

Features

- Up to 11.3Gbps Data Links
- Up to 80km transmission on SMF
- DWDM EML Laser and APD receiver
- Metal enclosure, for lower EMI
- 2-wire interface with integrated Digital Diagnostic monitoring
- Hot-pluggable SFP+ footprint
- Specifications compliant with SFF 8472
- Compliant with SFP+ MSA with LC connector
- Single 3.3V power supply
- Case operating temperature range: -40°C to 85°C
- Power dissipation < 1.5Wp
- Cisco Systems Compatible



Applications

- 10G Ethernet
- 10G SONET/SDH, OTU2/2e and 10G FC

Standard

- Compliant to SFF-8431
- RoHS Compliant.

1. Absolute Maximum Ratings

Any stress beyond the maximum ratings can result in permanent damage. The device specifications are guaranteed only under the recommended operating conditions.

Parameter	Symbol	Min	Typ	Max	Unit
Storage Temperature	Ts	-40	-	85	°C
Relative Humidity	RH	5	-	95	%
Power Supply Voltage	VCC	-0.3	-	4	V
Signal Input Voltage		Vcc-0.3	-	Vcc+0.3	V

2. Recommended Operating Conditions

Parameter	Symbol	Min	Typ	Max	Unit	Notes
Case Operating Temperature	Tcase	-40	-	85	°C	
Power Supply Voltage	VCC	3.14	3.3	3.47	V	
Power Supply Current	ICC	-		450	mA	
Data Rate	BR		10.3125		Gbps	
Transmission Distance	TD		-	80	Km	
Coupled fiber	Single mode fiber					9/125um SMF

3. Optical Characteristics

Parameter	Symbol	Min	Typ	Max	Unit	Note
Transmitter						
Average Optical Power	Pout	-1		4	dBm	1
Center Wavelength Spacing			100		GHz	2
Optical Wavelength	λ_c	$\lambda_c-0.1$		$\lambda_c+0.1$	nm	
Optical Extinction Ratio	ER	6.0			dB	
Side Mode Supression Ratio	SMSR	30			dB	
Average Launch Power	Poff			-30	dBm	
Transmitter and Dispersion Penalty	TDP			3.0	dB	
Output Eye Mask	Compliant with IEEE 802.3ae					
Receiver						
Wavelength Range	λ_c	1480		1580	nm	
Receiver Sensitivity	Rsen			-23	dBm	3
Input Saturation Power (Overload)	Psat	-6			dBm	
LOS Assert	LOSA	-35			dBm	
LOS De-assert	LOSD			-26	dBm	
LOS Detect Hysteresis	PHYS	0.5			dB	

Notes:

1. Output power is power coupled into a 9/125 mm single-mode fiber.
2. Corresponds to approximately 0.8 nm.
3. Measured with a PRBS 2³¹-1 test pattern, @10.325Gb/s, BER<10⁻¹².

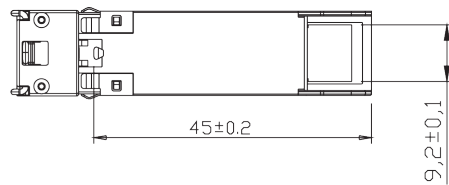
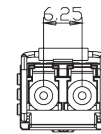
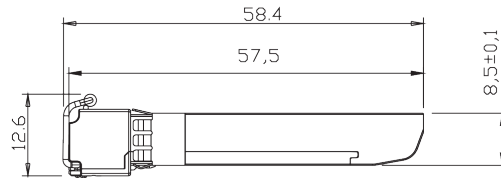
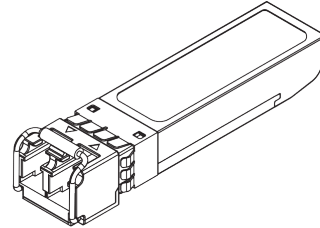
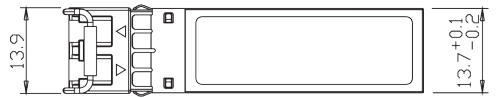
4. Electrical Characteristics

Parameter	Symbol	Min	Typ	Max	Unit	Notes
Supply Voltage	Vcc	3.14	3.3	3.46	V	
Supply Current	Icc			450	mA	
Transmitter						
Input differential impedance	ohm		100		Ω	1
Single ended data input swing	V _{in,pp}	120		820	mV	
Transmit Disable Voltage	VD	V _{cc} -1.3		V _{cc}	V	
Transmit Enable Voltage	VEN	V _{ee}		V _{ee} + 0.8	V	2
TX_FAULT Voltage-High		V _{cc} -1.3		V _{cc}		
TX_FAULT Voltage-Low		V _{ee}		V _{ee} + 0.8		
Transmit Disable Assert Time				10	us	
Receiver						
Differential data output swing	V _{out,pp}	350		850	mV	3
Data output rise time	t _r	30			ps	4
Data output fall time	t _f	30			ps	4
LOS Fault	VLOS fault	V _{cc} -1.3		V _{cc} HOST	V	5
LOS Normal	VLOS norm	V _{ee}		V _{ee} +0.8	V	5

Notes:

1. Connected directly to TX data input pins. AC coupled thereafter.
2. Or open circuit.
3. Into 100 ohms differential termination.
4. These are unfiltered 20-80% values
5. Loss Of Signal is LVTTTL. Logic 0 indicates normal operation; logic 1 indicates no signal detected.

