

### **OORVL<sup>™</sup> DSP Graphical Compiler**

Advanced DSP Design Environment for Windows® 95/98/NT

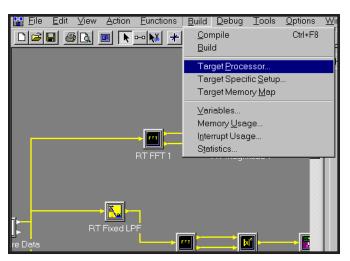
## **OORVL DSP Graphical Compiler**

# Graphical Compiler for Design of DSP Applications

### **Overview**

The OORVL DSP Compiler can be thought of as a "Graphical DSP Compiler", able to create a DSP Algorithm from a graphical design, or block diagram approach. Using component-based functions, this graphical design is then turned into DSP Object Code directly within the environment. The capability of exporting DSP Object Code Files allows dramatic mantime savings on many DSP applications.

- Allows "Black-box" design with re-usable software components
- Easy-to-use Graphical Design Environment
- Open Software Architecture for flexible expansion
- Hundreds of functions including a C runtime library!
- Supports standard development tools (C Compilers, Libraries, etc.)



Hypersignal OORVL DSP Graphical Compiler

This new technology is based on an open software architecture and works synergistically with the standard DSP assemblers, compilers, linkers; users may create their own unique block functions for the DSP and use them within the OORVL DSP Graphical Compiler with other block functions. Since OORVL DSP Graphical Compiler supports many types of DSP's, moving designs from one processor family to another is very easy, allowing migration to faster, higher-performance DSP's.

Just as a C compiler turns a textual language (i.e., C) into DSP object code, the OORVL DSP Graphical Compiler turns a graphical language, or block diagram (Object Oriented Real-time Visual Language, OORVL) directly into DSP object code. With this powerful tool users will write much or all of their algorithm, or software, graphically as opposed to textual software, like C or assembly. The savings in design/development time as well as the advantages of maintainability and self-documenting nature of a graphical design are considerable.

#### **Graphical Interface for Easier Design**

Additionally, OORVL DSP Graphical Compiler is aimed at developing DSP projects similar in nature to how a conventional DSP C Compiler is used today; the beauty is that the end user need not have a specific DSP board, but may develop for virtually any DSP target (just like the C language). OORVL supports a variety of target processors including many popular DSP's. The additional overhead is very small due to the low-risk architecture used by OORVL DSP Graphical Compiler. In addition to the dedicated signal procesing functions, a standard library is provided which is virtually 1 for 1 compatible with standard C libraries, so learning curves are reduced. Users will have a good degree of comfort when using this 'new' compiler technology; users will be able to quickly write their algorithm, or software, graphically using OORVL. Since the user leverages OORVL DSP Graphical Compiler's open software architecture, they can easily extend the environment - with true black box functionality!

OORVL DSP Graphical Compiler uses a methodology of developing DSP algorithms and systems graphically by simply connecting functional blocks together with point-and-click methods. A user only needs to choose the desired block functions, place them onto 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".



©Hyperception, Inc. 1998