

Hallal, H., Negulescu, R., and A. Petrenko. "Design of Divergence-free Protocol Converters Using Supervisory Control Techniques" In *Proceedings of the 7th IEEE International Conference on Electronic Circuits and Systems (ICECS'2K)*, pp. 705-708. Beirut, Lebanon, December 17-20, 2000.

Abstract:

In this paper, we use supervisory control techniques to design a protocol converter, which avoids divergence in a communication system. A typical application is to design gateways that interface heterogeneous computer networks while minimizing the communication time with the involved parties. As an example, we design a divergence-free converter that interfaces an alternating bit sender and a nonsequenced receiver, and we implement the converter as an asynchronous circuit.