Recommended Fiber Optic Transceivers for Ethernet NICs

Reference Guide

Ethernet Network Adapters

Designed for today's enterprise and cloud-scale environments, Broadcom's NetXtreme® E-Series Ethernet network adapters are the ideal solution for high-performance virtualization, intelligent flow processing, secure data center connectivity, and machine learning.

Available in PCIe NIC and OCP mezzanine 2.0 and 3.0 form factors, Broadcom's Ethernet network adapters support configurations ranging from 1G to 200G, and utilizing both optical and copper connectivity.

Optical Transceivers

Broadcom's Optical Transceivers are products that support insertion and removal of fiber optic connectors - for applications requiring flexibility in user handling, cable types and link distances. Available in host soldered and edge pluggable variants, these electrical-to-optical converters (transceivers) provide generations of optical connectivity at data rates up to 100Gb/s and link distances up to 10km (and beyond). Target applications include LAN Ethernet, SAN Fibre Channel, CPRI Mobile Fronthaul, SONET/OTN Telecommunications, InfiniBand and Proprietary Interconnect networks.

Recommended Fiber Optic Transceivers for PCIe NIC

Form Factor	Marketing Name	Part Number	Ports	I/O	IC Family	Fiber Optic Transceivers Part Number	Fiber Optic Transceivers Description
PCIe NIC	P210TP	BCM957416A4160C	2x 10GBASE-T	RJ45	Wh+	N/A	N/A
PCIe NIC	P210P	BCM957412A4120AC	2x 10GbE	SFP+	Wh+	AFBR-710SMZ	10G-SR
PCIe NIC	P225P	BCM957414A4142CC	2x 25/10G	SFP28	Wh+	AFBR-8CERxxZ	25G AOC, xx=length in meters, supports 25G rate only
						AFBR-735SMZ	Dual rate 10G/25G-SR, 10G rate is power up default, Rate select pins or registers must be used to change rate
PCIe NIC	P425G	BCM957504-P425G	4x 25G	SFP28	Thor	AFBR-8CERxxZ	25G AOC, xx=length in meters, supports 25G rate only
						AFBR-735SMZ	Dual rate 10G/25G-SR, 10G rate is power up default, Rate select pins or registers must be used to change rate
PCIe NIC	P150P	BCM957414A4140C	1x 50GbE	QSFP28	Wh+	AFBR-89CDHZ	100G-SR4 (4x25G NRZ)(2x25G NRZ mode supported)
PCIe NIC	P1100p	BCM957454A4540C	1x 100GbE	QSFP28	Stratus	AFBR-89CDHZ	100G-SR4 (4x25G NRZ)
PCIe NIC	P2100G	BCM957508-P2100G	2x 100G	QSFP56	Thor	AFBR-89CDHZ	100G-SR4 (4x25G NRZ)
						AFBR-93CDDZ	200G-SR4 (4x50G PAM4) in development
PCIe NIC	P2200G	BCM957508-P2200G	2x 200GbE	QSFP56	Thor	AFBR-93CDDZ	200G-SR4 (4x50G PAM4) in development
PCIe NIC	P2200G	BCM957508-P2200G	2x 200GbE	QSFP56	Thor	AFBR-93CDDZ	200G-SR4 (4x50G PAM4) in development

Recommended Fiber Optic Transceivers for PCIe SmartNIC

Form Factor	Marketing Name	Part Number	Ports	I/O	IC Family	Fiber Optic Transceivers Part Number	Fiber Optic Transceivers Description
PCIe SmartNIC	PS225-H08	BCM958802A8048C	2x 25GbE	SFP28	Stingray	AFBR-8CERxxZ	25G AOC , xx=length in meters, supports 25G rate only
						AFBR-735SMZ	Dual rate 10G/25G-SR, 10G rate is power up default, Rate select pins or registers must be used to change rate
PCIe SmartNIC	PS225-H16	BCM958802A8046C	2x 25GbE	SFP28	Stingray	AFBR-8CERxxZ	25G AOC , xx=length in meters, supports 25G rate only
						AFBR-735SMZ	Dual rate 10G/25G-SR, 10G rate is power up default, Rate select pins or registers must be used to change rate
PCIe SmartNIC	PS1100R Active HS	BCM958804A8040C	1x 100GbE	QSFP28	Stingray	AFBR-89CDHZ	100G-SR4 (4x25G NRZ)
PCIe SmartNIC	PS1100R Passive HS	BCM958804A8041C	1x 100GbE	QSFP28	Stingray	AFBR-89CDHZ	100G-SR4 (4x25G NRZ)

