

POWERQUICC II ETHERNET PORT-TO-PORT FORWARDING

Data Sheet

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PRODUCT DESCRIPTION

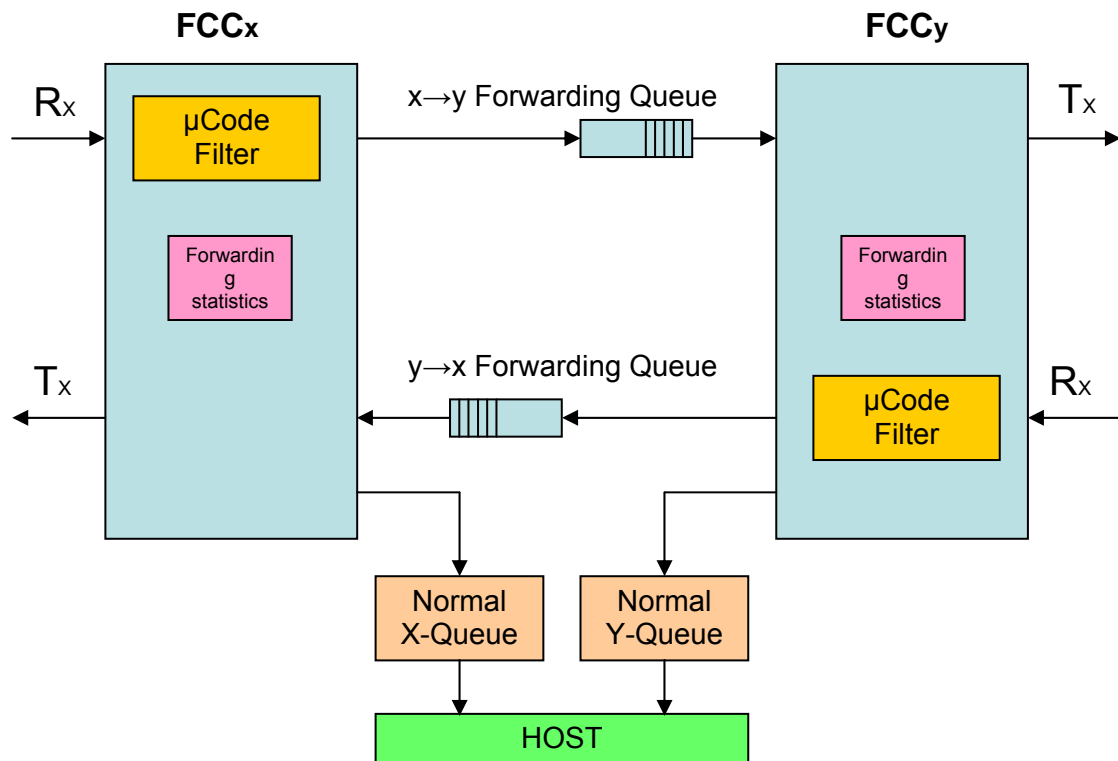
A microcode module carrying out Ethernet packets port-to-port forwarding operation.

Main features:

- Forwarding is based on exact match of IP destination address.
- Any FCC pair can be selected for forwarding (i.e. FCCx to/from FCCy)
- None-matched packets are forwarded to the standard HOST queue
- Forwarding BDs are located on the DPRAM to ensure fast transfer, and to minimize bus traffic
- Statistics counters are maintained for each port:
 1. Number of matched IPs counter
 2. Number of forwarded packets counter
 3. Number of discarded packets due to busy queue
- Highly efficient zero copy implementation
- Supports up to 128 IP exact match addresses, or IP address/port number combination.
- Supports three way forwarding (all tree ports)
- Compatible with PowerQUICC HIP7 versions (MPC8280/827x/824x), but can relatively easily be ported to support earlier versions.



An illustration of the operation of the module is presented below:



ABOUT DOGAV SYSTEMS

DoGav Systems is a leading provider of software and hardware consultancy and training services. It specializes in Freescale's processors, in particular the PowerQUICC family of communication processors. It has a proven track record of over 20 years supporting Freescale customers in developing market-leading products for the communications equipment market.

DoGav Systems is Freescale's most experienced and active microcode developer. Since receiving its license in 2000, it has developed numerous customized microcode packages for both small and large Freescale customers. These packages are now successfully deployed in commercial products. In addition, DoGav Systems also offers more than 30 off-the-shelf microcode products for the PowerQUICC I, PowerQUICC II, PowerQUICC III and PowerQUICC II Pro processors.