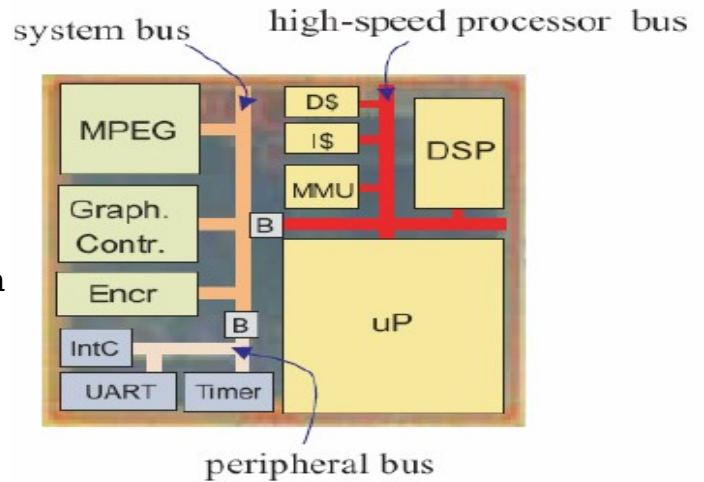


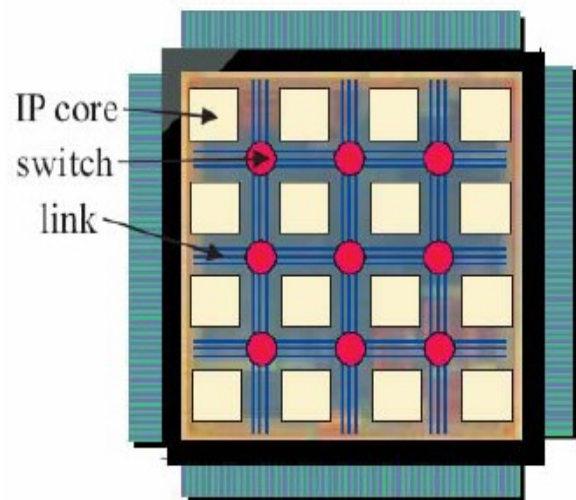
Network On Chip

- **Clock skew is the main problem in large bus-based SoCs.**
- **A single bus can not have more than one access at the same time.**

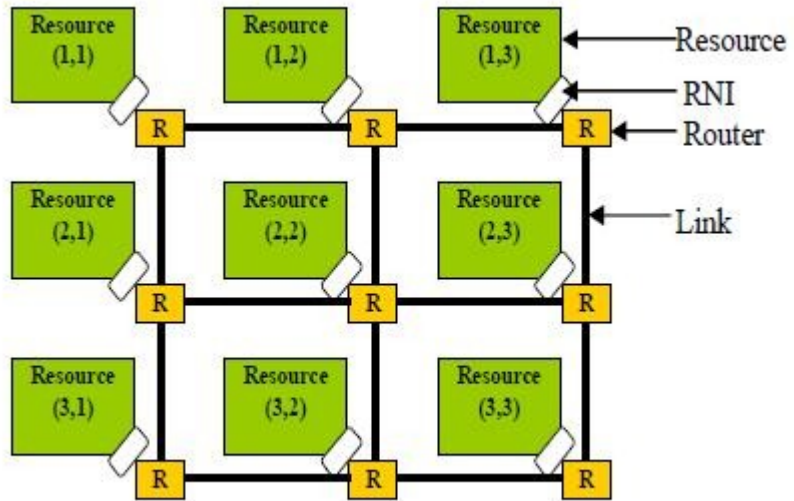


: *Example for a typical bus-based SoC*

- **Routers in the Network solve the clock skew problem**
- **Transmitting packets instead of words.**
- **Reduce the complexity of designing wires for predictable speed, power, noise, reliability, etc.**
- **Support modularity and IP reuse via standard interfaces.**
- **A high level of parallelism is achieved.**



Example of NoC with IP cores links and switches.



- A 2*2 NETWORK:

