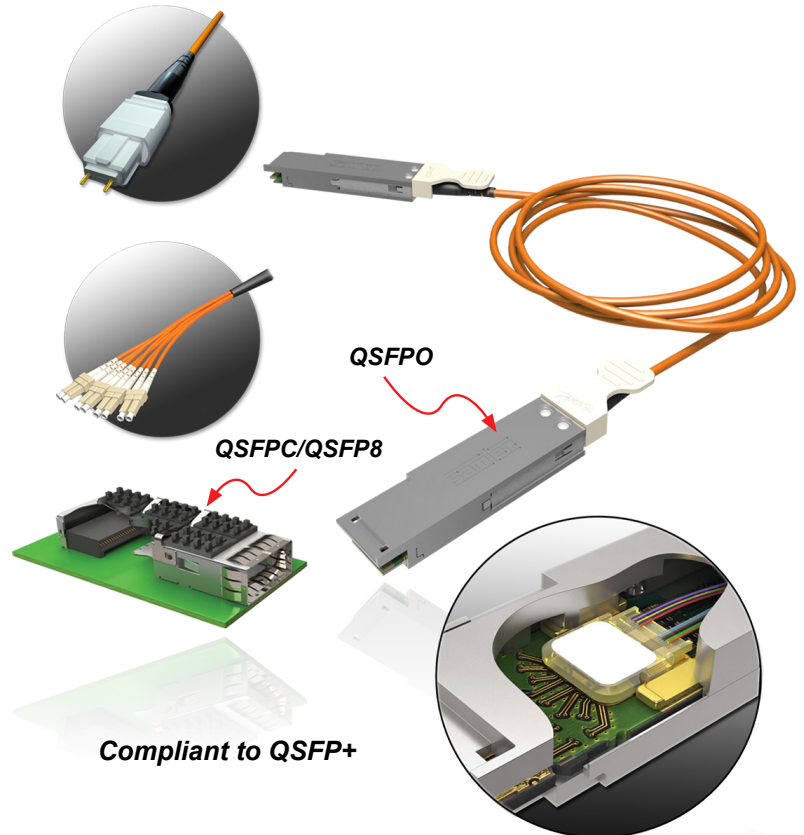




QSFP+ ACTIVE OPTICAL CABLE ASSEMBLY

QSFP+ connectors provide four channels of data in one pluggable interface. Each channel is capable of transferring data at 10 Gbps and supports a total of 40 Gbps as specified for QSFP+. A 56 Gbps system running 14 Gbps per channel will be available from Samtec in April, 2012. These interconnects have three times the density of SFP+ interconnects, providing a cost-effective, low-power option for high-speed data centers.

Samtec's QSFP0 series can be used as a direct replacement for traditional copper cables, but with the added benefit of a lighter weight cable solution of up to 100m. They can also be used to replace pluggable optical transceivers in links up to 100m. This series is compliant to the QSFP+ MSA specification and Infiniband and Ethernet Standards.



Key Features of QSFP+ Active Optical Cable Assemblies include:

- Supports Infiniband QDR, DDR, and SDR; 56 Gbps will support Infiniband FDR
 - Small diameter cable (3mm) for increased airflow in rack
 - Cable lengths from 1m to 100m
 - 4 full duplex lanes
 - One piece direct attach assembly
 - 40 Gbps or 56 Gbps aggregate bandwidth (transmitting up to 10 Gbps per lane/40 Gbps; 14 Gbps per lane/56 Gbps available Q1, 2012)
- Mating QSFP+ connector (QSFP8 Series), cage (QSFP0 Series), and kit (QSFPK Series) are also available
 - Additional end options available
 - Lightweight outer shell
 - On the list of the Infiniband Trade Association (IBTA) Approved Integrator's List

