Hypersignal® VIDSP™ Studio

Advanced Virtual Instrumentation Environment for Windows® 95/98/NT

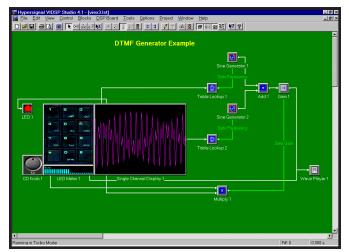
VIDSP Studio

Fast, Flexible Design Environment for VI Applications

- Virtual Instrumentation and Data Acquisition applications
- Efficient, <u>High-speed</u> Graphical Design Environment
- Open Software Architecture for flexible user expansion
- Includes hundreds of functions!

Overview

Hypersignal VIDSP Studio is a powerful new graphical design environment created with the engineer in mind. VIDSP Studio contains an extensive set of processing functions that provide the high performance building blocks developers need to implement a virtually limitless number of Instrumentation and Acquisition projects. Photo-realistic controls, indicators, and displays allow for extremely life-like systems to be designed. Stand-alone projects (run-time applications) may be created using the application builder wizard. The environment is based on an open software architecture to allow easy extension using a standard C compiler (i.e. Microsoft Visual C/C++). A Digital Filter Design utility is also included, and can be used with included FIR and IIR digital filter design blocks.



DTMF Example worksheet created with VIDSP Studio

Graphical Interface

VIDSP Studio uses a methodology of developing instrumentation and acquisition algorithms and systems graphically by simply connecting functional blocks together with point-and-click methods. A users only needs to choose function blocks, place them on a worksheet, select their parameters interactively, and describe their data flow by connecting with lines using a mouse. A visual design is generally a more natural design methodology, and is the perfect paradigm of the old saying "A picture is worth a thousand words".

Interactive Design

A good visual design environment provides interactive control and observeability of the design at execution time which allows "on-the-fly" types of analysis and "whatif" scenarios. With VIDSP Studio the user can change design parameters quickly

with pop-up menus or controls, and immediately observe the results with graphical text and waveform displays. Virtually all blocks have parameters the user can modify to achieve the desired function. To adjust these parameters, the user simply clicks on the block's icon and a menu appears. The parameters are easily edited and modified. In a textual design environment, it can be painful to change parameter values and obtain results interactively. Since the VIDSP Studio environment allows designers to change the structure or design parameters quickly, it prevents interruptions of the design thought process. This results in more efficient design activities which can lead to a tremendous time savings.

Fast Execution Speed

For virtual instrumentation development environments to provide acceptable systems, they must run FAST! VIDSP Studio excels at this, and because each block function is a DLL, your system runs at **executable**, not interpretive speed! The well-designed I/O functionality of VIDSP Studio combined with its optimized processing functions (i.e., FFT's, Digital Filters, etc.) provide a comprehensive design environment for VI systems of all kinds.



Stand-alone application created with VIDSP Studio Professional Edition

