BROADCOM ®

Fiber Optic Products Guide
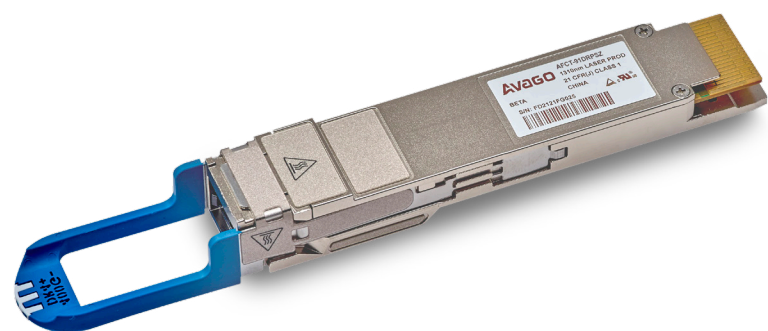# Enterprise, High Speed Interconnect and Storage Applications

400G QSFP-DD (Optical)

Datacom applications for 8x50GE

- Broadcom Silicon Photonic Chiplet in Package (SCIP™) technology
- Compliant to 400GE 802.3bs electrical specs with host FEC for all optical variants
- DR4 to support up to 500m SMF link distance
- DR4+ to support up to 2 km SMF link distance
- Optical breakout support for 400G DR4/DR4+ to 4x100G DR
- Compliant to QSFP-DD MSA
- Commercial temperature range
- Digital diagnostics monitoring
- CMIS compliant two wire serial management interface

1G SFP, 10G SFP+ & 25G SFP28 (Optical)

Datacom applications using 1/10/25 Gigabit Ethernet and 32G/16G/1G Fibre Channel

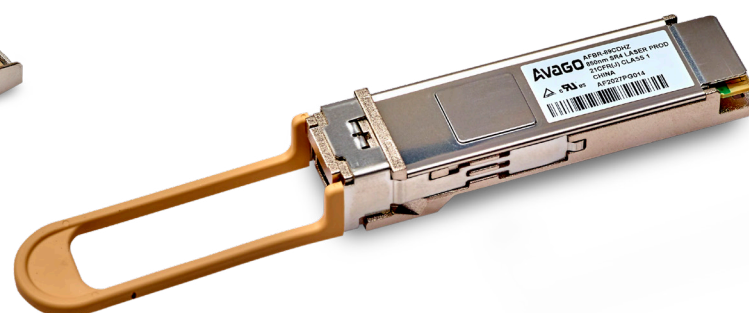**Fronthaul applications using 1.22G through 25.78G eCPRI**

- 3.3V operating voltage
- Short- and long-reach applications
- Digital diagnostics monitoring
- Available in commercial, extended, and industrial operating temperatures for selected applications

100G QSFP28 (Optical)

Datacom applications for 4x25GE/100GbE/128GFC and for EDR InfiniBand and omni-path applications

- Compliant to 100GbE 802.3 electrical specs for all optical variants
- SR4 (eSR4) to support 100m (300m) OM4 MMF link using MPO connectors
- BiDi to support 100m OM4 MMF link using duplex LC connectors
- SW4 to support 128GFC up to 100m OM4 MMF link distance
- Compliant to QSFP28 MSA
- Wide case temperature range
- Digital diagnostics monitoring
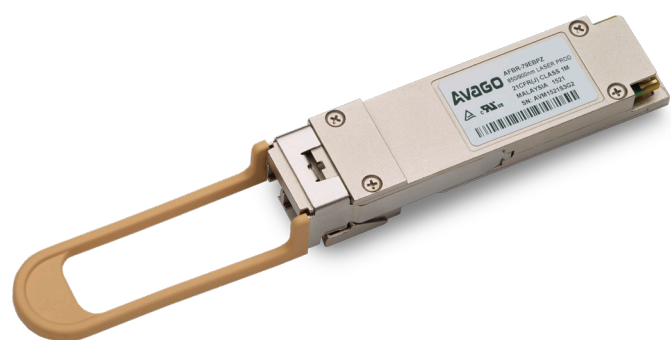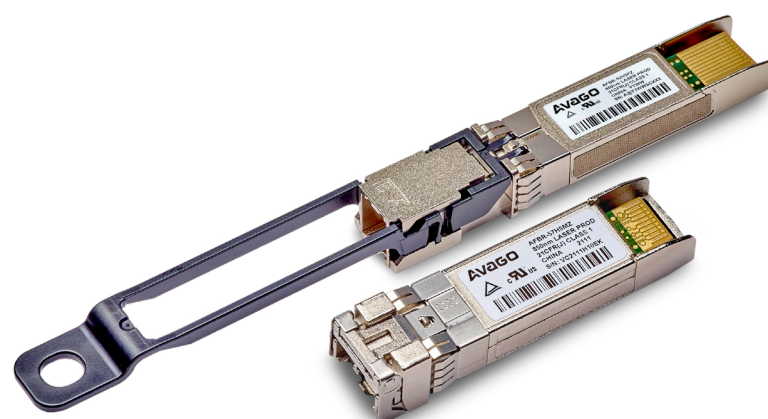- Two wire serial management interface

