34060841-AO

Huawei® 34060841 Compatible TAA 2.4Gbs/1.2Gbs-C++ SFP Transceiver (SMF, 1490nmTx/1310nmRx, 40km, SC, DOM)

Features

- INF-8074 and SFF-8472 Compliance
- Simplex SC Connector
- Commercial Temperature 0 to 70 Celsius
- Single-mode Fiber
- Hot Pluggable
- Excellent ESD Protection
- Metal with Lower EMI
- RoHS Compliant and Lead Free

Applications

- GPON
- Access and Enterprise

Product Description

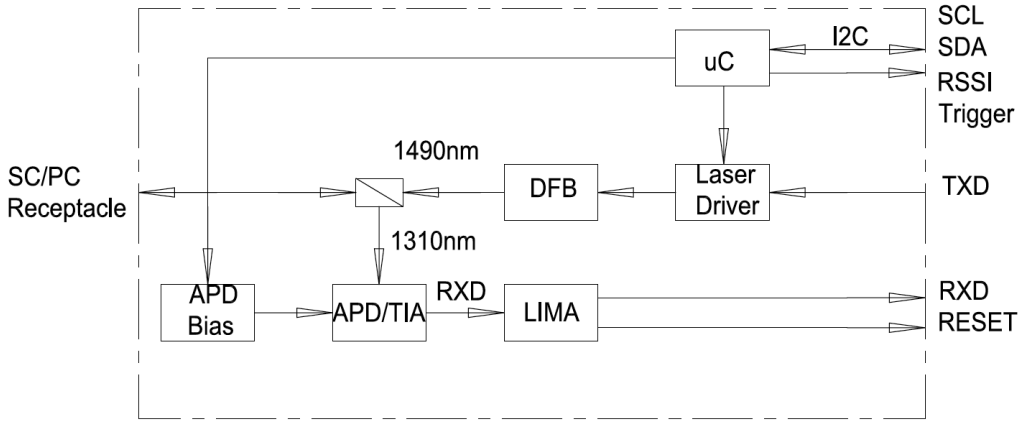
This Huawei® 34060841 compatible SFP transceiver provides 2.4Gbs/1.2Gbs-C+ throughput up to 40km over single-mode fiber (SMF) using a wavelength of 1490nmTx/1310nmRx via a SC connector. It is guaranteed to be 100% compatible with the equivalent Huawei® transceiver. This easy to install, hot swappable transceiver has been programmed, uniquely serialized and data-traffic and application tested to ensure that it will initialize and perform identically. Digital optical monitoring (DOM) support is also present to allow access to real-time operating parameters. This transceiver is Trade Agreements Act (TAA) compliant. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

AddOn's transceivers are RoHS compliant and lead-free.

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only "U.S. – made or designated country end products."

Rev. 081722

Function Diagram



Pin Descriptions

Pin	Symbol	Name/Descriptions
1	V_{EET}	Transmitter Ground
2	TX_FAULT	Transmitter Fault Indication, LVTTL Output, Active High
3	TX_DISABLE	Transmitter Disable, LVTTL Input. Optical output power is off when this PIN is high or left unconnected.
4	SDA	I2C Data
5	SCL	I2C Clock
6	MOD_DEF(0)	Internally grounded
7	Rest	Receiver Reset, LVTTL Input. Set “Reset” high at the end of previous burst, 2 bytes in duration
8	BPD	Burst Packet Detect, LVTTL output. BPD assert low when module receives “reset” signal, assert high when incoming burst is preset.
9	RSSI_Trigger	RSSI Trigger Signal from Host, LVTTL input.
10	V_{EER}	Receiver ground
11	V_{EER}	Receiver ground
12	RD-	Inv. Received Data Out, LVPECL, DC coupled
13	RD+	Received Data Out, LVPECL, DC coupled
14	V_{EER}	Receiver ground
15	V_{CCR}	Receiver Power Supply
16	V_{CCT}	Transmitter Power Supply
17	V_{EET}	Transmitter Ground
18	TD+	Transmit Data In, LVPECL or CML (AC coupled; internally 100 ohms differential
19	TD-	Inv. Transmit Data In, LVPECL or CML (AC coupled; internally 100 ohms differential termination)
20	V_{EET}	Transmitter Ground

