High Level Synthesis Of Controllers For Communication Protocols

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Summary

A method for implementing communication protocols in hardware is presented. A design automation system that accepts Petri net models of digital systems and produces VLSI layouts is proposed. It is assumed that the composite Petri net model of the protocol is available. A procedure for automatically detecting the entities of the communication protocol is given. This procedure has exponential complexity as it uses a reachability graph. No restrictions have been put on the Petri net model

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