5. Mechanical Diagram



Units in MM

Note: External physical characteristics are subject to variation. This may include, but is not limited to, external case designs, pull tab colors and/or shapes, removal latch styles or colors, and label sizes and placement. These variations do not affect the function or characteristics of the transceivers.

6. Ordering Information

OEM	Part Number	OEM	Part Number
Adtran	1442485F5-A	Cisco	DWDM-SFP10G-28.77-A
Adtran	1442485F6-A	Cisco	DWDM-SFP10G-29.55-A
Adtran	1442485F7-A	Cisco	10GS-D22-80-CSC
Adtran	1442485F8-A	Cisco	10GS-D33-40-CSC
Adtran	1442481F1-A	Cisco	10GS-D32-40-CSC
Adtran	1442481F2-A	Cisco	10GS-D31-40-CSC
Adtran	1442481F3-A	Cisco	10GS-D30-40-CSC
Adtran	1442481F4-A	Cisco	10GS-D29-40-CSC
Adtran	1442481F5-A	Cisco	10GS-D28-40-CSC
Adtran	1442481F6-A	Cisco	8GFCS-D28-40-CSC
Adtran	1442481F7-A	Cisco	8GFCS-D27-40-CSC
Adtran	1442481F8-A	Cisco	10GS-D27-40-CSC
Adtran	1442481F9-A	Cisco	8GFCS-D26-40-CSC
Adtran	1442482F1-A	Cisco	8GFCS-D25-40-CSC
Adtran	1442482F2-A	Cisco	10GS-D23-40-CSC

Adtran	1442482F3-A	Cisco	10GS-D22-40-CSC
Adtran	1442482F4-A	Cisco	10GS-D21-40-CSC
Adtran	1442482F5-A	Cisco	10GS-D56-80-CSC
Adtran	1442482F6-A	Cisco	DWDM-SFP10G-35.82-C1
Adtran	1442482F7-A	Cisco	DWDM-SFP10G-43.73-C1
Adtran	1442482F8-A	Cisco	10GS-D33-80-CSC
Adtran	1442482F9-A	Cisco	DWDM-SFP10G-51.72-C1
Adtran	1442483F1-A	Cisco	10GS-D27-80-CSC
Adtran	1442483F2-A	Cisco	10GS-D25-80-CSC
Adtran	1442483F3-A	Cisco	10GS-D24-80-CSC
Adtran	1442483F4-A	Cisco	10GS-D23-80-CSC
Adtran	1442483F5-A	Cisco	10GS-D21-80-CSC
Adtran	1442483F6-A	Cisco	10GS-D20-80-CSC
Adtran	1442483F7-A	Cisco	10GS-D19-80-CSC
Adtran	1442483F8-A	Cisco	10GS-D18-80-CSC
Adtran	1442483F9-A	Cisco	10GS-D17-80-CSC
Adtran	1442484F1-A	Cisco	10GS-D16-80-CSC
Adtran	1442484F2-A	Cyan	280-0229-00-A
Adtran	1442484F3-A	Cyan	280-0230-00-A
Adtran	1442484F4-A	Cyan	280-0231-00-A
Adtran	1442484F5-A	Cyan	280-0232-00-A
Adtran	1442484F6-A	Cyan	280-0233-00-A
Adtran	1442484F7-A	Cyan	280-0234-00-A
Adtran	1442484F8-A	Cyan	280-0235-00-A
Adtran	1442484F9-A	Cyan	280-0236-00-A
Adtran	1442485F1-A	Cyan	280-0237-00-A
Adtran	1442485F2-A	Cyan	280-0238-00-A
Adtran	1442485F3-A	Cyan	280-0239-00-A
Adtran	1442485F4-A	Cyan	280-0240-00-A
Adtran	1442485GC-A	Cyan	280-0241-00-A
Adtran	1442485G6C-A	Cyan	280-0242-00-A
Adtran	1442485G7C-A	Cyan	280-0243-00-A
Adtran	1442485G8C-A	Cyan	280-0244-00-A
Adtran	1442481G1C-A	Cyan	280-0245-00-A
Adtran	1442481G2C-A	Cyan	280-0246-00-A
Adtran	1442481G3C-A	Cyan	280-0247-00-A
Adtran	1442481G4C-A	Cyan	280-0248-00-A

