PARPRO

RPE-130
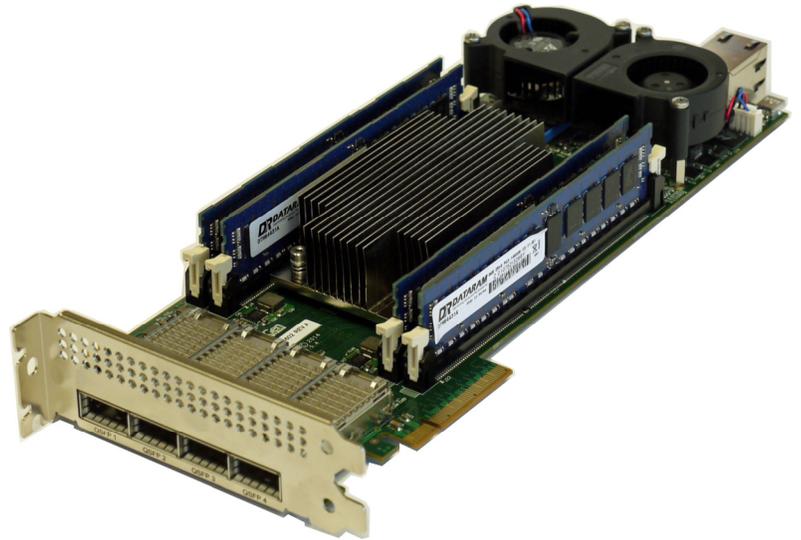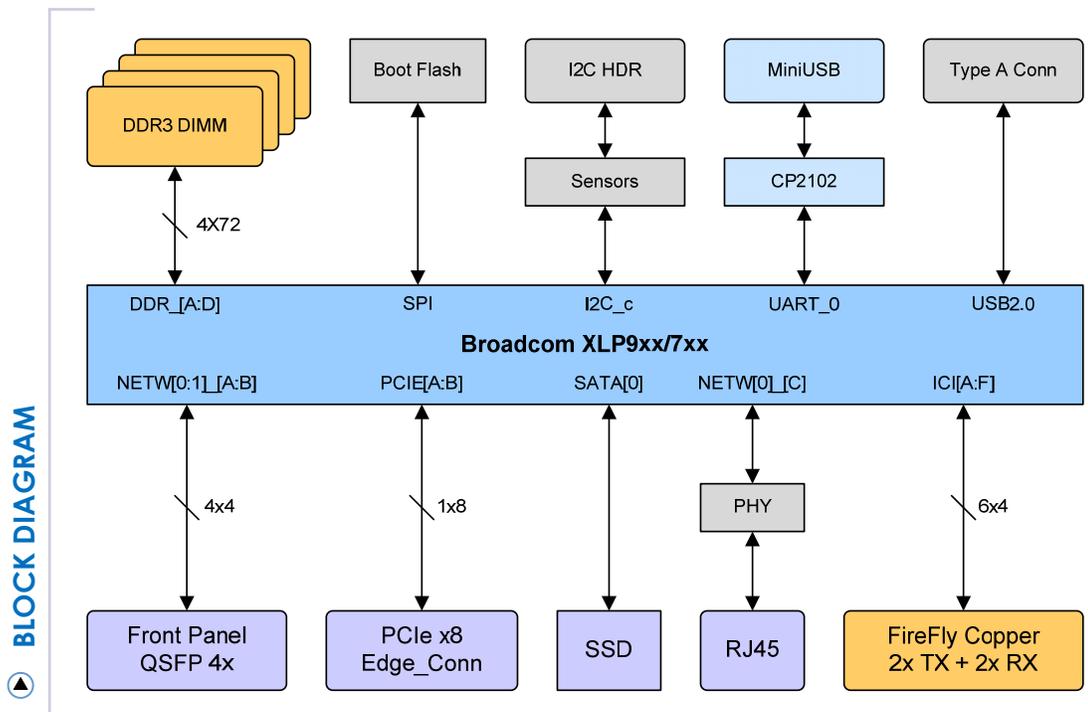## PCI Express Broadcom XLP II Packet Processor Card

