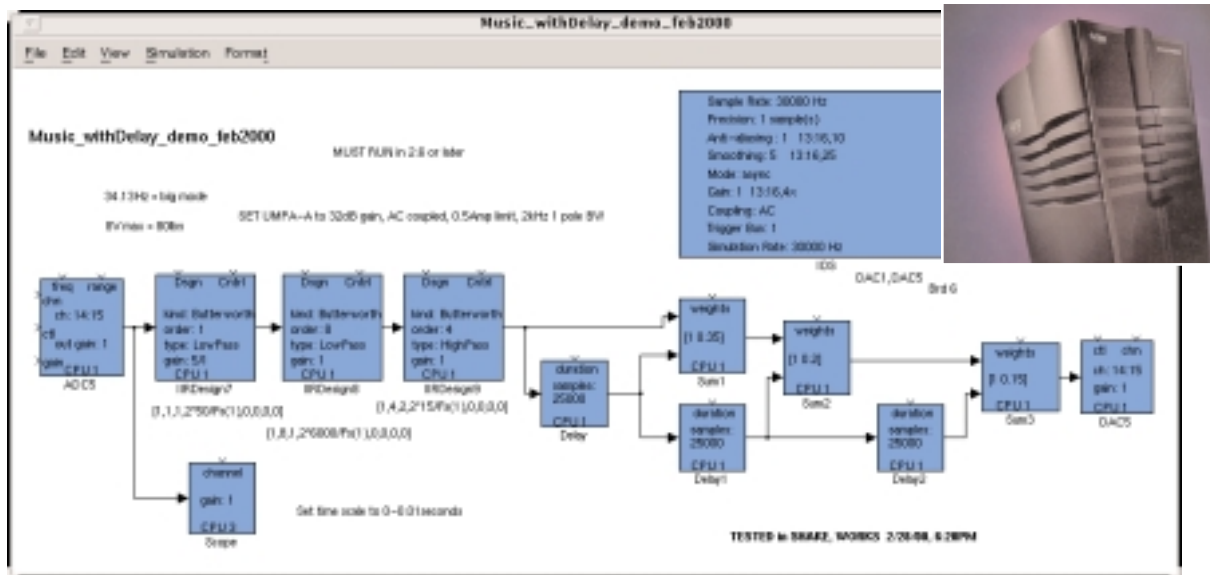


Application Note

General Real-Time I/O Parallel Processor Graphical Algorithm Development for Closed Loop I/O Processing



The General Realtime I/O Parallel Processor (GRIPP) software was developed by AP Labs to run on a realtime version of the Solaris Operating System.

The system features include:

- Intuitive User Interface built using MatLab™ and SimuLink™
- Over 60 different icons to build mathematical models
- Provides ability to add user icons written in C or as MatLab™ m-files
- Interface to VxWorks based I/O subsystem with 64 high speed D/A and A/D channels
- Parallel Processing of Mathematical Model utilizing 16 UltraSparc™ Processors
- Scalable to run in non-realtime mode on a Sun Workstation with a single CPU
- Realtime signal graphics display
- User Interface software runs on separate UltraSparc Computer in full system configuration

- *High Speed Closed Loop system achieving less than 20 microsecond system latency*
- *Realtime tasks communicate utilizing shared memory across Gigaplane-X backplane*
- *High speed Input/Output between E10000 and I/O subsystem conducted via FibreChannel*