Recommended Operating Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operating Case Temperature	Tc	0		70	°C
Storage Temperature	TSTG	-40		85	°C
Power Supply Voltage	Vcc	3.13	3.3	3.47	V
Power Supply Current	Icc			450	mA

Transmitter Characteristics

Parameter		Symbol	Min.	Typ.	Max.	Unit	Notes
Optical Transmitter Power		PO	4.5		10	dBm	
Optical Transmitter Power off		POFF			-39	dBm	
Output Center Wavelength		λ	1480		1500	nm	
Output Spectrum Width		Δλ			1.0	nm	
Side Mode Suppression Ratio		SMSR	30			dB	
Extinction Ratio		ER	8.2			dB	
Optical Rise Time					160	ps	
Optical Fall Time					160	ps	
Optical Eye Diagram		Compliant with ITU-T G.984.2 Mask					
Tolerance to TX Back Reflection			-15			dB	
Data Rate				2.488		Gb/s	
Differential Input Voltage		VPP	300		1200	mV	
Differential Input Impedance		ZIN	80	100	120	ohm	
TX Disable	High		2.0			V	
	Low		0		0.8	V	
TX Fault	High		2.4			V	
	Low		0		0.4	V	

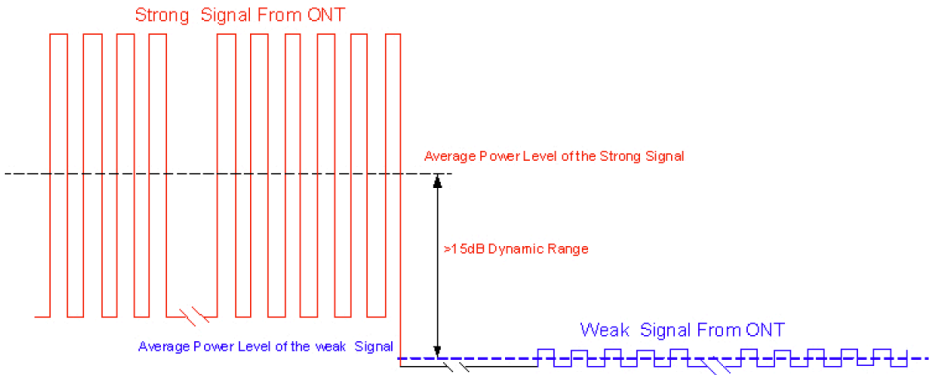
Receiver Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Wavelength of Operation		1260		1310	nm	
Data Rate			1.244		Gb/s	
Sensitivity	Sen			-30	dBm	1
Saturation Optical Power	Sat	-12			dBm	1
Receiver Reflectance				-12	dB	
Receiver Burst-mode Dynamic Range		15			dB	2
Data Output Voltage - High	VOH	VccR-1.05		VccR-0.85	V	
Data Output Voltage - Low	VOL	VccR-1.84		VccR-1.60	V	
Data Output Differential Swing		400		1600	mV	
RSSI accuracy		-3		3	dB	3
BPD Output Voltage - High	VIH	2.4			V	4
BPD Output Voltage – Low	VIL			0.4	V	4
Guard Time	T_{GUARD}		32		bits	
Reset Width	T_{RESET}		16		bits	
Optical Signal During Time	$T_{ONT\ EN\_DUR}$	300			ns	5
RSSI Trigger Delay	T_D	0		3000	ns	6
RSSI Trigger Width	T_W	300		$T_{ONT\ EN\_DUR}$	ns	

