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### An Asynchronous Loom for a Router Node in Noc Scheme to Enhance the QoS Mechanism

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**Abstract** - In contemporary IC technology, the Network on chip (NOC) replaces the busses and the stanch interconnects. A proficient router is nothing but to select an unswerving path between the sources to destination in a network. The major gears of a NOC node as a router are nothing but the switches, which transmits the data from one place to another and the Network Interface (NI), provides a frontier between the network nodes. In this paper, we proposed a design of a novel package for a network node with asynchronous communication to/from the synchronous modules. This dedicated design includes transmitter and receiver communication ports, Four-phase Handshake protocol and asynthesized synchronizer. This design has been bear out with VHDL code and simulated in modelsim. We believe in that, which provides a reliable asynchronous communication services out of the ordinary clock subsystems.