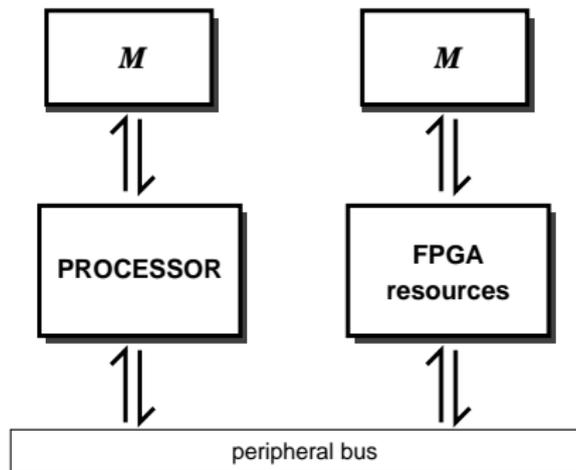


Systems Built From FPGAs

FPGA System Architectures

- ▶ Peripheral Bus
- ▶ Co-Processor
- ▶ Function Unit
- ▶ Peer Processor
- ▶ Network Interface

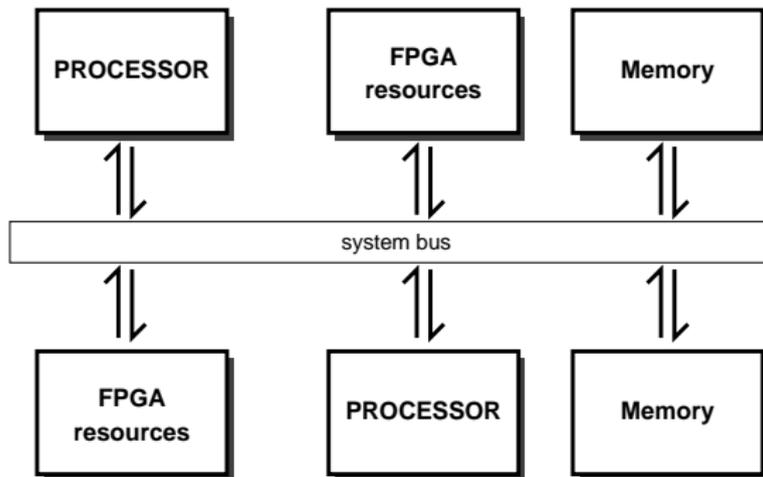
Peripheral Bus



Peripheral Bus Examples

- ▶ DEC PAMette
- ▶ Annapolis Microsystems (PCI bus)
- ▶ Nallatech

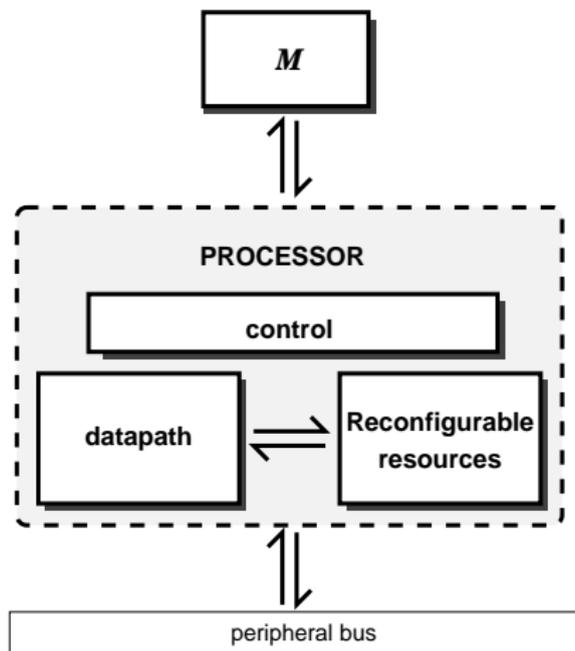
Co-Processor (System Bus)



Co-Processor (System Bus) Example

- ▶ Splash-2 (attached to S-Bus)
- ▶ SGI RASC
- ▶ DRC
- ▶ XtremeData
- ▶ Pilchart (DIMM slot)

