48 cable included  DB9 supporting:1 x RS232 secondary port	RJ45 supporting: 1 x T1 port 64kbps to 1.54Mbps  RJ48 cable included	DB25 supporting: 1 x 4Mbps serial  DB9 supporting: 1x RS232 serial	DB25 supporting: 2 x POS read only serial ports  2 x asynch ports to 128kbps
<b>Interfaces</b>	Line decoding: AMI, B8ZS  Framing: ESE, D4  T1 Clocking mode: Normal, Master  Fractional T1 using any channel combination  Remote management	V.35, RS232, X.21, EIA530, RS422	V.35, RS232, X.21, EIA530, RS422	Line decoding: HDB3, AMI,B8ZS  Framing: CRC4, non-CRC4, ESE, D4  T1/E1 Clocking mode: Normal, Master  Fractional E1/T1 using any channel combination.  Remote management  Synchronous/Asynch. RS232 port on DB9	56 and 64kbps DDS DSU/CSU including all Telco standard DDS options.  Remote management  Synchronous/Asynch. RS232 port on DB9	Line decoding: AMI, B8ZS  Framing: ESE, D4  T1 Clocking mode: Normal, Master  Fractional T1 using any channel combination  Remote management	V.35, RS232, X.21, EIA530, RS422 on main port  RS232 on secondary DB9	IBM 4680/4690/3680, NCR 2126/2127, NCR 1255, NCR 7000, Fujitsu/ ICL ISS400/ GMS2/ GMS3/GMS4 HSI, TEC TDLC and others.  2 x asynch RS485 ports, full duplex multipoint
<b>Certification</b>	FCC Part 15 Class A, FCC Part 68	FCC Part 15 Class A, CE Certification	FCC Part 15 Class A, CE Certification	FCC Part 15 Class A, FCC Part 68, CE Certification	FCC Part 15 Class A, FCC Part 68, CE Certification	FCC Part 15 Class A, FCC Part 68	FCC Part 15 Class A, CE Certification	FCC Part 15 Class A, CE Certification
<b>Power consumption</b>	600 ma at 5v	700 ma at 5v 80 ma at ±12v	700 ma at 5v 80 ma at ±12v	500 ma at 5v	500 ma at 5v	600 ma at 5v	650 ma at 5v 35 ma at ±12v	700 ma at 5v
<b>Dimensions</b>	146 mm x 99 mm 	146 mm x 99 mm 	146 mm x 99 mm 	170 mm x 99 mm 	170 mm x 99 mm 	255 mm x 99 mm 	159 mm x 99 mm 	146 mm x 99 mm 