

Guest VM

Trap to hypervisor for access
to PCI config and MSI-X

Direct MMIO

PCI Bar 2 (Config/MMIO)

IOMMU-based DMA
is based on GPA

IOMMU

Hypervisor

PCI Config (IO)

PCI Bar 4 (MSI-X/MMIO)

IRQ is injected via
IOMMU or hypervisor

hardware