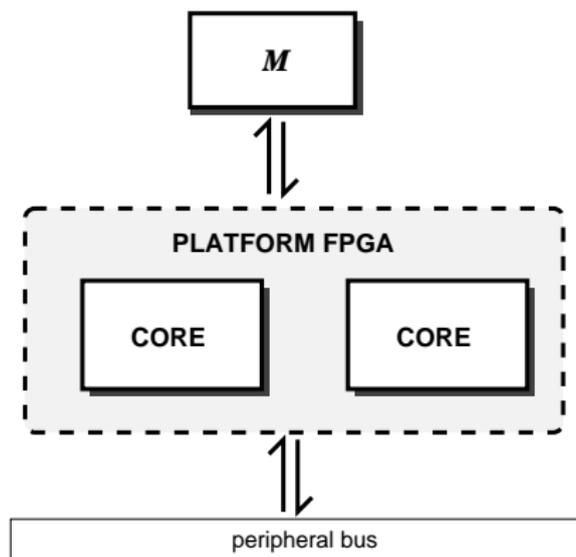
Function Unit (1)



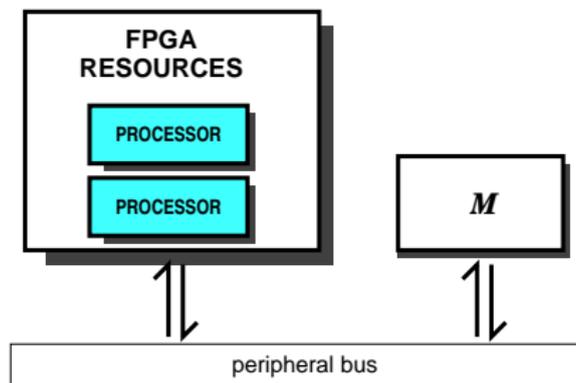
Function Unit (1) Examples

- ▶ Garp
- ▶ Chimera
- ▶ PRISC

Function Unit (2)



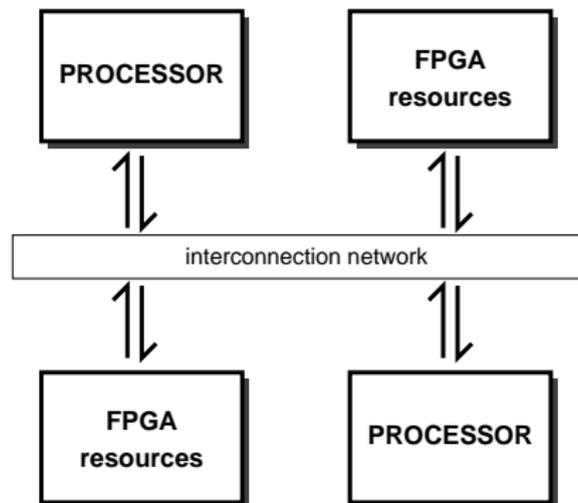
Function Unit (2)



Function Unit (2) Example

- ▶ Xilinx Virtex II Pro
- ▶ Xilinx Virtex 4 FX
- ▶ Xilinx Virtex 5 FXT

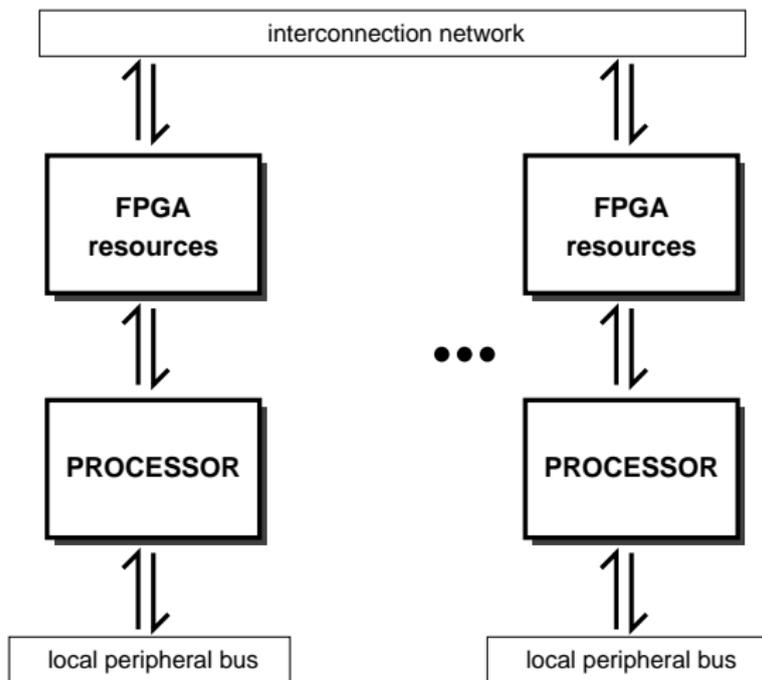
Peer Processor (backplane)



Peer Processor (backplane) Example

- ▶ Cray XD-1

Network Interface



Network Interface Examples

- ▶ SRC MAPstation
- ▶ Adaptable Computing Cluster :-)