SUMMARY

Featuring Broadcom XLP II technology, the PARPRO RPE-130 Accelerator Card is a high-performance network processor PCI Express card designed for use in PCI Express compliant systems. It showcases the latest Broadcom XLP9xx/7xx Network Processor with clock rate of 1.8GHz. The RPE-130 includes 128GB of quad-channel 72-bit wide DDR3 ECC memory running up to 2133MT/s. Four QSFP/ interfaces are provided on the front panel, supporting 40GigE or 10GigE. Refer to the block diagram for detail.
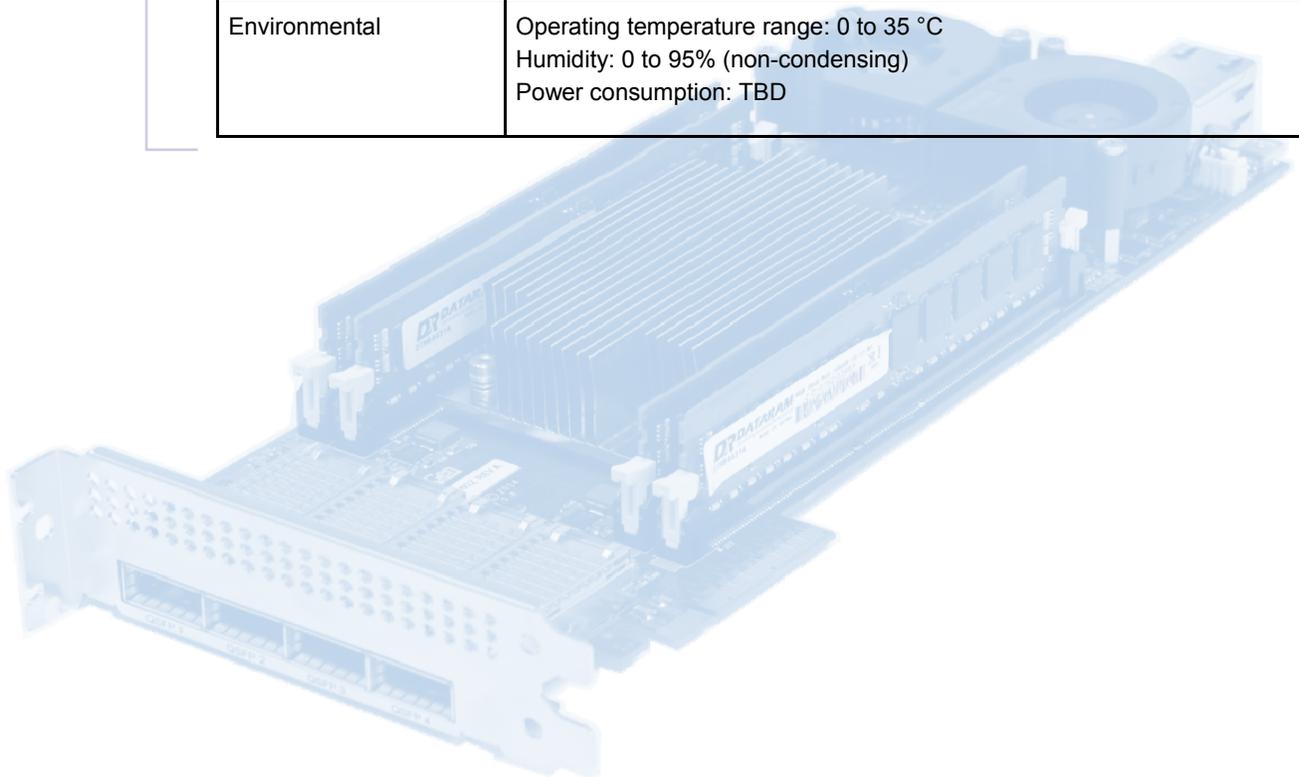
APPLICATIONS

Packet Processing

Deep Packet Inspection

Data Security

Load Balancing

BLOCK DIAGRAM

| DDR3 DIMM | Boot Flash | I2C HDR | MiniUSB | Type A Conn |
| | | Sensors | CP2102 | |

4X72

Broadcom XLP9xx/7xx

| DDR_[A:D] | SPI | I2C_c | UART_0 | USB2.0 |
| NETW[0:1]_[A:B] | PCIE[A:B] | SATA[0] | NETW[0]_[C] | ICI[A:F] |

4x4 · 1x8 · PHY · 6x4

| Front Panel QSFP 4x | PCIe x8 Edge_Conn | SSD | RJ45 | FireFly Copper 2x TX + 2x RX |

FEATURES

Network Processing Units (NPUs)	Broadcom XLP 900 or 700 series processors • Single processor with clock rate of up to 1.8GHz • Up to 16 cores and 64 nxCPU Virtual CPUs
Memory	Up to 128GB of DDR3 memory w/ ECC on quad-channel x72 bus DDR3 clock rate up to 2133MT/s Up to 64GB soldered down SSD
I/O Capabilities	Four front panel SFP/SFP+ sites • Supports 40GigE or 10GigE (via breakout cable) PCI Express Gen3 x8 to base board USB 2.0 Type A host connector MiniUSB UART console 10/100/1000Base-T RJ45 Broadcom ICI coherent Processor interconnect (XLP 900 series only)
Mechanical	Standard dual-slot PCI Express card form factor • full length full height • 6-pin aux power connector
Environmental	Operating temperature range: 0 to 35 °C Humidity: 0 to 95% (non-condensing) Power consumption: TBD