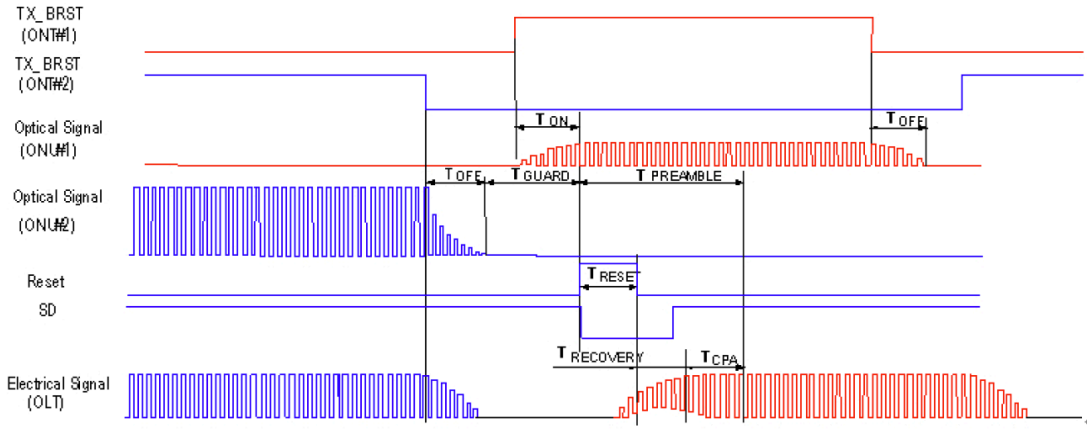
Notes

1. Measured with 1310nm, 1.244Gbps PRBS223-1 burst-mode optical input, ER=10dB, BER=1x10-10; Single burst packet length is 40us and packet interval is 40us.
2. Input optical power level difference of adjacent burst packets.
3. Receiver optical power ranged from -8dBm to -28dBm, measured with 1310nm, 1.244Gbps PRBS27-1 burst-mode optical input, ER=10dB, 50%duty cycle.
4. BPD assert low when module receive “Reset” signal, assert high when burst package is detected and latch to high state until next “Reset” signal.
5. For RSSI Measurement
6. Refer to first bit of the preamble

