the spectral amplitudes in the neighborhood of the peak. In addition, a sound segment can be captured to disk file A and the same segment processed can be captured to disk file B. Then each can be averaged and a difference displayed in order to show the frequency response of the processing. Thus the spectral analysis subsystem can be used as a graphical aid to EQ processing and as a test system for revealing the frequency response of exterior processing units such as de-essers, reverberation and other effects modules.

VIII. Conclusion

The GOTHAM Signal Arts Sigma-DSP3 is a high fidelity digital mixing, EQ and dynamics processing system for professional music recording and post-production studios. It can accommodate up to 60 digital audio channels and is designed to interface to existing 24, 32 and 48 channel digital tape machines, and be controlled by the faders and knobs of any scanned analog console or computer virtual console via a simple Ethernet connection and message protocol.

References

[1] R.R. Shively, E.B. Morgan, T.W. Copley and A.L. Gorin, "A High Performance Reconfigurable Parallel Processing Architecture", Proc. Supercomputing '89, November 1989.

[2] R.R. Shively and A.L. Gorin, "A Reconfigurable Fault-Tolerant Systolic Signal Processor", Proc. ICASSP '89, May 1989.

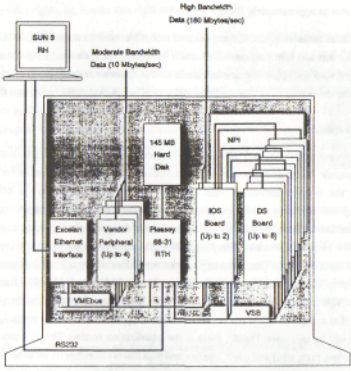

Figure 1: DSP3 Architecture