Adtran	1442481G5C-A	Cyan	280-0249-00-A
Adtran	1442481G6C-A	Cyan	280-0250-00-A
Adtran	1442481G7C-A	Cyan	280-0251-00-A
Adtran	1442481G8C-A	Cyan	280-0252-00-A
Adtran	1442481G9C-A	Cyan	280-0253-00-A
Adtran	1442482G1C-A	Cyan	280-0254-00-A
Adtran	1442482G2C-A	Cyan	280-0255-00-A
Adtran	1442482G3C-A	Cyan	280-0256-00-A
Adtran	1442482G4C-A	Cyan	280-0257-00-A
Adtran	1442482G5C-A	Cyan	280-0258-00-A
Adtran	1442482G6C-A	Cyan	280-0259-00-A
Adtran	1442482G7C-A	Cyan	280-0260-00-A
Adtran	1442482G8C-A	Cyan	280-0261-00-A
Adtran	1442482G9C-A	Cyan	280-0262-00-A
Adtran	1442483G1C-A	Cyan	280-0263-00-A
Adtran	1442483G2C-A	Cyan	280-0264-00-A
Adtran	1442483G3C-A	Cyan	280-0265-00-A
Adtran	1442483G4C-A	Cyan	280-0266-00-A
Adtran	1442483G5C-A	Cyan	280-0267-00-A
Adtran	1442483G6C-A	Cyan	280-0268-00-A
Adtran	1442483G7C-A	Juniper	DWDM-SFPP-10GE-80-63.86-A
Adtran	1442483G8C-A	Juniper	DWDM-SFPP-10GE-80-63.05-A
Adtran	1442483G9C-A	Juniper	DWDM-SFPP-10GE-80-62.23-A
Adtran	1442484G1C-A	Juniper	DWDM-SFPP-10GE-80-61.41-A
Adtran	1442484G2C-A	Juniper	DWDM-SFPP-10GE-80-60.61-A
Adtran	1442484G3C-A	Juniper	DWDM-SFPP-10GE-80-59.79-A
Adtran	1442484G4C-A	Juniper	DWDM-SFPP-10GE-80-58.98-A
Adtran	1442484G5C-A	Juniper	DWDM-SFPP-10GE-80-58.17-A
Adtran	1442484G6C-A	Juniper	DWDM-SFPP-10GE-80-57.36-A
Adtran	1442484G7C-A	Juniper	DWDM-SFPP-10GE-80-56.55-A
Adtran	1442484G8C-A	Juniper	DWDM-SFPP-10GE-80-55.75-A
Adtran	1442484G9C-A	Juniper	DWDM-SFPP-10GE-80-54.94-A
Adtran	1442485G1C-A	Juniper	DWDM-SFPP-10GE-80-54.13-A
Adtran	1442485G2C-A	Juniper	DWDM-SFPP-10GE-80-53.32-A
Adtran	1442485G3C-A	Juniper	DWDM-SFPP-10GE-80-52.52-A
Adtran	1442485G4C-A	Juniper	DWDM-SFPP-10GE-80-51.72-A
Alcatel-Lucent	10GS-D19-40-ALU	Juniper	DWDM-SFPP-10GE-80-50.92-A