SFP56 (Optical)

- Compliant to RoHS directives
- High performance 850nm
- Class 1 eye safe per IEC60825-1 and CDRH
- Wide temperature range (0°C to 75°C)
- LC duplex connector optical interface conforming to ANSI TIA/EIA604-10 (FOCIS 10A)
- Diagnostic features per SFF-8472 "Diagnostic Monitoring Interface for Optical Transceivers"
- Enhanced operational features including EWRAP, OWRAP and adaptive electrical EQ/emphasis settings.
- Integrated PRBS generator and bit error rate checker
- Real time monitoring of: transmitter average optical power, received average optical power, laser bias current, temperature, supply voltage, power on hours
  - SFP+ mechanical specifications per SFF-8432
  - SFP+ compliant low speed interface per SFF-8419
  - Fibre Channel FC-PI-7 compliant high speed optical and electrical interface

40G QSFP+ (Optical)

Datacom applications for 4x10GE/40GbE/4x14G, and for QDR InfiniBand applications

- Bi-Directional (BiDi) to support 40GE up to 150m link distance over LC Duplex OM4 MMF
- Digital diagnostics monitoring
- Two wire serial management interface

Future Products in Development

For products not listed on this brochure, please contact your local Sales team. Custom products or products in active development are not shown on this products guide.

