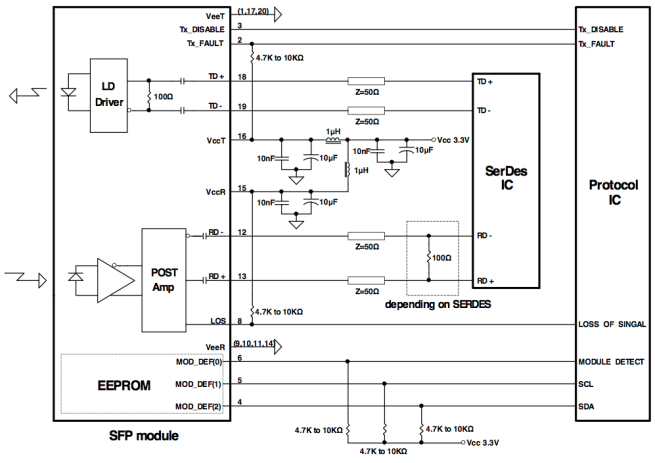
1.25G to 2.67Gbps SFP Transceiver
80km and 120km, DWDM (E)ZX/LR-2
P/N AZX6A0x-DWyy (80km ZX)
P/N AL26A0x-DWyy (120km EZX and 80km LR-2)

Description

Menara Networks' AZX6A00-DWxx and AEZ6A00-DWxx transceivers are designed for use in 1Gbps, OC-48 and OTU-1 DWDM 100GHz links up to 80km or 120km over single mode fiber. The SFP module supports IEEE 802.3ae 1000BASE-(E)ZX applications along with SONET OC-48 LR-2 and Fiber Channel 1x SM-LC-L FC-PI applications for Ethernet Switches or IP Router optical interfaces. Digital Optical Monitoring interfaces are provided via the SFP SFF-8472 standards compliant I^2C interface.

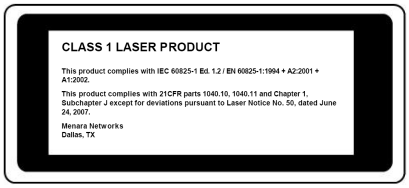


Applications

- 80km or 120km GbE, OC-48 or OTU-1 DWDM switch transmission interconnection
- Long distance, multi-channel Ethernet Switch or IP Router bandwidth expansion

Features

- Hot-pluggable SFP footprint
- Up to 2.67Gbps bit rates
- 100GHz DWDM transmitter supporting 40 DWDM channels per fiber pair
- APD receiver for greater range (120km)
- Single 3.3V power supply
- Power dissipation < 1.3W
- 0°C to +70°C and -40°C to +85°C Temperature Ranges
- Duplex LC fiber connectors
- IEEE 802.3ae 1000BASE-(E)ZX
- SONET OC-48 LR-2
- 1G FC SM-LC-L FC-PI
- Full Digital Optical Monitoring
- Metal enclosure for lower EMI
- Complies with RoHS directive (2002/95/EC)
- Compliant with SFP MSA SFF-8472 and SFF-8074
- Laser Class 1 IEC/CDRH compliant
- Links of 80km or 120 km with 9/125 µm single mode fiber (SMF) of maximum interconnect distances



Transmitter E-O Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Support data rate	-	1.15	1.25	2.67	Gb/s	-
Center Wavelength (100GHz)	λ	1530.33	to	1561.42	nm	
Spectral Width (RMS)	Δλ	-	-	1	nm	-
Wavelength Accuracy	$\Delta\lambda_{EOL}$	-100		100	pm	
Side Mode Suppression Ratio	SMSR	30			dB	
Average Optical Output Power	Po	0	-	4	dBm	
Extinction Ratio	Er	8.2	-	-	dB	
Output Eye Diagram	Compliant with SFP MSA					

Receiver O-E Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Support data rate	-	1.15	1.25	2.67	Gb/s	-
Operating Wavelength	-	1500	-	1580	nm	-
Receiver sensitivity (EZX/LR-2) 1GE	S_{en1}	-	-	-31	dBm	1
Receiver sensitivity (ZX) 1GE	S_{en1}	-	-	-27	dBm	1
Receiver sensitivity (EZX/LR-2) OC-48	S_{en2}	-	-	-28	dBm	1
Receiver sensitivity (ZX) OC-48	S_{en2}	-	-	-24	dBm	1
Saturation	P_{sat}	-9	-	-	dBm	
Receiver Optical Return Loss	-	-	-	-27	dB	-
LOS Asserted (EOL) (120km)		-40	-	-	dBm	
LOS Asserted (EOL) (80km)		-36	-	-	dBm	
LOS Hysteresis (EOL)		1.0	-	5.0	dB	

Notes:

1. PRBS 2^{23}-1 at 10^{-12} BER

Ordering Information

Part Number	ROHS Compliant	Operating Case Temperature
AZX6A0y-DWxx (ZX) AZX6A1y-DWxx (ZX) AZX6A2y-DWxx (ZX)	ROHS-6	0 ~ +70°C 0 ~ +85°C -40 ~ +85°C
AL26A0y-DWxx (EZX/LR-2) AL26A1y-DWxx (EZX/LR-2) AL26A2y-DWxx (EZX/LR-2)	ROHS-6	0 ~ +70°C 0 ~ +85°C -40 ~ +85°C

xx = DWDM Wavelength. See table below for details.
y = Compatibility; J = Juniper, A = AlcatelLucent, C = Cisco, O = Cisco ONS, N = Ciena, F or 9 = Fujitsu

Freq (THz)	Wave (nm)	ITU Ch	Freq (THz)	Wave (nm)	ITU Ch	Freq (THz)	Wave (nm)	ITU Ch
196.10	1528.77	61	194.70	1539.77	47	193.30	1550.82	33
196.00	1529.55	60	194.60	1540.56	46	193.20	1551.72	32
195.90	1530.33	59	194.50	1541.35	45	193.10	1552.52	31
195.80	1531.12	58	194.40	1542.14	44	193.00	1553.33	30
195.70	1531.90	57	194.30	1542.94	43	192.90	1554.13	29
195.60	1532.68	56	194.20	1543.73	42	192.80	1554.94	28
195.50	1533.47	55	194.10	1544.53	41	192.70	1555.75	27
195.40	1534.25	54	194.00	1545.32	40	192.60	1556.55	26
195.30	1535.04	53	193.90	1546.12	39	192.50	1557.36	25
195.20	1535.82	52	193.80	1546.92	38	192.40	1558.17	24
195.10	1536.61	51	193.70	1547.72	37	192.30	1558.98	23
195.00	1537.40	50	193.60	1548.51	36	192.20	1559.79	22
194.90	1538.19	49	193.50	1549.32	35	192.10	1560.61	21
194.80	1538.98	48	193.40	1550.12	34	192.00	1561.42	20