Alcatel-Lucent	10GS-D18-40-ALU	Juniper	DWDM-SFP-10GE-80-50.12-A
Alcatel-Lucent	10GS-D17-40-ALU	Juniper	DWDM-SFP-10GE-80-49.31-A
Alcatel-Lucent	10GS-D16-40-ALU	Juniper	DWDM-SFP-10GE-80-48.51-A
Alcatel-Lucent Nokia	SFP-10G-17DWD80-A	Juniper	DWDM-SFP-10GE-80-47.72-A
Alcatel-Lucent Nokia	SFP-10G-18DWD80-A	Juniper	DWDM-SFP-10GE-80-46.92-A
Alcatel-Lucent Nokia	SFP-10G-19DWD80-A	Juniper	DWDM-SFP-10GE-80-46.12-A
Alcatel-Lucent Nokia	SFP-10G-20DWD80-A	Juniper	DWDM-SFP-10GE-80-45.32-A
Alcatel-Lucent Nokia	SFP-10G-21DWD80-A	Juniper	DWDM-SFP-10GE-80-44.53-A
Alcatel-Lucent Nokia	SFP-10G-22DWD80-A	Juniper	DWDM-SFP-10GE-80-43.73-A
Alcatel-Lucent Nokia	SFP-10G-23DWD80-A	Juniper	DWDM-SFP-10GE-80-42.94-A
Alcatel-Lucent Nokia	SFP-10G-24DWD80-A	Juniper	DWDM-SFP-10GE-80-42.14-A
Alcatel-Lucent Nokia	SFP-10G-25DWD80-A	Juniper	DWDM-SFP-10GE-80-41.34-A
Alcatel-Lucent Nokia	SFP-10G-26DWD80-A	Juniper	DWDM-SFP-10GE-80-40.56-A
Alcatel-Lucent Nokia	SFP-10G-27DWD80-A	Juniper	DWDM-SFP-10GE-80-39.77-A
Alcatel-Lucent Nokia	SFP-10G-28DWD80-A	Juniper	DWDM-SFP-10GE-80-38.98-A
Alcatel-Lucent Nokia	SFP-10G-29DWD80-A	Juniper	DWDM-SFP-10GE-80-38.19-A
Alcatel-Lucent Nokia	SFP-10G-30DWD80-A	Juniper	DWDM-SFP-10GE-80-37.39-A
Alcatel-Lucent Nokia	SFP-10G-31DWD80-A	Juniper	DWDM-SFP-10GE-80-36.61-A
Alcatel-Lucent Nokia	SFP-10G-32DWD80-A	Juniper	DWDM-SFP-10GE-80-35.82-A
Alcatel-Lucent Nokia	SFP-10G-33DWD80-A	Juniper	DWDM-SFP-10GE-80-35.04-A
Alcatel-Lucent Nokia	SFP-10G-34DWD80-A	Juniper	DWDM-SFP-10GE-80-34.25-A
Alcatel-Lucent Nokia	SFP-10G-35DWD80-A	Juniper	DWDM-SFP-10GE-80-33.46-A
Alcatel-Lucent Nokia	SFP-10G-36DWD80-A	Juniper	DWDM-SFP-10GE-80-32.68-A
Alcatel-Lucent Nokia	SFP-10G-37DWD80-A	Juniper	DWDM-SFP-10GE-80-31.90-A
Alcatel-Lucent Nokia	SFP-10G-38DWD80-A	Juniper	DWDM-SFP-10GE-80-31.12-A
Alcatel-Lucent Nokia	SFP-10G-39DWD80-A	Juniper	DWDM-SFP-10GE-80-30.33-A
Alcatel-Lucent Nokia	SFP-10G-40DWD80-A	Juniper	DWDM-SFP-10GE-80-29.55-A
Alcatel-Lucent Nokia	SFP-10G-41DWD80-A	Juniper	10GS-D26-80-JUN
Alcatel-Lucent Nokia	SFP-10G-42DWD80-A	Juniper	10GS-D25-80-JUN
Alcatel-Lucent Nokia	SFP-10G-43DWD80-A	Juniper	10GS-D24-80-JUN
Alcatel-Lucent Nokia	SFP-10G-44DWD80-A	Juniper	10GS-D23-80-JUN
Alcatel-Lucent Nokia	SFP-10G-45DWD80-A	Juniper	10GS-D27-80-JUN
Alcatel-Lucent Nokia	SFP-10G-46DWD80-A	Juniper	DWDM-SFP-10GE-80-51.72-C1
Alcatel-Lucent Nokia	SFP-10G-47DWD80-A	Juniper	DWDM-SFP-10GE-80-28.77-A
Alcatel-Lucent Nokia	SFP-10G-48DWD80-A	MRV	SFP-10GDWZR-17-A
Alcatel-Lucent Nokia	SFP-10G-49DWD80-A	MRV	SFP-10GDWZR-18-A
Alcatel-Lucent Nokia	SFP-10G-50DWD80-A	MRV	SFP-10GDWZR-19-A

Alcatel-Lucent Nokia	SFP-10G-51DWD80-A	MRV	SFP-10GDWZR-20-A
Alcatel-Lucent Nokia	SFP-10G-52DWD80-A	MRV	SFP-10GDWZR-21-A
Alcatel-Lucent Nokia	SFP-10G-53DWD80-A	MRV	SFP-10GDWZR-22-A
Alcatel-Lucent Nokia	SFP-10G-54DWD80-A	MRV	SFP-10GDWZR-23-A
Alcatel-Lucent Nokia	SFP-10G-55DWD80-A	MRV	SFP-10GDWZR-24-A
Alcatel-Lucent Nokia	SFP-10G-56DWD80-A	MRV	SFP-10GDWZR-25-A
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Alcatel-Lucent Nokia	SFP-10G-58DWD80-A	MRV	SFP-10GDWZR-27-A
Alcatel-Lucent Nokia	SFP-10G-59DWD80-A	MRV	SFP-10GDWZR-28-A
Alcatel-Lucent Nokia	SFP-10G-60DWD80-A	MRV	SFP-10GDWZR-29-A
Alcatel-Lucent Nokia	SFP-10G-61DWD80-A	MRV	SFP-10GDWZR-30-A
Arista	SFP-10G-DZ-63.86-A	MRV	SFP-10GDWZR-31-A
Arista	SFP-10G-DZ-63.05-A	MRV	SFP-10GDWZR-32-A
Arista	SFP-10G-DZ-62.23-A	MRV	SFP-10GDWZR-33-A
Arista	SFP-10G-DZ-61.41-A	MRV	SFP-10GDWZR-34-A
Arista	SFP-10G-DZ-60.61-A	MRV	SFP-10GDWZR-35-A
Arista	SFP-10G-DZ-59.79-A	MRV	SFP-10GDWZR-36-A
Arista	SFP-10G-DZ-58.98-A	MRV	SFP-10GDWZR-37-A
Arista	SFP-10G-DZ-58.17-A	MRV	SFP-10GDWZR-38-A
Arista	SFP-10G-DZ-57.36-A	MRV	SFP-10GDWZR-39-A
Arista	SFP-10G-DZ-56.55-A	MRV	SFP-10GDWZR-40-A
Arista	SFP-10G-DZ-55.75-A	MRV	SFP-10GDWZR-41-A
Arista	SFP-10G-DZ-54.94-A	MRV	SFP-10GDWZR-42-A
Arista	SFP-10G-DZ-54.13-A	MRV	SFP-10GDWZR-43-A
Arista	SFP-10G-DZ-53.32-A	MRV	SFP-10GDWZR-44-A
Arista	SFP-10G-DZ-52.52-A	MRV	SFP-10GDWZR-45-A
Arista	SFP-10G-DZ-51.72-A	MRV	SFP-10GDWZR-46-A
Arista	SFP-10G-DZ-50.92-A	MRV	SFP-10GDWZR-47-A
Arista	SFP-10G-DZ-50.12-A	MRV	SFP-10GDWZR-48-A
Arista	SFP-10G-DZ-49.31-A	MRV	SFP-10GDWZR-49-A
Arista	SFP-10G-DZ-48.51-A	MRV	SFP-10GDWZR-50-A
Arista	SFP-10G-DZ-47.72-A	MRV	SFP-10GDWZR-51-A
Arista	SFP-10G-DZ-46.92-A	MRV	SFP-10GDWZR-52-A
Arista	SFP-10G-DZ-46.12-A	MRV	SFP-10GDWZR-53-A
Arista	SFP-10G-DZ-45.32-A	MRV	SFP-10GDWZR-54-A
Arista	SFP-10G-DZ-44.53-A	MRV	SFP-10GDWZR-55-A
Arista	SFP-10G-DZ-43.73-A	MRV	SFP-10GDWZR-56-A

