


## X250 - SmartNIC Card for Next-Gen Workloads

In virtualization environments, general Network Interface Controller (NIC) cards can no longer satisfy the evolving needs of applications. Inventec X250 SmartNIC solution offers dual port 25G high speed connectivity in a full-height, half-length and single-width PCIe form factor, combining a controller that is based on Broadcom® Stingray™ SmartNIC SoC family with an integrated ARM CPU, and an Intel® Arria® 10 FPGA. It can be tailored to add specific acceleration applications, or even fulfill unique functions that are yet to be seen in today's architecture. Most importantly, X250 offers flexibility that is not constrained by the existing hardware infrastructure. The programmability makes X250 adaptable with the growth of your business, open to all the possibilities in application of network acceleration, smart security, software define storage, network function virtualization (NFV), among others.

### Flexibility, Programmability, and High Performance

In X250, the FPGA gets its own PCIe channels, connecting to both the ARM and the host x86 CPU. Performance can be extracted from it if treating the NIC and the FPGA as two independent devices with two PCIe x8 bifurcated from the x16 slot. The FPGA offers programmability and high performance, while the ARM runs embedded Linux – new features can be added-in to either or both of them, providing great flexibility. You can even make prototypes in the ARM and then migrate to the FPGA to gain better performance! X250 series is generally customizable to accelerate features in SDN, 5G RAN, and edge computing. 

### Highlights -

- NIC + FPGA FHHL PCIe Accelerator Card
- Dual 25G (SFP28) Ethernet Port
- PCIe Gen3 x16 Host Interface with x8/x8 bifurcation

Model Name	X250
Form Factor	Full Height/Half Length/Single Width Standard PCIe Card
NIC	Broadcom® Stingray™ BCM58804
FPGA	Intel® Arria® 10 GX660 Series
Memory	Onboard: 2 channels of DDR4 2400MHz 16GB
Storage	64GB eMMC flash
Network	Dual port 25G SFP28
Host Interface	PCIe Gen3 x16 (two x8 bi-fabrication)
TDP	75W

