## LANTRONIX®



#### **DSTni™- LX Development Kit**

- Includes a development board, real time operating system (RTOS) software, TCP/IP, protocol stack, advanced C-language development system, and integrated in-circuit debugger
- ▶ Includes Paradigm C++ from Paradigm Systems
- Also includes the FS2 In-Circuit Emulator from First Silicon Solutions

# The DSTni-LX Development Kit provides an ideal, low profile means of embedding network technology into devices and systems

DSTni-LX Development Kit contains all the hardware components, operating software, and software programming tools necessary to successfully develop robust embedded networking applications using the Lantronix DSTni-LX single chip networking solution.

#### **A Complete Development Platform**

The kit provides a complete development platform, including a development board with the DSTni-LX networking chip pre-installed, a real time operating system (RTOS) software, a TCP/IP protocol stack, an advanced C-language development system, and an integrated in-circuit debugger.

#### The DSTni OS Suite - Seamless Integration

The DSTni OS Suite is a pre-integrated set of embedded software components that include binary versions of a real time operating system (RTOS), a TCP/IP Communication Protocol Stack, and additional tools and utilities.

#### **Application Development Made Simple**

The DSTni-LX Development Kit includes Paradigm C++ from Paradigm Systems. This powerful application development tool kit provides a robust, tightly integrated x86 development environment.

The compilers, assembler, linker, locate utility, and debugger are fully integrated into Paradigm C++, along with other tools and utilities to assist with project management and third party tool integration.

Also included is the FS<sup>2</sup> In-Circuit Emulator from First Silicon Solutions to foster an effective and efficient means of application testing and debugging. Utilizing their on-chip instrumentation technology, the In-Target System Analyzer with JTAG cable and test board provides run control, memory and register visibility, software and hardware breakpoints, and a trace history feature. It can easily be configured to provide network protocol analysis on the DSTni-LX.





#### **Features**

#### **DSTni-LX Development Board:**

DSTni-LX chip(160 pin LQFP) with PROFIBUS

1 Mbyte on-board SRAM

256 Kbytes on-board serial flash

2 Mbytes on-board parallel flash

8 Kbytes on-chip Dual Port Memory with semaphores

JTAG interface in-circuit emulator support

Support for either 32-pin I/O or interface to on-chip Dual

Port Memory

Watchdog interface

Two DB9 connectors for RS-232 serial interface

One screw block connector for RS-485/422

10/100Base-T RJ45 Ethernet connector

Two DB9 and two combicon connectors for CAN interface

Bus power monitor for both CAN channels

Isolation circuitry for CAN, PROFIBUS, and Ethernet

+5 VDC input connector

Diagnostic and status LEDs

**Configuration jumpers** 

160 test pins for direct DSTni-LX connection

### DSTni-LX Development Kit Contents: Hardware

DSTni-LX development board

Power supplys

7-foot twisted pair straight-through Ethernet cable

7-foot twisted pair cross-over Ethernet cable

6-foot modem serial cable, DB9 female to DB9 male

Complete set of hardware manuals

#### Software

Real time operating system (RTOS): A binary version of DSTni OS, a mature embedded ANSI-C kernel providing applications with the ability to perform multiple application tasks simultaneously through the use of over 70 systems calls

Embedded TCP/IP protocol suite: An embedded compact TCP/IP stack with a small foot print providing real time embedded applications. It is ROMable and reentrant to ensure optimal performance with its companion real time operating system

Complete set of software manuals

#### **Development Tools**

FS<sup>2</sup> In-Circuit Emulator with IEEE 1149.1 (JTAG) interface

Power supply for the FS<sup>2</sup> debugger hardware

A CD containing the FS<sup>2</sup> software

IEEE 1284 parallel port

A CD containing Paradigm interface to PC integrated development environment for creating x86 real and protected mode embedded system applications

Complete set of documentation

#### **Ordering Information DSTni-LX-Kit3**

#### **Ordering Information**

#### Hardware

DSTni-LX Development Board

#### Software

Real Time Operating System (RTOS) and TCP/IP Protocol Suite (binaries)

#### **Development Tools**

Paradigm C++ Professional (IDE, compiler, assembler, linker, locator) and JTAG FS2 In-Target Simulator

#### **For More Information**

#### **Master Distributor**

Grid Connect Inc. 1841 Centre Pt. Circle, #143 Naperville, IL 60563 630.245.1445 630.245.1717 sales@gridconnect.com www.gridconnect.com

