



Features

- Compliant with SONET, SDH, GBE, FC
- Customizable power consumption
- Custom memory maps available
- Built in diagnostic functions
- Supports 28Gbps total data rate
- Host-pluggable MSA footprint
- Full SFF-8432 MSA compliant
- Temperature range from 0° to 80°C
- No reference clock required
- Economical and flexible 28Gbps SFP28 port testing
- Board level system testing
- Power on validation
- Excellent signal integrity

Applications

- SFP port/system testing
- Ethernet IEEE 802.3 (Gigabit, 10 Gigabit and 25 Gigabit Ethernet)
- SONET, SDH, GBE, Fiber Channel Support

Recommended Operating Conditions

Parameter	Symbol	Min.	Max.	Units	Note
Storage Temperature	<i>Tstg</i>	-40	85	°C	
Ambient Operating Temperature	<i>Ta</i>	0	80	°C	
Data DC Voltage	<i>Voffset</i>	-10	10	Vpk	V (Tx+,Tx-,Rx+, Rx-) to ground
Supply Voltage	<i>V_{cc}</i>	3.13	3.47	Vdc	
Baud Rate	<i>BRate</i>	0.1	28	Gbps	

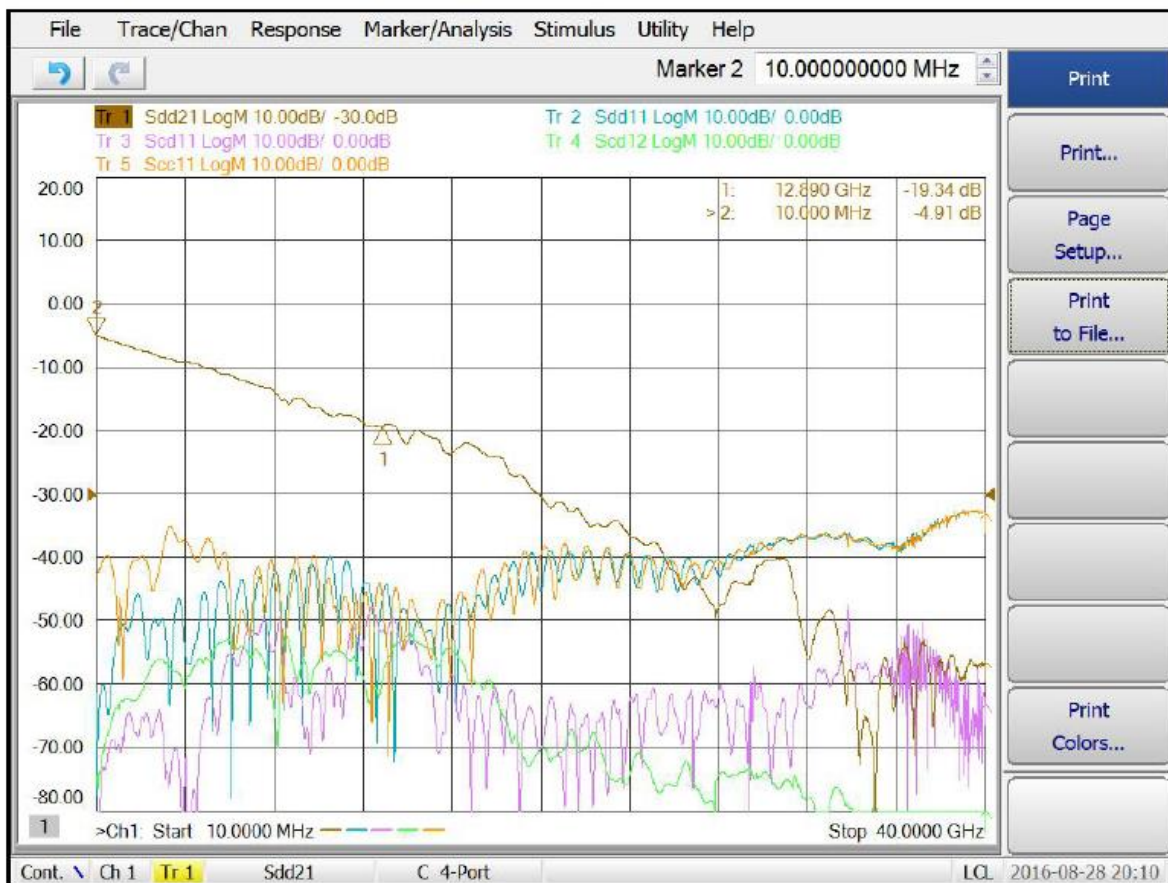
Electrical Characteristics

Parameter	Symbol	Min	Type	Max	Units	Notes
Bit Error Rate	BER			IE-12		Errors/Bit (Note1)
Supply Current – Serial ID write	IccW		2	30	mA	For Serial ID option only
Supply Current – Serial ID read	IccR		0.4	10	mA	
Surge Current	I surge	-	-	30	mA	Surge above steady state value

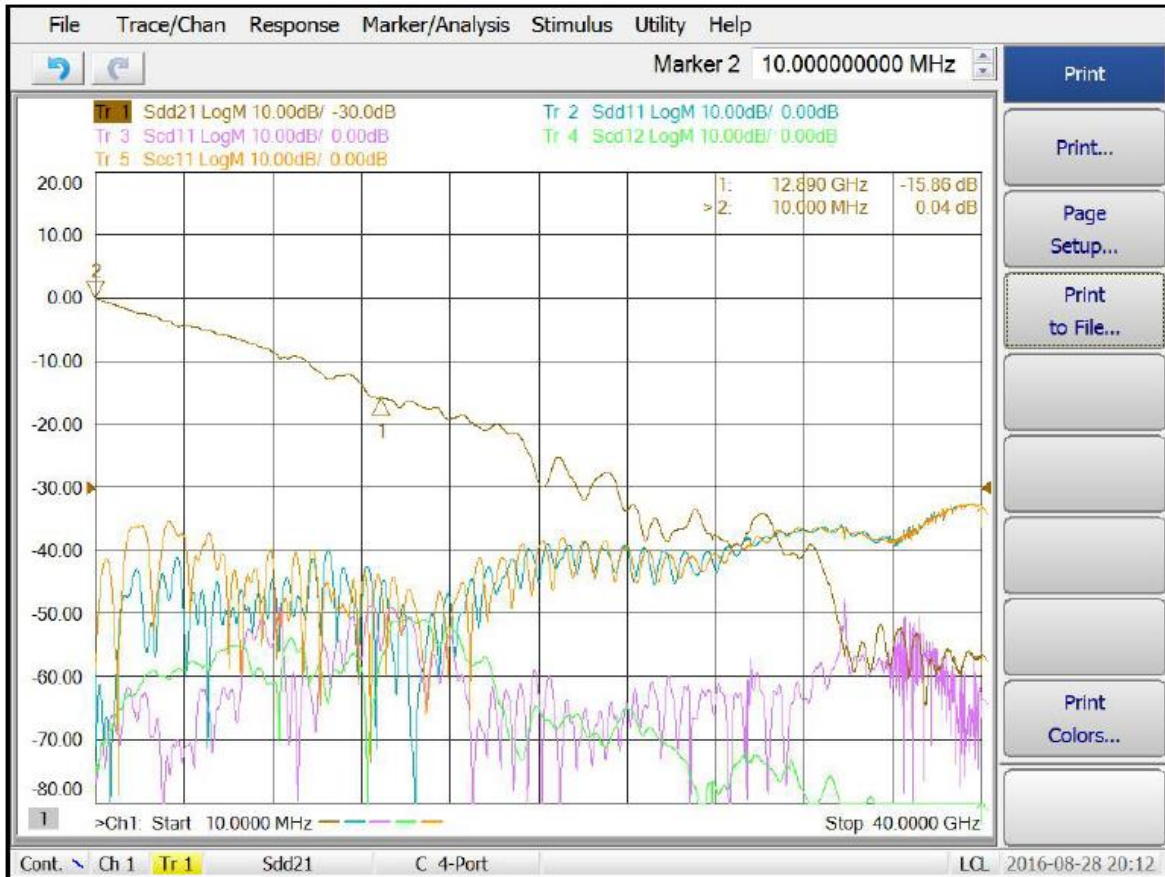
Notes: 1, Tested with a 2^7-1, 2^23-1, 2^31-1 PRBS pattern