Broadcom Fiber Optic Products Guide

Market Segment	Product Segment	Form Factor / Description	Part Number	Fiber Type	Data Rate (Maximum)	Reach	Operating Wavelength	Transmitter	Receiver	Case Temperature Range	Optical Connector
Ethernet	1G	SFP SX	AFBR-5718xxZ	MMF	1 Gb/s	550m	850nm	VCSEL	PIN	Various	LC
	10G	SFP+ SR	AFBR-710DMZ	MMF	10 / 1 Gb/s	300m OM3 / 400m OM4	850nm	VCSEL	PIN	0 to 70°C	LC
	10G	SFP+ SR	AFBR-710xSMZ	MMF	10 Gb/s	300m OM3 / 400m OM4	850nm	VCSEL	PIN	Various	LC
	25G	SFP28 SR	AFBR-734xSMZ	MMF	25.78 Gb/s (Fixed Rate)	70m OM3 / 100m OM4	850nm	VCSEL	PIN	0 to 70°C / 0 to 85°C	LC
	25G	SFP28 SR	AFBR-734TMZ	MMF	25.78 Gb/s (Fixed Rate)	30m OM3 / 50m OM4 (BER <le-12, no-FEC)	850nm	VCSEL	PIN	0 to 70°C	N/A
	25G	SFP28 SR	AFBR-735xSMZ	MMF	25.78 / 10 Gb/s	70m OM3 / 100m OM4	850nm	VCSEL	PIN	0 to 70°C / 0 to 85°C	LC
	25G	SFP28 SR	AFBR-735TMZ	MMF	25.78 / 10 Gb/s	30m OM3 / 50m OM4 (BER < 1e-12, no-FEC)	850nm	VCSEL	PIN	0 to 70°C	LC
	25G	SFP28 LR	AFCT-725SMZ	SMF	25.78 Gb/s	10km	1310nm	DFB	PIN	0 to 70°C	LC
	40G	QSFP+ BiDi	AFBR-79EBxZ	MMF	40 Gb/s	100m OM3 / 150m OM4	850 / 900nm	VCSEL	PIN	10 to 70°C	LC
	100G	QSFP28 SR4	AFBR-89CDHZ	MMF	100 Gb/s & 4 x 25.78 Gb/s	70m OM3 / 100m OM4	850nm	VCSEL	PIN	0 to 70°C	MPO
	100G	QSFP28 eSR4	AFBR-89CEHZ	MMF	100 Gb/s & 4 x 25.78 Gb/s	170m OM3 / 300m OM4	850nm	VCSEL	PIN	0 to 70°C	MPO
	100G	QSFP28 BiDi	AFBR-89BDDZ	MMF	100 Gb/s	70m OM3 / 100m OM4 / 150m OM5	850nm/910nm	VCSEL	PIN	10 to 70°C	LC
	400G	QSFP-DD DR4+	AFCT-91DRPSZ*	SMF	400 Gb/s	2km	1310nm	SCIP™	SCIP™	0 to 70°C	MPO
	400G	QSFP-DD DR4	AFCT-91DRDSZ*	SMF	400 Gb/s	500m	1310nm	SCIP™	SCIP™	0 to 70°C	MPO
Storage / Fibre Channel	10G	SFP+ SR	AFBR-710xFMZ	MMF	10 Gb/s	300m OM3 / 400m OM4	850nm	VCSEL	PIN	-40 to 85°C	LC
	16G	SFP+ SW	AFBR-57F5xxMZ	MMF	14.025 / 10.3 / 8.5 / 4.25 Gb/s	100m at 14.025 GBd	850nm	VCSEL	PIN	0 to 70°C / 0 to 85°C	LC
	16G	SFP+ SW	AFBR-57F5PZ	MMF	14.025 / 8.5 / 4.25 Gb/s	125m OM4 @ 14.025GBd	850nm	VCSEL	PIN	0 to 70°C / 0 to 85°C	LC
	32G	SFP28 SW	AFBR-57G5PZ	MMF	28.05 / 14.025 / 8.5 Gb/s	100m OM4 @ 28.05 GBd	850nm	VCSEL	PIN	0 to 70°C	LC
	32G	SFP28 SW	AFBR-57G5xMZ	MMF	28.05 / 14.025 / 8.5 Gb/s	100m OM4 at 28.05 GBd	850nm	VCSEL	PIN	0 to 70°C / 0 to 85°C	LC
	32G	SFP28 LW	AFCT-57G5MZ	SMF	28.05 / 14.025 / 8.5 Gb/s	10km at 28.025GBd	1310nm	DFB	PIN	0 to 70°C	LC
	64G	SFP-DD SW	AFBR-52H5PZ	MMF	57.8 / 28.05 / 14.025 Gb/s	100m OM4	850 nm	VCSEL	PIN	0 to 70°C	LC
	64G	SFP56 SW	AFBR-57H5MZ	MMF	57.8 / 28.05 / 14.025 Gb/s	100m OM4	850 nm	VCSEL	PIN	0 to 70°C	LC
	64G	SFP56 LW	AFCT-57H5MZ	MMF	57.8 / 28.05 / 14.025 Gb/s	10km SMF	1310nm	EML	PIN	0 to 70°C	LC
	128G	QSFP28 iSW4	AFBR-89FMDZ	MMF	4 x 28.05 / 14.025 Gb/s	100m OM4 at 28.05 GBd	850nm	VCSEL	PIN	0 to 70°C	MPO
	128G	QSFP28 SW4	AFBR-89FDDZ	MMF	4 x 28.05 Gb/s	100m OM4 at 28.05 GBd	850nm	VCSEL	PIN	0 to 70°C	MPO
Wireless	10G	SFP+ SR	AFBR-710JAMZ	MMF	9.83 Gb/s	300m OM3/400m OM4	850nm	VCSEL	PIN	-40 to 85°C	LC
	25G	SFP28 SR	AFBR-735JAMZ*	MMF	25.78/24.33/10.3125/9.83 Gb/s	100m OM4	850nm	VCSEL	PIN	-40 to 85°C	LC

*Please contact Sales for details.