Arista	SFP-10G-DZ-42.94-A	MRV	SFP-10GDWZR-57-A
Arista	SFP-10G-DZ-42.14-A	MRV	SFP-10GDWZR-58-A
Arista	SFP-10G-DZ-41.34-A	MRV	SFP-10GDWZR-59-A
Arista	SFP-10G-DZ-40.56-A	MRV	SFP-10GDWZR-60-A
Arista	SFP-10G-DZ-39.77-A	MSA Champion ONE	10GSFP+E5900DWDM80
Arista	SFP-10G-DZ-38.98-A	MSA Champion ONE	10GSFP+E5800DWDM80
Arista	SFP-10G-DZ-38.19-A	MSA Champion ONE	10GSFP+E5200DWDM80
Arista	SFP-10G-DZ-37.39-A	MSA Champion ONE	10GSFP+E4500DWDM80
Arista	SFP-10G-DZ-36.61-A	MSA Champion ONE	10GSFP+E4400DWDM80
Arista	SFP-10G-DZ-35.82-A	MSA Champion ONE	10GSFP+E3600DWDM80
Arista	SFP-10G-DZ-35.04-A	MSA Champion ONE	10GSFP+E3500DWDM80
Arista	SFP-10G-DZ-34.25-A	MSA Champion ONE	10GSFP+E2400DWDM80
Arista	SFP-10G-DZ-33.46-A	MSA Champion ONE	10GSFP+E2200DWDM80
Arista	SFP-10G-DZ-32.68-A	MSA Champion ONE	10GSFP+E2100DWDM80
Arista	SFP-10G-DZ-31.90-A	MSA Champion ONE	10GSFP+E5600DWDM40
Arista	SFP-10G-DZ-31.12-A	MSA Champion ONE	10GSFP+E5300DWDM40
Arista	SFP-10G-DZ-30.33-A	MSA Champion ONE	10GSFP+E5200DWDM40
Arista	SFP-10G-DZ-29.55-A	MSA Champion ONE	10GSFP+E4900DWDM40
Arista	SFP-10G-DZ-28.77-A	MSA Champion ONE	10GSFP+E4800DWDM40
Brocade	10G-SFPP-D63.86-LR-A	MSA Champion ONE	10GSFP+E4700DWDM40
Brocade	10G-SFPP-D63.05-LR-A	MSA Champion ONE	10GSFP+E4600DWDM40
Brocade	10G-SFPP-D62.23-LR-A	MSA Champion ONE	10GSFP+E4400DWDM40
Brocade	10G-SFPP-D61.41-LR-A	MSA Champion ONE	10GSFP+E4300DWDM40
Brocade	10G-SFPP-D60.61-LR-A	MSA Champion ONE	10GSFP+E4200DWDM40
Brocade	10G-SFPP-D59.79-LR-A	MSA Champion ONE	10GSFP+E4000DWDM40
Brocade	10G-SFPP-D58.98-LR-A	MSA Champion ONE	10GSFP+E3800DWDM40
Brocade	10G-SFPP-D58.17-LR-A	MSA Champion ONE	10GSFP+E3700DWDM40
Brocade	10G-SFPP-D57.36-LR-A	MSA Champion ONE	10GSFP+E3600DWDM40
Brocade	10G-SFPP-D56.55-LR-A	MSA Champion ONE	10GSFP+E3500DWDM40
Brocade	10G-SFPP-D55.75-LR-A	MSA Champion ONE	10GSFP+E3300DWDM40
Brocade	10G-SFPP-D54.94-LR-A	MSA Champion ONE	10GSFP+E3200DWDM40
Brocade	10G-SFPP-D54.13-LR-A	MSA Champion ONE	10GSFP+E3100DWDM40
Brocade	10G-SFPP-D53.32-LR-A	MSA Champion ONE	10GSFP+E3000DWDM40
Brocade	10G-SFPP-D52.52-LR-A	MSA Champion ONE	10GSFP+E2900DWDM40
Brocade	10G-SFPP-D51.72-LR-A	MSA Champion ONE	10GSFP+E2700DWDM40
Brocade	10G-SFPP-D50.92-LR-A	MSA Champion ONE	10GSFP+E2400DWDM40
Brocade	10G-SFPP-D50.12-LR-A	MSA Champion ONE	10GSFP+E2300DWDM40

