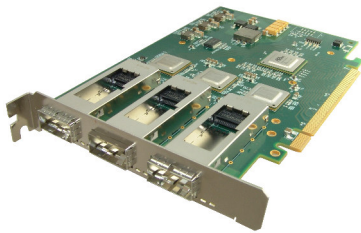


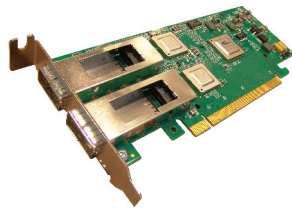
Dual and Triple Port 10/40/56GbE Network Adapters

Maximum Ethernet Performance - up to 100 Gbps Aggregate

HotLava System's dual-port and triple-port 10/40/56 gigabit Ethernet NICs delivers ultimate bandwidth performance by incorporating two or three independent Mellanox ConnectX-3 controllers and fully utilizing the bandwidth capability of Gen 3.0 PCI Express architecture.



Fuji 240G3Q
3x10/40/56GbE NIC



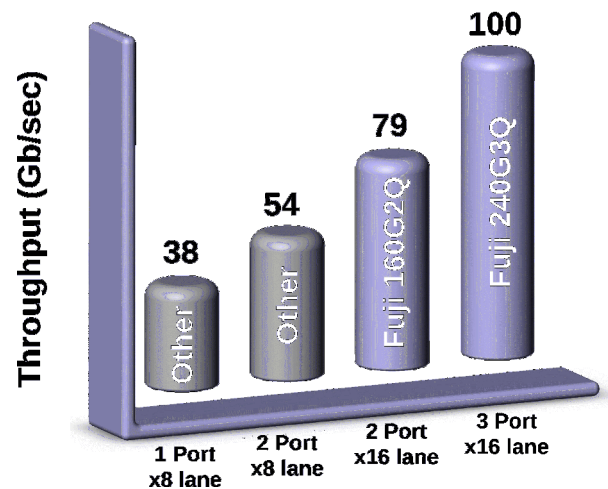
Fuji 160G2Q
2x10/40/56GbE NIC

UP TO 100% MORE
BANDWIDTH THAN
ALL OTHER x8 LANE
DUAL-PORT 40GbE
ADAPTERS

Highlights

- Two or three independent Mellanox ConnectX-3 10/40/56GbE controllers in one adapter
- Supports Ethernet or Infiniband
- Up to 100 Gbps aggregate bandwidth
- PCIe Gen 3.0 (8GT/s), x16 lane
- Low latency RDMA over Converged Ethernet (RoCE)
- Compatible with TCP/UDP/IP and iSCSI stacks
- Hardware-based I/O Virtualization
 - » SR-IOV
 - » Up to 127 Virtual Functions per Port

40GbE NIC Bandwidth Comparison



Key Features

- x16 lane PCIe Gen3 connector
- Dedicated 10/40/56GbE controller for each port
- Requires only one PCIe slot
- QSFP+ interfaces
- RDMA over Converged Ethernet (RoCE)
- Sockets Acceleration, HW-based stateless offload
- Single Root I/O Virtualization (SR-IOV)
- Multiple queues per virtual machine
- IEEE 1588 precision time protocol
- Intelligent interrupt coalescence

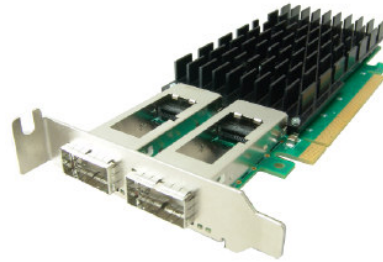
Benefits

- > Up to 2X the throughput of all other x8 lane dual-port 40GbE NICs
- > Up to 79 or 100 Gbps of aggregate throughput
- > Ideal for space-constrained chassis
- > Allows for hot swappable optical or twin-ax DA copper cables
- > Low latency and high bandwidth
- > Reduced CPU utilization for TCP/UDP/IP transport
- > Reduced CPU utilization by enabling VM hypervisor bypass
- > Reduced CPU utilization for NIC to VM traffic
- > Accurate data delivery time stamping for SLA measurements
- > Reduced IRQ interrupts when processing high I/O rates

Product Specifications

Media Type
 40/56GBASE-SR4
 40/56GBASE-LR4
 40/56GBASE-CR4
 (Direct Attached/twinax)
 40/56G Active Optical
 Cable

Status LEDs
 Link Active, Link Activity



Product Name	Fuji 240G3Q	Fuji 160G2Q
Number of ports	3	2
Number of Controllers	3	2
Slot Type	x16, PCI-e 3.0	x16, PCI-e 3.0
Media Connector	QSFP+	QSFP+
Form Factor	6.60 in x 4.33 in (Standard Height)	6.60 in x 2.73 in (Low Profile)

Operating System Support

Linux
 OpenFabrics Enterprise Distribution (OFED)
 Windows Server 2012 R2 (x64 only)
 Windows Server 2012 (x64 only)
 Windows 2008 R2 (x64)
 OpenFabrics Windows Distribution (WinOF)
 VMware ESXi
 FreeBSD

Additional Features

IEEE 802.3ae 10 Gigabit Ethernet
 IEEE 802.3ba 40 Gigabit Ethernet
 IEEE 802.3ad Link Aggregation and Failover
 IEEE 802.3az Energy Efficient Ethernet
 IEEE 802.1Q/1p VLAN tags and priority
 IEEE 802.1Qau Congestion Notification
 IEEE P802.1Qbb D1.0 Priority-based Flow Control
 IEEE 1588 Precision Clock Synchronization
 Jumbo frame support (9KB)
 128 MAC/VLAN addresses per port
 Single Root I/O Virtualization
 127 virtual functions / port
 VXLAN
 VMware NetQueue support

Environmental

Operating Temp	0 to 55 °C with 200 LFM airflow.
Storage Temp	-40 to 70 °C
Operating Humidity	20% to 85% non-condensing
Storage Humidity	0 to 85% non-condensing
RoHS 6 Complaint	Yes
Hardware certifications	FCC Class A, CE, VCCI, EN300-386
Power Consumption	Dual-Port: 23 Watts Typical Triple-Port: 29 Watts Typical

Ordering Information

Product Name	Part Number
Fuji 240G3Q	3QF3A60A2
Fuji 160G2Q	2QF3A60A1

Applications

Network Appliance

Unified Threat Management
 SDN Gateway / Router
 High Availability / Redundancy
 Bandwidth Manager
 Access Control Manager
 Ethernet Dedicated Internet Access
 Short Haul Metro up to 10km

Server

Link Aggregation
 High Availability / Redundancy
 Backup Networks
 Storage

Virtual Server

Ultra High Network Bandwidth
 Redundancy / Backup
 Hypervisor Bypass
 Dedicated VM Ports

Video over IP

Surveillance
 IPTV

NAS / SAN

iSCSI
 iSER
 FCoE
 Direct Ethernet attach

Traffic Generator

Maximize Bandwidth and Connectivity