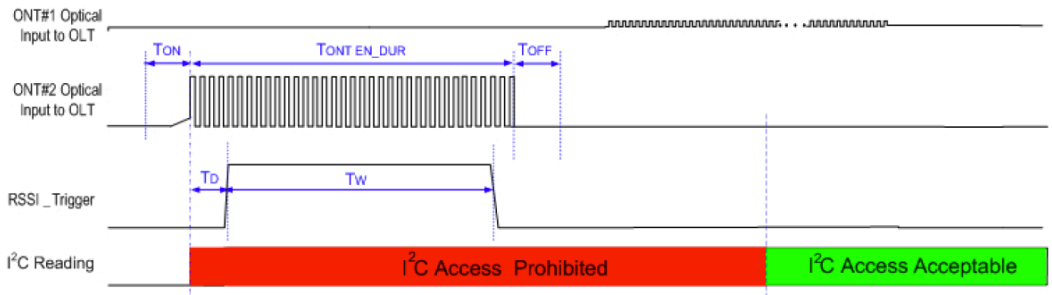
Burst Mode Receiver Dynamic Range



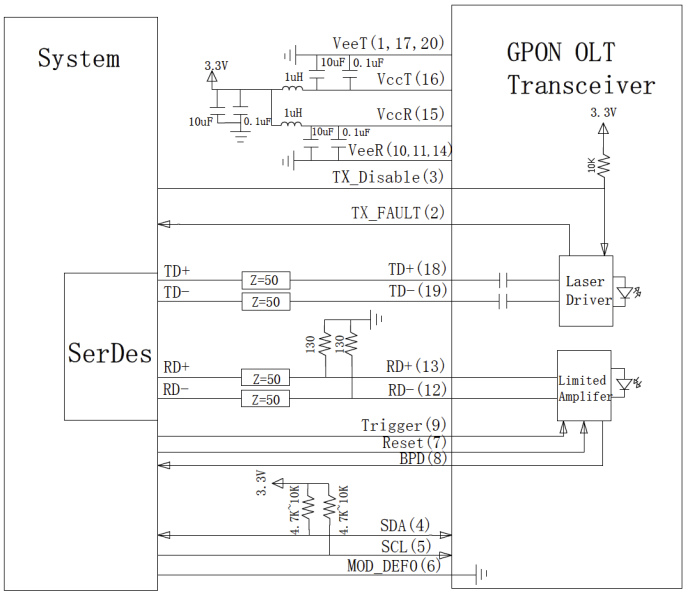
Timing Parameter Definitions in Burst Mode Sequence



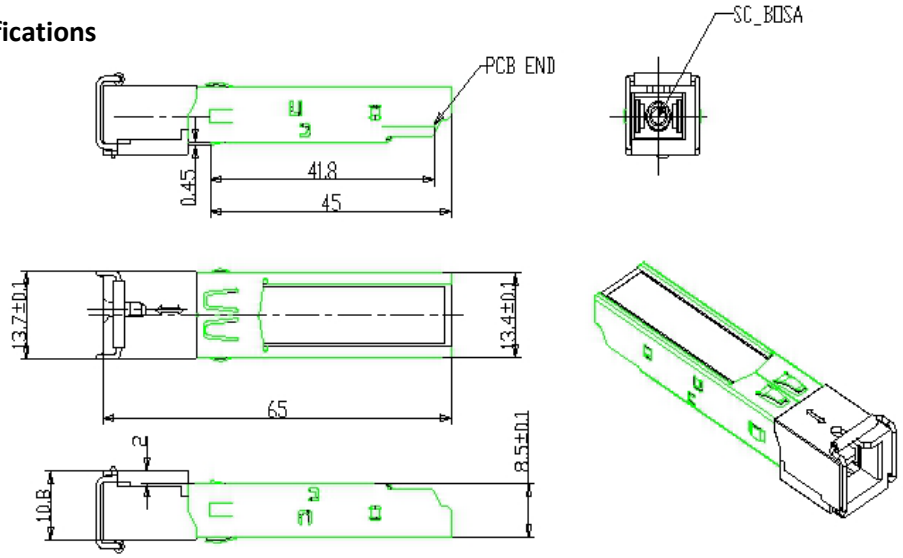
RSSI Timing Sequence



Recommended Application Circuit



Mechanical Specifications



Digital Diagnostic Monitoring Accuracy

Parameter	Accuracy	Units	Notes
Transceiver Temperature	±3	°C	Temperature sensor
Power Supply Voltage	±3	%	Vcc=3.13~3.47V
TX Bias Current	±10	mA	
TX Optical Power	±3	dB	Average Power
RX Power	±3	dB	

About AddOn Networks

In 1999, AddOn Networks entered the market with a single product. Our founders fulfilled a severe shortage for compatible, cost-effective optical transceivers that compete at the same performance levels as leading OEM manufacturers. Adhering to the idea of redefining service and product quality not previously had in the fiber optic networking industry, AddOn invested resources in solution design, production, fulfillment, and global support.

Combining one of the most extensive and stringent testing processes in the industry, an exceptional free tech support center, and a consistent roll-out of innovative technologies, AddOn has continually set industry standards of quality and reliability throughout its history.

Reliability is the cornerstone of any optical fiber network and is in engrained in AddOn's DNA. It has played a key role in nurturing the long-term relationships developed over the years with customers. AddOn remains committed to exceeding industry standards with certifications from ranging from NEBS Level 3 to ISO 9001:2005 with every new development while maintaining the signature reliability of its products.

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