Brocade	10G-SFPP-D49.31-LR-A	MSA Champion ONE	10GSFP+E2200DWDM40
Brocade	10G-SFPP-D48.51-LR-A	MSA Champion ONE	10GSFP+E2100DWDM40
Brocade	10G-SFPP-D47.72-LR-A	MSA Champion ONE	10GSFP+E4500DWDM40-H
Brocade	10G-SFPP-D46.92-LR-A	MSA Champion ONE	10GSFP+E5700DWDM80
Brocade	10G-SFPP-D46.12-LR-A	MSA Champion ONE	10GSFP+E4800DWDM80
Brocade	10G-SFPP-D45.32-LR-A	MSA Champion ONE	10GSFP+E4600DWDM80
Brocade	10G-SFPP-D44.53-LR-A	MSA Champion ONE	10GSFP+E4000DWDM80
Brocade	10G-SFPP-D43.73-LR-A	MSA Champion ONE	10GSFP+E3900DWDM80
Brocade	10G-SFPP-D42.94-LR-A	MSA Champion ONE	10GSFP+E3200DWDM80
Brocade	10G-SFPP-D42.14-LR-A	MSA Champion ONE	10GSFP+E2900DWDM80
Brocade	10G-SFPP-D41.34-LR-A	MSA Champion ONE	10GSFP+E2800DWDM80
Brocade	10G-SFPP-D40.56-LR-A	MSA Champion ONE	10GSFP+E2700DWDM80
Brocade	10G-SFPP-D39.77-LR-A	MSA Champion ONE	10GSFP+E2500DWDM80
Brocade	10G-SFPP-D38.98-LR-A	MSA Champion ONE	10GSFP+E2300DWDM80
Brocade	10G-SFPP-D38.19-LR-A	MSA Champion ONE	10GSFP+E2000DWDM80
Brocade	10G-SFPP-D37.39-LR-A	MSA Champion ONE	10GSFP+E1900DWDM80
Brocade	10G-SFPP-D36.61-LR-A	MSA Champion ONE	10GSFP+E1800DWDM80
Brocade	10G-SFPP-D35.82-LR-A	MSA Champion ONE	10GSFP+E1700DWDM80
Brocade	10G-SFPP-D35.04-LR-A	MSA Champion ONE	10GSFP+E1600DWDM80
Brocade	10G-SFPP-D34.25-LR-A	MSA Champion ONE	10GSFP+E5600DWDM80
Brocade	10G-SFPP-D33.46-LR-A	MSA Champion ONE	10GSFP+E5000DWDM80-H
Brocade	10G-SFPP-D32.68-LR-A	MSA Champion ONE	10GSFP+E3700DWDM80-H
Brocade	10G-SFPP-D31.90-LR-A	MSA Champion ONE	10GSFP+E3600DWDM80-H
Brocade	10G-SFPP-D31.12-LR-A	MSA Champion ONE	10GSFP+E3300DWDM80-H
Brocade	10G-SFPP-D30.33-LR-A	MSA Champion ONE	10GSFP+E3100DWDM80-H
Brocade	10G-SFPP-D29.55-LR-A	MSA Champion ONE	10GSFP+E2900DWDM80-H
Brocade	10G-SFPP-D28.77-LR-A	MSA Champion ONE	10GSFP+E2700DWDM80-H
Calix	100-04272-80-A	MSA Champion ONE	10GSFP+E2600DWDM80-H
Calix	100-04273-80-A	MSA Champion ONE	10GSFP+E2500DWDM80-H
Calix	100-04274-80-A	MSA Champion ONE	10GSFP+E2400DWDM80-H
Calix	100-04275-80-A	MSA Champion ONE	10GSFP+E2300DWDM80-H
Calix	100-04276-80-A	MSA Champion ONE	10GSFP+E2200DWDM80-H
Calix	100-04277-80-A	MSA Champion ONE	10GSFP+E2100DWDM80-H
Calix	100-04278-80-A	MSA Generic	AN-DWDM-SFPP-80-I-6386
Calix	100-04279-80-A	MSA Generic	AN-DWDM-SFPP-80-I-6305
Ciena	XCVR-S80V55-DW17-A	MSA Generic	AN-DWDM-SFPP-80-I-6223
Ciena	XCVR-S80V55-DW18-A	MSA Generic	AN-DWDM-SFPP-80-I-6141

