

Why is our Tool Better?

Q. How do our Hypersignal graphical design environments compare in general to other "similar" products?

Efficient Implementation under Windows

To begin with, ours is generally a more efficient implementation and faster - all of the block functions are executable DLL's running at **executable speed**, not interpretive speed. Our product can also take advantage of frame-based, or vector-based processing, which means data may be processed either a single point at a time, or handled in frames for block-oriented processing yielding a much higher throughput in many DSP applications. This was the result of being DSP-focused at the start of our company's business and developing this product exclusively for Windows. The inherent efficiency tends to be quite important in many DSP Applications.

Open Software Architecture (Easy to add custom functions)

In addition, it is generally easier to add user-defined custom block functions. This is mainly due to our open software architecture coupled with our powerful, robust Block Wizard which produces the bulk of the code required for a new block function; a standard C compiler (like Microsoft Visual C/C++) is the vehicle used to extend our environment. Hyperception engineers use the same procedure to create all of the functions within Hypersignal, so it is indeed a very usable and proven method for the end-user.

Real-time Support (RIDE, OORVL DSP Graphical Compiler)

Another reason Hypersignal Software stands out is that in addition to simulation on the host machine, our product supports many industry standard (not Hyperception made) real-time DSP/Acquisition boards at a fine-grained block function level. No other product on the market has achieved this type of integration and speed, and for those customers eventually considering any real-time or data acquisition types of projects, this is a very important consideration. OORVL DSP Graphical Compiler supports many DSP chips also.

Hierarchy Support

The capability for true n-level hierarchy design is another important consideration for many customers. With this, the user can create subsystems of the overall design, and share these subsystems with other users. When a correction to the subsystem is made, it can be applied to all systems which use that hierarchical construct. This hierarchy also gives the user another method of creating custom blocks visually, without the need for creating a DLL or writing any source code or arduous script files.

Optional Source Code Generation

Another capability of our product is that it supports an optional ANSI C Source Code generator to obtain the C source from a visual design (Enterprise Editions). Although other products may have this, not all of them do, and those that do tend to be considerably more expensive. We would compare favorably on the basis of the efficiency of the code produced (whatever the tool cost). This support is important for customers who may not initially require this, because it minimizes their risk if they later decide that they do.

Multi-rate and Multi-dimensional Support

Another point for some is that our product can handle multi-rate and multi-dimensional signal processing. This implies that image processing professionals could use our product in that particular market. Even if the customer does not need this, it does tend to make them consider how well-thought-out our overall software architecture must be, which may be a deciding factor for their application.

Optional Parallel Processing Support/Third party company support

At times, the capability of our Hypersignal Software to support parallel processing with the Pegasus product is of some importance to certain customers, especially as they start requiring more processing power to adequately deal with their project's requirements. Again, for some customers, just simply knowing that this capability is available makes for a reduction in the technical/business risk of their purchase decision.

Overall Price/Performance and Absolute Cost

Our products typically cost less than many of our competitors, and we believe that our price/performance ratio is much better than other potential solutions. We encourage you to evaluate our software in this performance area, and welcome comparisons.

Hyperception's General Product Focus

In general, we have a more DSP-focused approach to our product than other companies; this is a direct result of the **over-a-decade worth of work specifically on DSP Software for the PC platform**. This longevity in the DSP/engineering marketplace has not only allowed us to improve our product in a real customer-driven manner, but also offers the customer some reassurance that we may be around when other companies may not.