



P488CG2I81L Dual port 100G Ethernet PCIe Card Intel E810 Based

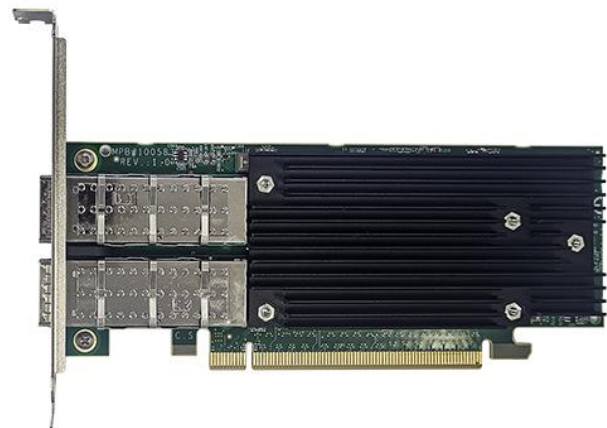
Dual port 100G Ethernet PCIe Card Intel E810 Based

Product Description

Silicom's P488CG2I81L Dual port 100G Ethernet PCIe Card Intel E810 Based is designed for Servers and high-end appliances. The Silicom P488CG2I81L Dual port 100G Ethernet PCIe Card Intel E810 Based offer simple integration into any PCI Express x16 (bifurcated x8x8) to 100Gigabit Networks. The performance is optimized so that system I/O is not the bottleneck in high-performance networking applications.



The Silicom P488CG2I81L Dual port 100G Ethernet PCIe Card Intel E810 Based is based on Intel E810-CAM1 Ethernet controller with fully integrated two 100G Ethernet Ports, enhanced programmable packet processing pipeline, virtualization (Enhanced SR-IOV support with up to 256 VFs, backward compatibility VF driver support), new features for the communications market (fine grained scheduler, transmit head drop support, adjustment of credits according to different headers, enhanced QoS, enhanced burst control) and RDMA (iWARP and RoCEv2).



Silicom's 100 Gigabit Ethernet PCI-Express Server adapters are the ideal solution for implementing multiple network segments, mission-critical high-powered networking applications and environments within high performance servers.

Key Features

LAN and Virtualization Features:

- 100Gbps throughput (each of Tx and Rx)
- Parses up to 504B from packet header
- 768 switch ports (VSIs)
- Programmable forwarding rules
- Virtualization
 - Host virtualization via VMQ and SR-IOV
 - 256 SR-IOV Virtual Functions
 - Stateless offloads for tunneled packets (network virtualization support)
 - Malicious VF protection
- RDMA
 - iWARP and RoCE v2
 - 256K Queue Pairs (QPs)
 - Send Queue Push Mode

- QoS
 - WFQ Transmit scheduler with 9 programmable layers
 - Pipeline sharing and starvation avoidance.
 - Up to 32 Congestion Domains in the Tx and Rx paths
 - QoS via 802.1p PCP or Differentiated services DSCP value.
 - Rx Packet buffer supports at least 3 no-drop flow control events, shared among ports.

Host Interface:

- PCIe x16, x8x8 bifurcation via gold fingers of edge card
- Support PCI Express Base Specification Revision 4.0, 16GT/s, 8GT/s, 5GT/s or 2.5GT/s Compliance with PCIe spec 4.0 currently at draft 0.9

Technical Specifications

-QX4: QSFP28 100Gigabit Ethernet Technical Specifications Adapters:	
QSFP28 (Quad Small Form-factor Pluggable) supports:	100GBASE: CAUI-4 interfaces according IEEE 802.3bm and IEEE 802.3bj standards , to support 100GBase-SR4, 100GBase-LR4 and 100GBase-CR4 interfaces.
-ZS4: Fiber 100GBASE-SR4 Ethernet Technical Specifications:	
IEEE Standard / Network topology:	Fiber Gigabit Ethernet, 100GBase-SR4 (850nM)
Data Transfer Rate:	103.125GBd
Cables and Operating distance: Up to:	Multimode fiber: 62.5um, (OM4) 100m
Optical Output Power:	Typical: -1.55 dBm Minimum: -8.4 dB * being defined by IEEE 802.3bm
Optical Receive Sensitivity:	Typical: -8.94 dBm Maximum: -5.2 dBm * being defined by IEEE 802.3bm
-ZL4: Fiber 100GBASE-LR4 Ethernet Technical Specifications:	
IEEE Standard / Network topology:	Fiber 100Gigabit Ethernet, 100GBASE-LR4 (1310nM)
Data Transfer Rate:	103.1GBd
Cables and Operating distance: Up to:	Single-Mode: 10km
Optical Output Power:	Minimum: -4.3 dBm
Optical Receive Sensitivity:	Maximum: -10.6 dBm
General Technical Specifications	
Interface Standard:	PCI-Express Base Specification Revision 4.0 (16 GTs)
Board Size:	Low profile short add-in card 193.05mm X 68.91mm (7.60"X 2.713")
PCI Express Card Type:	X8 X8 bifurcation
PCI Express Voltage:	+12V ± 8%
PCI Connector:	Gold Finger: X16 Lane
Controller:	(2x) Intel E810-CAM1
Holder:	Metal Bracket
Operating Humidity:	0%–90%, non-condensing
Operating Temperature:	0°C – 45°C (32°F – 113°F)
Storage:	-40°C–65°C (-40°F–149°F)
Regulation:	Card shall meet CE, FCC Class B, ROHS requirements

LEDs/ Connectors Specifications:	
LEDs:	Two LEDs per port (1) Link 100/25/10Gbps LED: Turns on – link 100Gbps (Green) 25G/10Gbps (Yellow) (1) Link/Act 100/25/10Gbps LED (Green): Turns on – link, Blink – ACT
LEDs location:	LEDs are located on the PCB, visible by light guide in the metal bracket
Connector:	(2) MPO/LC
Operating Systems Support:	
Operating system support:	Windows Linux FreeBSD VMware

Order Information

P/N	Description	Notes:
P488CG2I81L-QX4	Dual port (QSFP28) 100 Gigabit Ethernet PCI Express Gen 4.0 Server Adapter	RoHS Compliant, Gen4 x 16 (bifurcated x8 x8), based on Intel E810-CAM1
P488CG2I81L-ZS4	Dual port Fiber (SR4) 100 Gigabit Ethernet PCI Express Gen 4.0 Server Adapter	RoHS Compliant, Gen4 x 16 (bifurcated x8 x8), based on Intel E810-CAM1
P488CG2I81L-ZL4	Dual port Fiber (LR4) 100 Gigabit Ethernet PCI Express Gen 4.0 Server Adapter	RoHS Compliant, Gen4 x 16 (bifurcated x8 x8), based on Intel E810-CAM1
P488CG2I81LEU-QX4	Dual port (QSFP28) 100 Gigabit Ethernet PCI Express Gen 4.0 Server Adapter w/ PXE UEFI	RoHS Compliant, Gen4 x 16 (bifurcated x8 x8), based on Intel E810-CAM1
P488CG2I81LEU-ZS4	Dual port Fiber (SR4) 100 Gigabit Ethernet PCI Express Gen 4.0 Server Adapter w/ PXE UEFI	RoHS Compliant, Gen4 x 16 (bifurcated x8 x8), based on Intel E810-CAM1
P488CG2I81LEU-ZL4	Dual port Fiber (LR4) 100 Gigabit Ethernet PCI Express Gen 4.0 Server Adapter w/ PXE UEFI	RoHS Compliant, Gen4 x 16 (bifurcated x8 x8), based on Intel E810-CAM1