Ciena	XCVR-S80V55-DW19-A	MSA Generic	AN-DWDM-SFPP-80-I-6061
Ciena	XCVR-S80V55-DW20-A	MSA Generic	AN-DWDM-SFPP-80-I-5979
Ciena	XCVR-S80V55-DW21-A	MSA Generic	AN-DWDM-SFPP-80-I-5898
Ciena	XCVR-S80V55-DW22-A	MSA Generic	AN-DWDM-SFPP-80-I-5817
Ciena	XCVR-S80V55-DW23-A	MSA Generic	AN-DWDM-SFPP-80-I-5736
Ciena	XCVR-S80V55-DW24-A	MSA Generic	AN-DWDM-SFPP-80-I-5655
Ciena	XCVR-S80V55-DW25-A	MSA Generic	AN-DWDM-SFPP-80-I-5575
Ciena	XCVR-S80V55-DW26-A	MSA Generic	AN-DWDM-SFPP-80-I-5494
Ciena	XCVR-S80V55-DW27-A	MSA Generic	AN-DWDM-SFPP-80-I-5413
Ciena	XCVR-S80V55-DW28-A	MSA Generic	AN-DWDM-SFPP-80-I-5332
Ciena	XCVR-S80V55-DW29-A	MSA Generic	AN-DWDM-SFPP-80-I-5252
Ciena	XCVR-S80V55-DW30-A	MSA Generic	AN-DWDM-SFPP-80-I-5172
Ciena	XCVR-S80V55-DW31-A	MSA Generic	AN-DWDM-SFPP-80-I-5092
Ciena	XCVR-S80V55-DW32-A	MSA Generic	AN-DWDM-SFPP-80-I-5012
Ciena	XCVR-S80V55-DW33-A	MSA Generic	AN-DWDM-SFPP-80-I-4931
Ciena	XCVR-S80V55-DW34-A	MSA Generic	AN-DWDM-SFPP-80-I-4851
Ciena	XCVR-S80V55-DW35-A	MSA Generic	AN-DWDM-SFPP-80-I-4772
Ciena	XCVR-S80V55-DW36-A	MSA Generic	AN-DWDM-SFPP-80-I-4692
Ciena	XCVR-S80V55-DW37-A	MSA Generic	AN-DWDM-SFPP-80-I-4612
Ciena	XCVR-S80V55-DW38-A	MSA Generic	AN-DWDM-SFPP-80-I-4532
Ciena	XCVR-S80V55-DW39-A	MSA Generic	AN-DWDM-SFPP-80-I-4453
Ciena	XCVR-S80V55-DW40-A	MSA Generic	AN-DWDM-SFPP-80-I-4373
Ciena	XCVR-S80V55-DW41-A	MSA Generic	AN-DWDM-SFPP-80-I-4294
Ciena	XCVR-S80V55-DW42-A	MSA Generic	AN-DWDM-SFPP-80-I-4214
Ciena	XCVR-S80V55-DW43-A	MSA Generic	AN-DWDM-SFPP-80-I-4134
Ciena	XCVR-S80V55-DW44-A	MSA Generic	AN-DWDM-SFPP-80-I-4056
Ciena	XCVR-S80V55-DW45-A	MSA Generic	AN-DWDM-SFPP-80-I-3977
Ciena	XCVR-S80V55-DW46-A	MSA Generic	AN-DWDM-SFPP-80-I-3898
Ciena	XCVR-S80V55-DW47-A	MSA Generic	AN-DWDM-SFPP-80-I-3819
Ciena	XCVR-S80V55-DW48-A	MSA Generic	AN-DWDM-SFPP-80-I-3739
Ciena	XCVR-S80V55-DW49-A	MSA Generic	AN-DWDM-SFPP-80-I-3661
Ciena	XCVR-S80V55-DW50-A	MSA Generic	AN-DWDM-SFPP-80-I-3582
Ciena	XCVR-S80V55-DW51-A	MSA Generic	AN-DWDM-SFPP-80-I-3504
Ciena	XCVR-S80V55-DW52-A	MSA Generic	AN-DWDM-SFPP-80-I-3425
Ciena	XCVR-S80V55-DW53-A	MSA Generic	AN-DWDM-SFPP-80-I-3346
Ciena	XCVR-S80V55-DW54-A	MSA Generic	AN-DWDM-SFPP-80-I-3268
Ciena	XCVR-S80V55-DW55-A	MSA Generic	AN-DWDM-SFPP-80-I-3190

