

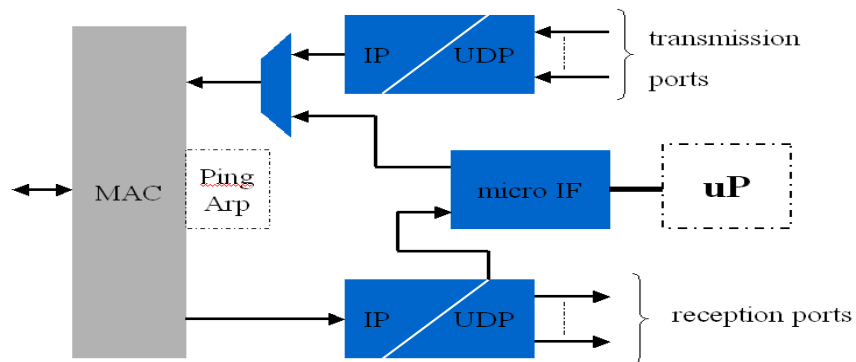
Overview

UdpStack is a set of VHDL cores implementing UDP stack for FPGA applications, UdpStack is the ultimate Offload Engine.

The UdpStack_SOC version allows user to share the Ethernet link between many hardwired “sockets” (multi Rx/Tx ports) and a processor. UdpStack_SOC meets high flexibility and performance by merging “real time” transfers (hardwired) and control transfers (processor).

UdpStack software interface is directly compatible with Xilinx “EthernetLite” and we provide standalone and LINUX drivers. UdpStack is directly connectable to Xilinx TEMAC or we can add our own MAC if your FPGA does not include one.

We always provide one or more application examples, some demo boards are directly supported by our application examples.



Features

High performances but low resources :

- “Easy To Use”, a real plug and play module
- High speed, user can reach the full link bandwidth
- Protocols : UDP, IP, ARP*, ICMP* * : can be removed if handled by the software
- Support Jumbo frames
- Handle clock domain crossing, for direct connection to user clock domain
- Provided with 256 dedicated MAC addresses

Applications

- Embedded OS application : Linux, uC-Linux,
- WEB2.0 mixed High throughput data transfer
- Video Over IP, MPEG-TS over UDP/IP : especially server application
- Voice Over IP, SIP/RTP over UDP/IP : especially server application