Data Path

Parameter	Symbol	Min	Type	Max	Units	Notes
Impedance		90	100	110	ohms	Differential Impedance
Durability Cycles			100		Times	

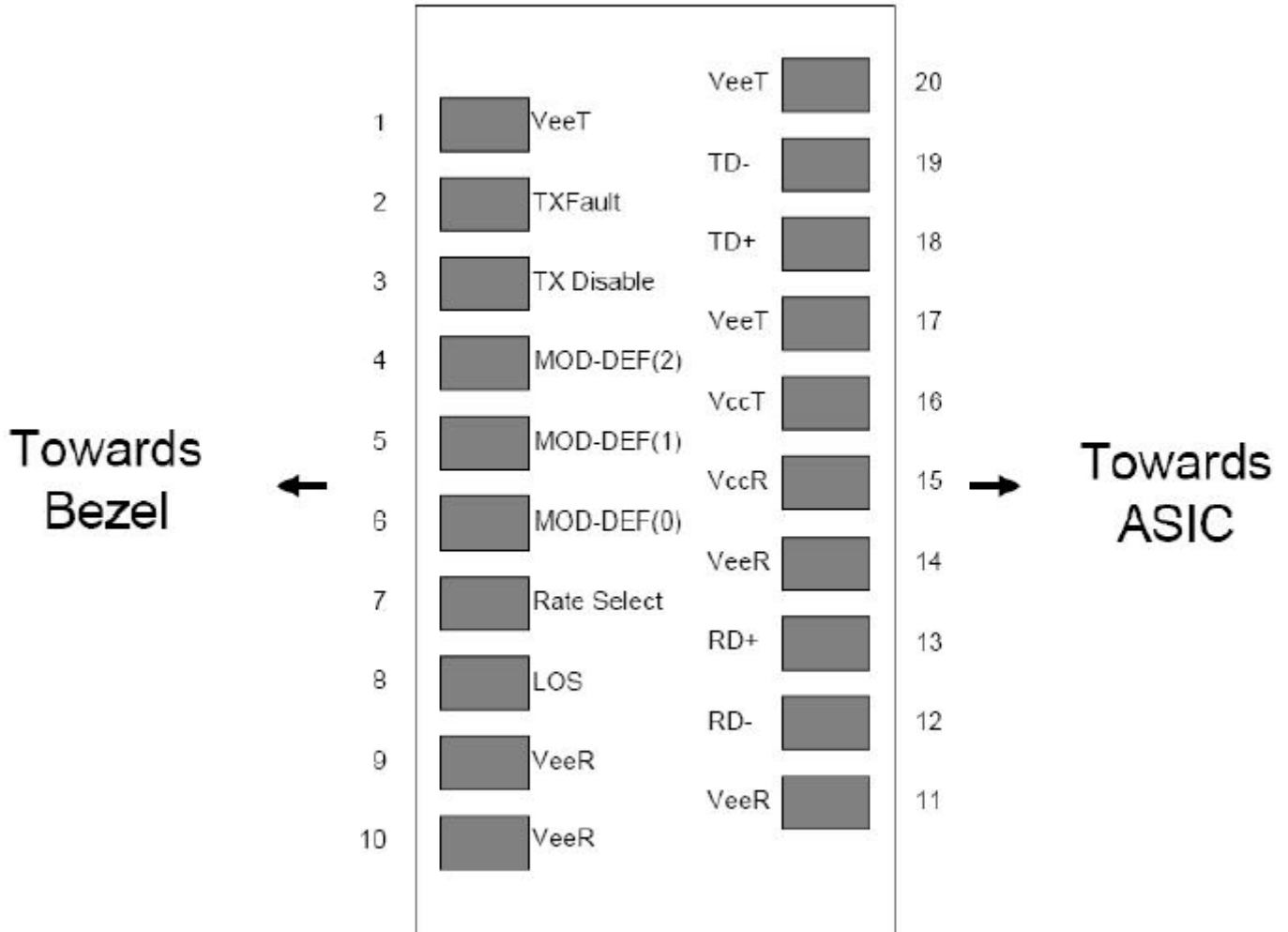


0dB



5dB

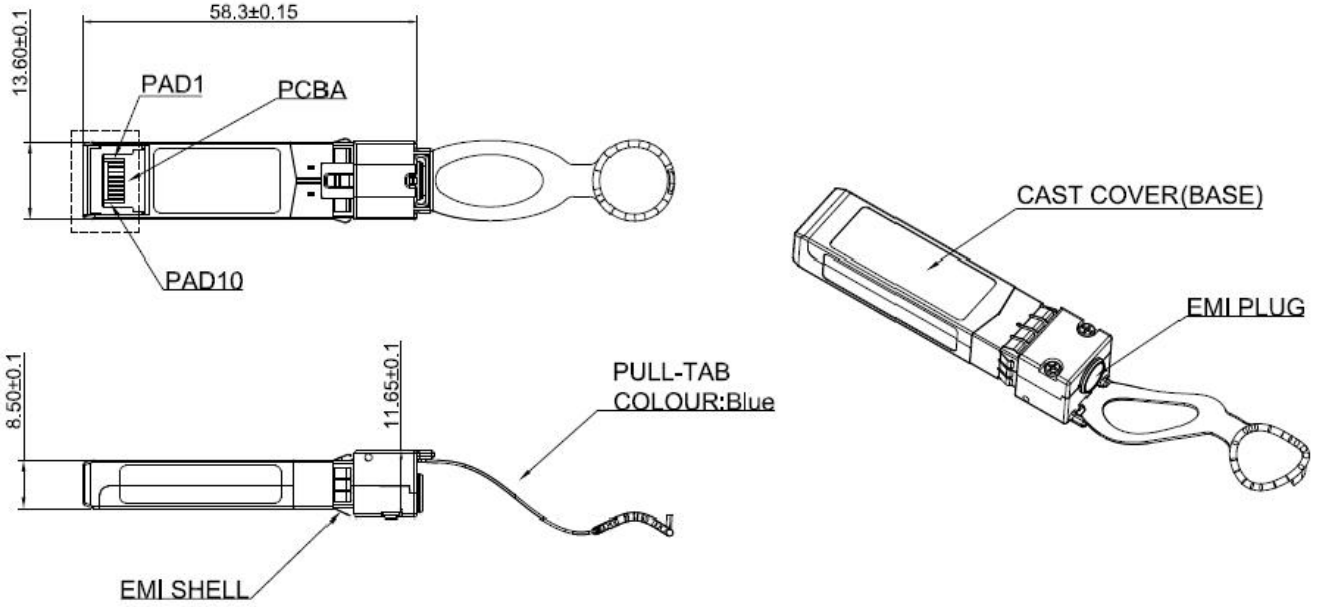
Pin Assignment



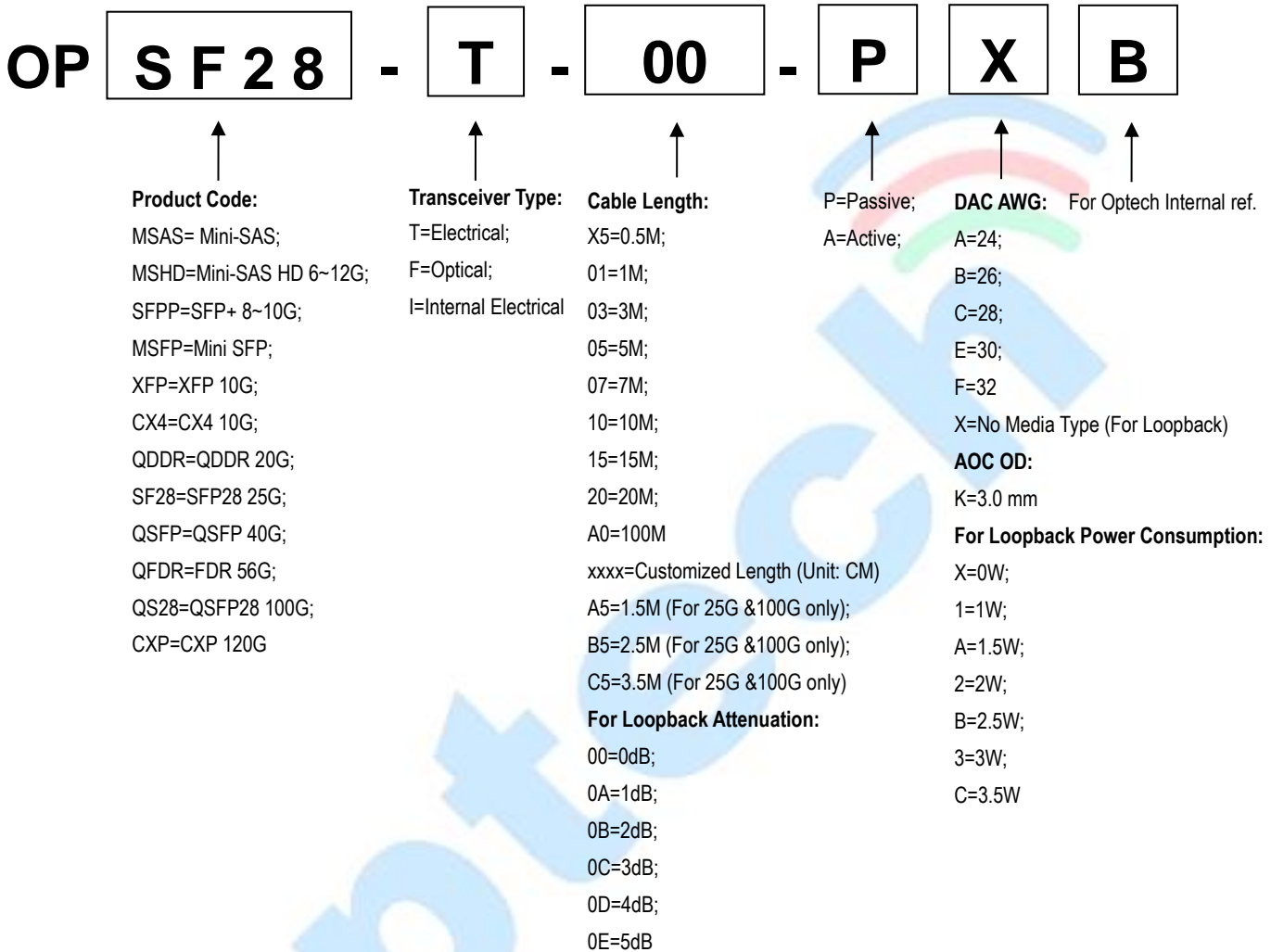
Pin Descriptions

Pin	Name	Description
1	TGND	Transmit ground
2	TX_FAULT	Internally tied to Transmit ground. TX_FAULT is not implemented.
3	TX_DISABLE	Internally pulled up to Vcc through a 5.11k ohm resistor. TX_DISABLE is not implemented.
4	MOD_DEF(2)	Signal SDA (Data) of the 2-wire serial ID interface
5	MOD_DEF(1)	Signal SCL (Clock) of the 2-wire serial ID interface
6	MOD_DEF(0)	This pin is internally tied to Transmit ground
7	Rate Select	Pin is internally pulled low through a 33.2k resistor. Rate Select is not implemented.
8	LOS	Internally tied to Receiver Ground. LOS is not implemented.
9	RGND	Receiver ground
10	RGND	Receiver ground
11	RGND	Receiver ground
12	RD-	Differential receiver outputs. User to terminate to 100 ohms differential at SERDES.
13	RD+	Differential receiver outputs. User to terminate to 100 ohms differential at SERDES.
14	RGND	Receiver ground
15	VCCR	Not used.
16	VCCT	EEPROM power
17	TGND	Transmit ground
18	TD+	Differential transmitter inputs. Internally terminated to 10 ohms differential.
19	TD-	Differential transmitter inputs. Internally terminated to 10 ohms differential.
20	TGND	Transmit ground

Dimensions



Ordering Information



Note: All information contained in this document is subject to change without notice.