Ciena	XCVR-S80V55-DW56-A	MSA Generic	AN-DWDM-SFPP-80-I-3112
Ciena	XCVR-S80V55-DW57-A	MSA Generic	AN-DWDM-SFPP-80-I-3033
Ciena	XCVR-S80V55-DW58-A	MSA Generic	AN-DWDM-SFPP-80-I-2955
Ciena	XCVR-S80V55-DW59-A	OnePort	OP-DWDM-SFPP-80-I-2877
Ciena	XCVR-S80V55-DW60-A	OnePort	OP-DWDM-SFPP-80-I-6386
Ciena	XCVR-S80W32-C1	OnePort	OP-DWDM-SFPP-80-I-6305
Ciena	XCVR-S80V55-DW61-A	OnePort	OP-DWDM-SFPP-80-I-6223
Cisco	DWDM-SFP10G-63.86-A	OnePort	OP-DWDM-SFPP-80-I-6141
Cisco	DWDM-SFP10G-63.05-A	OnePort	OP-DWDM-SFPP-80-I-6061
Cisco	DWDM-SFP10G-62.23-A	OnePort	OP-DWDM-SFPP-80-I-5979
Cisco	DWDM-SFP10G-61.41-A	OnePort	OP-DWDM-SFPP-80-I-5898
Cisco	DWDM-SFP10G-60.61-A	OnePort	OP-DWDM-SFPP-80-I-5817
Cisco	DWDM-SFP10G-59.79-A	OnePort	OP-DWDM-SFPP-80-I-5736
Cisco	DWDM-SFP10G-58.98-A	OnePort	OP-DWDM-SFPP-80-I-5655
Cisco	DWDM-SFP10G-58.17-A	OnePort	OP-DWDM-SFPP-80-I-5575
Cisco	DWDM-SFP10G-57.36-A	OnePort	OP-DWDM-SFPP-80-I-5494
Cisco	DWDM-SFP10G-56.55-A	OnePort	OP-DWDM-SFPP-80-I-5413
Cisco	DWDM-SFP10G-55.75-A	OnePort	OP-DWDM-SFPP-80-I-5332
Cisco	DWDM-SFP10G-54.94-A	OnePort	OP-DWDM-SFPP-80-I-5252
Cisco	DWDM-SFP10G-54.13-A	OnePort	OP-DWDM-SFPP-80-I-5172
Cisco	DWDM-SFP10G-53.32-A	OnePort	OP-DWDM-SFPP-80-I-5092
Cisco	DWDM-SFP10G-52.52-A	OnePort	OP-DWDM-SFPP-80-I-5012
Cisco	DWDM-SFP10G-51.72-A	OnePort	OP-DWDM-SFPP-80-I-4931
Cisco	DWDM-SFP10G-50.92-A	OnePort	OP-DWDM-SFPP-80-I-4851
Cisco	DWDM-SFP10G-50.12-A	OnePort	OP-DWDM-SFPP-80-I-4772
Cisco	DWDM-SFP10G-49.31-A	OnePort	OP-DWDM-SFPP-80-I-4692
Cisco	DWDM-SFP10G-48.51-A	OnePort	OP-DWDM-SFPP-80-I-4612
Cisco	DWDM-SFP10G-47.72-A	OnePort	OP-DWDM-SFPP-80-I-4532
Cisco	DWDM-SFP10G-46.92-A	OnePort	OP-DWDM-SFPP-80-I-4453
Cisco	DWDM-SFP10G-46.12-A	OnePort	OP-DWDM-SFPP-80-I-4373
Cisco	DWDM-SFP10G-45.32-A	OnePort	OP-DWDM-SFPP-80-I-4294
Cisco	DWDM-SFP10G-44.53-A	OnePort	OP-DWDM-SFPP-80-I-4214
Cisco	DWDM-SFP10G-43.73-A	OnePort	OP-DWDM-SFPP-80-I-4134
Cisco	DWDM-SFP10G-42.94-A	OnePort	OP-DWDM-SFPP-80-I-4056
Cisco	DWDM-SFP10G-42.14-A	OnePort	OP-DWDM-SFPP-80-I-3977
Cisco	DWDM-SFP10G-41.34-A	OnePort	OP-DWDM-SFPP-80-I-3898
Cisco	DWDM-SFP10G-40.56-A	OnePort	OP-DWDM-SFPP-80-I-3819

Cisco	DWDM-SFP10G-39.77-A	OnePort	OP-DWDM-SFPP-80-I-3739
Cisco	DWDM-SFP10G-38.98-A	OnePort	OP-DWDM-SFPP-80-I-3661
Cisco	DWDM-SFP10G-38.19-A	OnePort	OP-DWDM-SFPP-80-I-3582
Cisco	DWDM-SFP10G-37.39-A	OnePort	OP-DWDM-SFPP-80-I-3504
Cisco	DWDM-SFP10G-36.61-A	OnePort	OP-DWDM-SFPP-80-I-3425
Cisco	DWDM-SFP10G-35.82-A	OnePort	OP-DWDM-SFPP-80-I-3346
Cisco	DWDM-SFP10G-35.04-A	OnePort	OP-DWDM-SFPP-80-I-3268
Cisco	DWDM-SFP10G-34.25-A	OnePort	OP-DWDM-SFPP-80-I-3190
Cisco	DWDM-SFP10G-33.46-A	OnePort	OP-DWDM-SFPP-80-I-3112
Cisco	DWDM-SFP10G-32.68-A	OnePort	OP-DWDM-SFPP-80-I-3033
Cisco	DWDM-SFP10G-31.90-A	OnePort	OP-DWDM-SFPP-80-I-2955
Cisco	DWDM-SFP10G-31.12-A	OnePort	OP-DWDM-SFPP-80-I-2877
Cisco	DWDM-SFP10G-30.33-A		

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