LIVE DATA EXCHANGE (LDX™)

Applied Signal Processing, Inc.

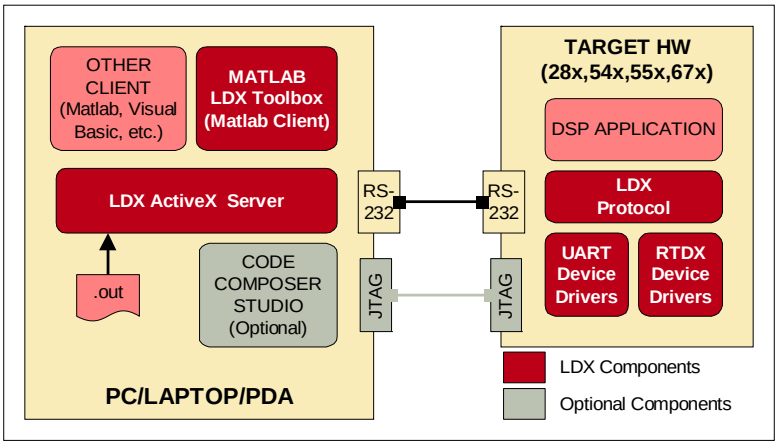
1981 N. Kollath Rd. Verona , WI 53593 / 608.441.9921 / Fax: 608.646.0311 / www.appliedsignalprocessing.com

TALK TO YOUR TARGET™

Applied Signal Processing's Live Data eXchange (LDX™) creates a seamless communication link between a target DSP and a PC, Laptop or Palm device. With LDX™ DSP developers can easily expand the functionality of their products to include a PC to DSP serial interface which is useful for applications that require field upgrades, parameter tuning or data interrogation without the use an emulator connection. For product development, LDX™ can use an emulator connection (instead of a serial port) to create an essential tool for engineers that provides "watch window" functionality without momentarily halting the DSP processor during reads and writes to the Target. This eliminates CODEC data glitches and synchronization corruption that often plague normal emulator usage on multi-channel DSP Targets. LDX™ is easier to use and more flexible than typical Texas Instruments RTDX™ based approaches because the LDX™ interface dynamically gives the PC Client access to all target memory and variables.

ADVANTAGES

- Allows seamless exchange of data between the PC Client and DSP Target environment.
- Does not require a DSP emulator.
- Does not halt the DSP during communications and memory reads/writes.
- All variables within the symbol table may be accessed without recompiling the DSP code.
- Provides a low cost DSP interface tool for field support.



LDX™ COMPONENTS

- LDX™ ActiveX Automation Server - A Windows activeX object/program that provides both a high level abstraction to the DSP target and the low level interface to the DSP over a physical connection. The LDX automation server can download a COFF out file to the DSP and use the symbol table to translate generalized symbol read and write requests to low level LDX™ commands. The Automation Server architecture allows it to be used by automation clients such as Mathworks MatLab™, Visual Basic, Visual C++ or Excel.

- Matlab LDX Toolbox - A collection of Matlab scripts and Graphical User Interfaces (GUIs) that allow a user to interface with the DSP Target application.

- Target DSP LDX Protocol and Device Drivers - The LDX™ DSP Driver software is design for the Texas Instruments family of DSPs. We have drivers for the TI 28x, 54x, 55x, and 67x DSP families. For other platforms, please contact us.

PC TO TARGET CONNECTION OPTIONS

- RS-232 Serial Connection - Add a simple two pin RS-232 connection to your DSP hardware design. This approach is particularly attractive for end user applications that require field support or a User Interface.

- Standard Emulator Connection - LDX™ can use a USB or JTAG emulator running Texas Instruments Code Composer Studio™ (CCS) with Real Time Data Exchange (RTDX™ - A trademark of Texas Instruments, Inc.) as the data pipe. CCS and LDX™ both use this connection to the DSP without resource conflicts.

- Other Connections – please contact us about customizing LDX to fit your needs.

ABOUT APPLIED SIGNAL PROCESSING, INC.

Applied Signal Processing, located near Madison WI, provides custom engineered solutions, reference designs, and contract engineering services for Digital Signal Processing and Embedded Systems.

MathWorks Partner

DSP TEXAS INSTRUMENTS