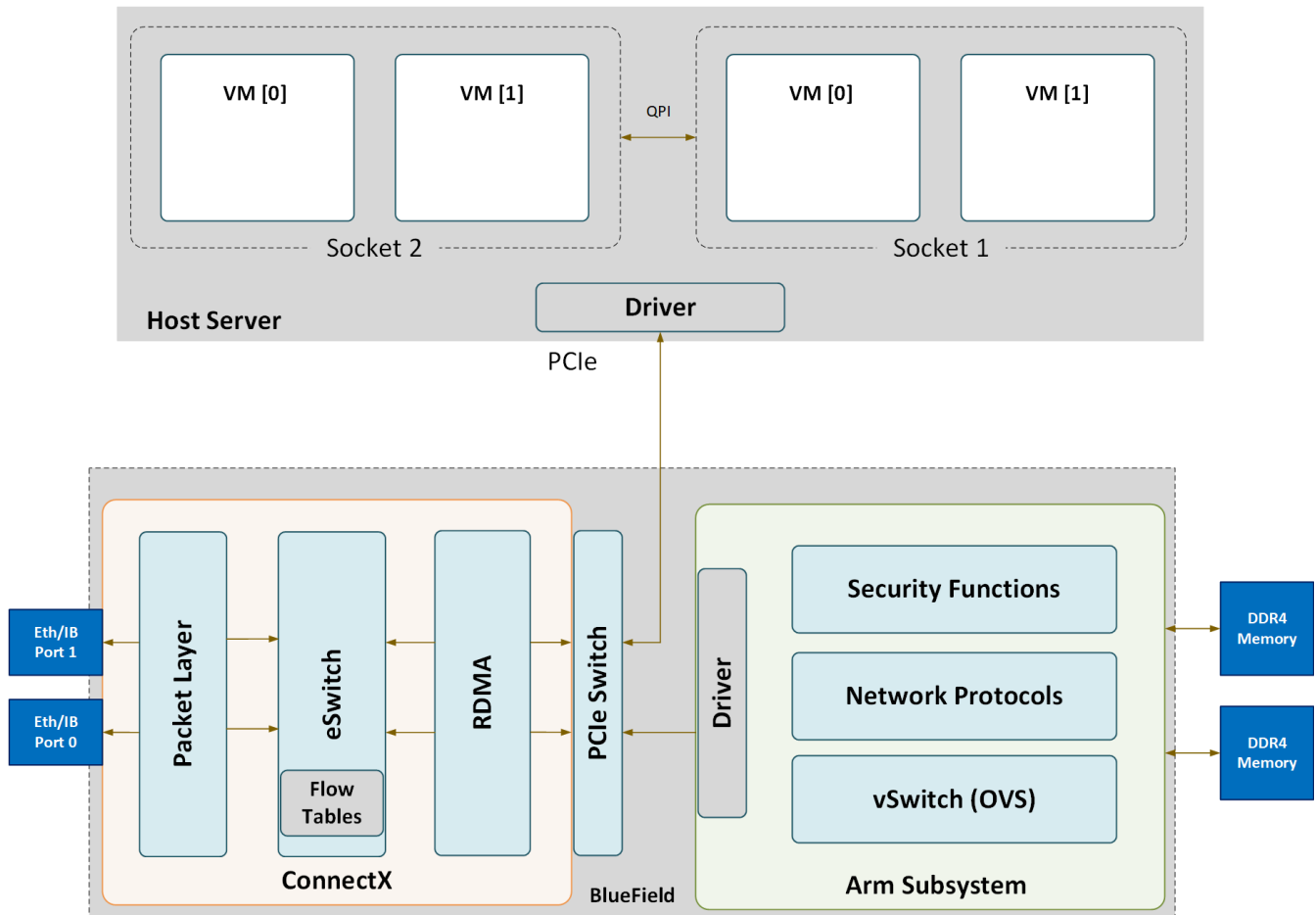




Functional Diagram

The following is a functional diagram of the NVIDIA® BlueField®-2 DPU.



For each network port of the BlueField networking platform (DPU or SuperNIC), there are 2 physical PCIe networking functions exposed:

- To the embedded Arm subsystem
- To the host over PCIe

Note

Different functions have different default grace period values during which functions can recover from/handle a single fatal error:

- ECPFs have a graceful period of 3 minutes
- PFs have a graceful period of 1 minute

- VFs/SFs have a graceful period of 30 seconds

The mlx5 drivers and their corresponding software stacks must be loaded on both hosts (Arm and the host server). The OS running on each one of the hosts would probe the drivers. BlueField-2 network interfaces are compatible with NVIDIA® ConnectX®-6 and higher. BlueField-3 network interfaces are compatible with ConnectX-7 and higher.

The same network drivers are used both for BlueField and the ConnectX NIC family.

Copyright 2024. PDF Generated on 08/20/2024