Router 1X3 - RTL Design and Verification

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Abstract : Routing is the process of moving a packet of data from source to destination and enables messages to pass from one computer to another and eventually reach the target machine. A router is a networking device that forwards data packets between computer networks. It is connected to two or more data lines from different networks (as opposed to a network switch, which connects data lines from one single network). This paper mainly emphasizes upon the study of router device, its top level architecture, and how various sub-modules of router i.e. Register, FIFO, FSM and Synchronizer are synthesized, and simulated and finally connected to its top module.

Keywords : data packets, networking, router, routing
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