Recommended Fiber Optic Transceivers for OCP 2.0 Form Factor

Form Factor	Marketing Name	Part Number	Ports	I/O	IC Family	Fiber Optic Transceivers Part Number	Fiber Optic Transceivers Description
OCP 2.0	M210TP	BCM957416M4163C	2 x 10GBASE-T	RJ45	Wh+	N/A	N/A
OCP 2.0	M210P	BCM957412M4123C	2 x 10GbE	SFP+	Wh+	AFBR-710SMZ	10G-SR
OCP 2.0	M125P	BCM957412M4122C	1 x 25/10GbE	SFP28	Wh+	AFBR-8CERxxZ	25G AOC , xx=length in meters, supports 25G rate only
						AFBR-735SMZ	Dual rate 10G/25G-SR, 10G rate is power up default, Rate select pins or registers must be used to change rate
OCP 2.0	M225P	BCM957414M4142C	2 x 25/10GbE	SFP28	Wh+	AFBR-8CERxxZ	25G AOC , xx=length in meters, supports 25G rate only
						AFBR-735SMZ	Dual rate 10G/25G-SR, 10G rate is power up default, Rate select pins or registers must be used to change rate
OCP 2.0	M150P	BCM957414M4143C	1 x 50GbE	QSFP28	Wh+	AFBR-89CDHZ	100G-SR4 (4x25G NRZ)(2x25G NRZ supported)
OCP 2.0	M150PM	BCM957452M4520C	1 x 50GbE	QSFP28	Stratus	AFBR-89CDHZ	100G-SR4 (4x25G NRZ) (2x25G NRZ supported)
OCP 2.0	M150G	BCM957502-M150G	1x 50G	QSFP28	Thor	AFBR-89CDHZ	100G-SR4 (4x25G NRZ) (2x25G NRZ supported)
OCP 2.0	M1100G16 (1x16)	BCM957504-M1100G16	1x 100G	QSFP28	Thor	AFBR-89CDHZ	100G-SR4 (4x25G NRZ)

Recommended Fiber Optic Transceivers for for OCP 3.0 Form Factor

Form Factor	Marketing Name	Part Number	Ports	I/O	IC Family	Fiber Optic Transceivers Part Number	Fiber Optic Transceivers Description
OCP 3.0	N210tp	BCM957416N4160C	2x 10GBT	RJ45	Wh+	N/A	N/A
OCP 3.0	N210p	BCM957412N4120C	2x 10G	SFP+	Wh+	N/A	10G-SR
OCP 3.0	N225p	BCM957414N4140C	2x 25G	SFP28	Wh+	AFBR-8CERxxZ	25G AOC , xx=length in meters, supports 25G rate only
						AFBR-735SMZ	Dual rate 10G/25G-SR, 10G rate is power up default, Rate select pins or registers must be used to change rate
OCP 3.0	N425G	BCM957504-N425G	4x 25G	SFP28	Thor	AFBR-8CERxxZ	25G AOC , xx=length in meters, supports 25G rate only
						AFBR-735SMZ	Dual rate 10G/25G-SR, 10G rate is power up default, Rate select pins or registers must be used to change rate
OCP 3.0	N1100G	BCM957504-N1100G	1x 100G	QSFP56	Thor	AFBR-89CDHZ	100G-SR4 (4x25G NRZ)
						AFBR-93CDDZ	200G-SR4 (4x50G PAM4) in development
OCP 3.0	N2100G	BCM957508-N2100G	2x 100G	QSFP56	Thor	AFBR-89CDHZ	100G-SR4 (4x25G NRZ)
						AFBR-93CDDZ	200G-SR4 (4x50G PAM4) in development
OCP 3.0	N2200G	BCM957508-N2200G	2 x 200GbE	QSFP56	Thor	AFBR-93CDDZ	200G-SR4 (4x50G PAM4) in development
OCP 3.0	N210tp	BCM957416N4160C	2x 10GBT	RJ45	Wh+	N/A	N/A

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