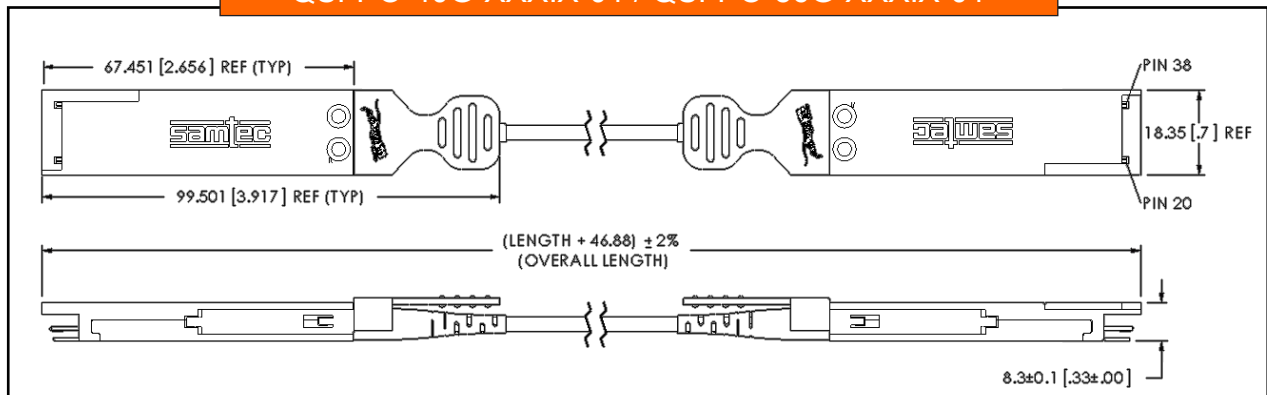
For more information, contact Samtec's Optical Group at optics@samtec.com or visit us at <http://www.samtec.com/ProductInformation/TechnicalSpecifications/Overview.aspx?series=QSFP0>.



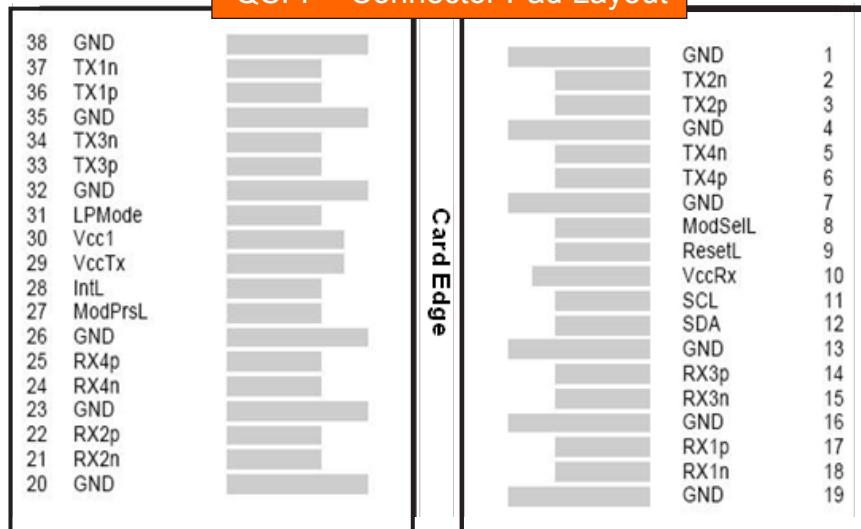
Data Sheet

Specifications	Units	Minimum	Typical	Maximum	Notes
Data Rate (channel)	Gbs	1		10.5/14	Transceiver is Data Agnostic
Diff. Input Amplitude	mv	250		1600	Peak to Peak Differential (minimum for applications $\leq 10.5G = 150mV$)
Diff. Output Amplitude	mv	340		700	Peak to Peak Differential
Power Supply Voltage	V	3.15	3.3	3.45	
Power Supply Current	mA		230		
Power Consumption	W		0.75	1.0	Power per end
Bit Error Rate	BER		10^{-15}		
Operating Case Temp.	°C	0		70	Case Temperature
Operating Humidity	%RH	5		90	Non-Condensing
Storage Temp. Range	°C	-40		85	
Channels			4		Full Duplex
Length	m	1		100	Custom lengths available
Cable Type			OFNP		Plenum Rated
Connector			QSFP+		SFF-8436 Compliant
Cable Weight	g		13.7		88% Less than 24awg Copper Cable
Cable Diameter	mm		3		68% Less than 24awg Copper Cable
Cable Bend Radius	mm		30		

QSFP0-40G-XXX.X-01 / QSFP0-56G-XXX.X-01



QSFP+ Connector Pad Layout



Top Side Viewed from Top

Bottom Side Viewed from Bottom