40G QSFP+ AOC

Product Overview 3

Data Rate 10.31 x 4	**Wavelength 850**	**Reach 1~150m**
Temperature 0℃~+70℃		



Part Number WTACQ40-Q40-xxM

1. Product Overview

Features

- Support 40GBASE-SR4/QDR application
- Compliant to QSFP+ Electrical MSA SFF-8436
- Multi rate of up to 10.3125Gbps per lane
- +3.3V single power supply
- Low power consumption
- Operating case temp Commercial: 0°C to +70 °C
- RoHS 6/6 compliant

Applications

- 40GBASE-SR4 at 10.3125Gbps per lane
- InfiniBand QDR
- Other optical links

2. Ordering Information

Part No.	Bit Rate (Gbps)	Laser (nm)	Distance (m)	Fiber Type	DDMI	Connector	Temp
WTACQ40-Q40-xxM	10.31 x 4	850	1~150m	MMF	YES	N. A	0℃~+70℃

3. Absolute Maximum Ratings

Parameter	Symbol	Min	Type	Max	Unit	Ref.
Supply Voltage	Vcc3	-0.5	-	+3.6	V	
Storage Temperature	Ts	-5	-	+75	°C	
Operating Humidity	RH	+5	-	+85	%	1

4. Recommended Operating Conditions

Parameter	Symbol	Min.	Typical	Max.	Max.	Unit	Notes
Operating Case Temperature	TC	0	-	+70	°C	°C	
Power Supply Voltage	Vcc	3.14	3.3	3.47	3.47	V	
Power Dissipation	Pd	-	-	1.5	1.5	W	1
Bit Rate	BR	1.25	10.3125	-	-	Gbps	Per lane

5. Electrical Characteristics

Parameter	Parameter	Symbol	Min.	Typ.	Max.	Units	Notes
Electrical transmitter Characteristics	Electrical transmitter Characteristics	Electrical transmitter Characteristics	Electrical transmitter Characteristics	Electrical transmitter Characteristics	Electrical transmitter Characteristics	Electrical transmitter Characteristics	Electrical transmitter Characteristics
Differential Data Input Swing	Differential Data Input Swing	Vin	200	-	1000	mV	
Input Differential Impedance	Input Differential Impedance	ZD	90	100	110	Ω	
ModSelL	Module Select	VOL	VEE-0.3	-	0.4	V	
ModSelL	Module Unselect	VOH	2.0	-	VCC+0.3	V	
LPMode	Low Power Mode	VIL	VEE-0.3	-	0.8	V	
LPMode	Normal Operation	VIH	2.0	-	VCC+0.3	V	
ResetL	Reset	VIL	VEE-0.3	-	0.8	V	
ResetL	Normal Operation	VIH	2.0	-	VCC+0.3	V	
Electrical Receiver Characteristics	Electrical Receiver Characteristics	Electrical Receiver Characteristics	Electrical Receiver Characteristics	Electrical Receiver Characteristics	Electrical Receiver Characteristics	Electrical Receiver Characteristics	Electrical Receiver Characteristics
Differential Date Input Swing	Differential Date Input Swing	Vout	200	-	1000	mV	
Output Differential Impedance	Output Differential Impedance	ZD	90	100	110	Ω	
ModPrsL	Normal Operation	VOL	VEE-0.3	-	0.4	V	
IntL	Interrupt	VOL	VEE-0.3	-	0.4	V	
IntL	Normal Operation	VoH	2.0	-	VCC+0.3	V	
Bit Error Rate	Bit Error Rate	BER			E-12		1

6. Pin Descriptions

Pin	Symbol	Name/Description	Notes
1	GND	Ground	1
2	Tx2n	Transmitter Inverted Data Input	
3	Tx2p	Transmitter Non-Inverted Data Input	
4	GND	Ground	1
5	Tx4n	Transmitter Inverted Data Input	
6	Tx4p	Transmitter Non-Inverted Data Input	
7	GND	Ground	1
8	ModSelL	Module Select	
9	ResetL	Module Reset	
10	Vcc Rx	+3.3V Power Supply Receiver	
11	SCL	2-wire serial interface clock	
12	SDA	2-wire serial interface data	
13	GND	Ground	1

Pin	Symbol	Name/Description	Notes
14	Rx3p	Receiver Non-Inverted Data Output	
15	Rx3n	Receiver Inverted Data Output	
16	GND	Ground	1
17	Rx1p	Receiver Non-Inverted Data Output	
18	Rx1n	Receiver Inverted Data Output	
19	GND	Ground	1
20	GND	Ground	1
21	Rx2n	Receiver Inverted Data Output	
22	Rx2p	Receiver Non-Inverted Data Output	
23	GND	Ground	1
24	Rx4n	Receiver Inverted Data Output	
25	Rx4p	Receiver Non-Inverted Data Output	
26	GND	Ground	1
27	ModPrsL	Module Present	
28	IntL	Interrupt	
29	Vcc Tx	+3.3V Power supply transmitter	
30	Vcc1	+3.3V Power supply	
31	LPMode	Low Power Mode	
32	GND	Ground	1
33	Tx3p	Transmitter Non-Inverted Data Input	
34	Tx3n	Transmitter Inverted Data Input	
35	GND	Ground	1
36	Tx1p	Transmitter Non-Inverted Data Input	
37	Tx1n	Transmitter Inverted Data Input	
38	GND	Ground	1

7. Pin Descriptions

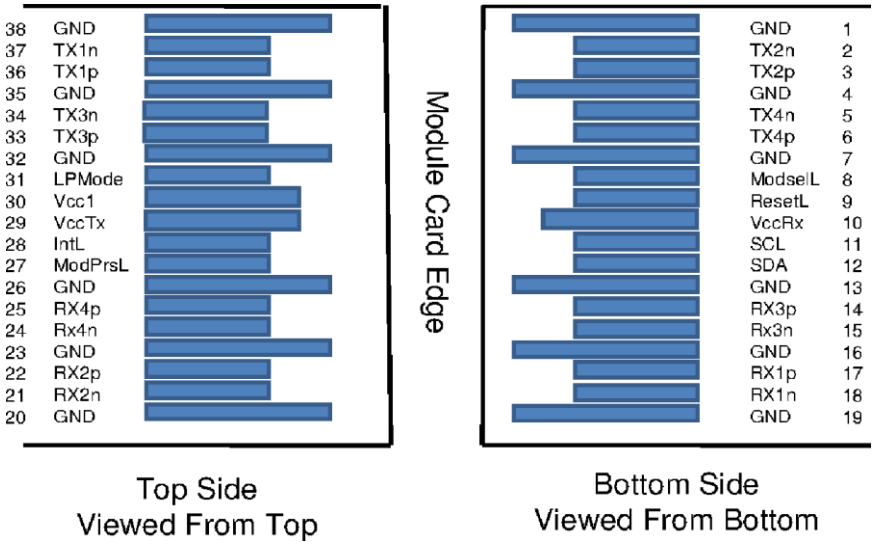
	L	L1	L2	L3	L4	W	W1	W2	H	H1	H2	H3	H4	H5
Max	72.2	-	128	4.35	61.4	18.45	-	6.2	8.6	12.4	5.35	2.5	1.6	2.0
Type	72.0	-	-	4.20	61.2	18.35	-	-	8.5	12.2	5.2	2.3	1.5	1.8
Min	68.8	16.5	124	4.05	61.0	18.25	2.2	5.8	8.4	12.0	5.05	2.1	1.3	1.6

8. Additional Specifications

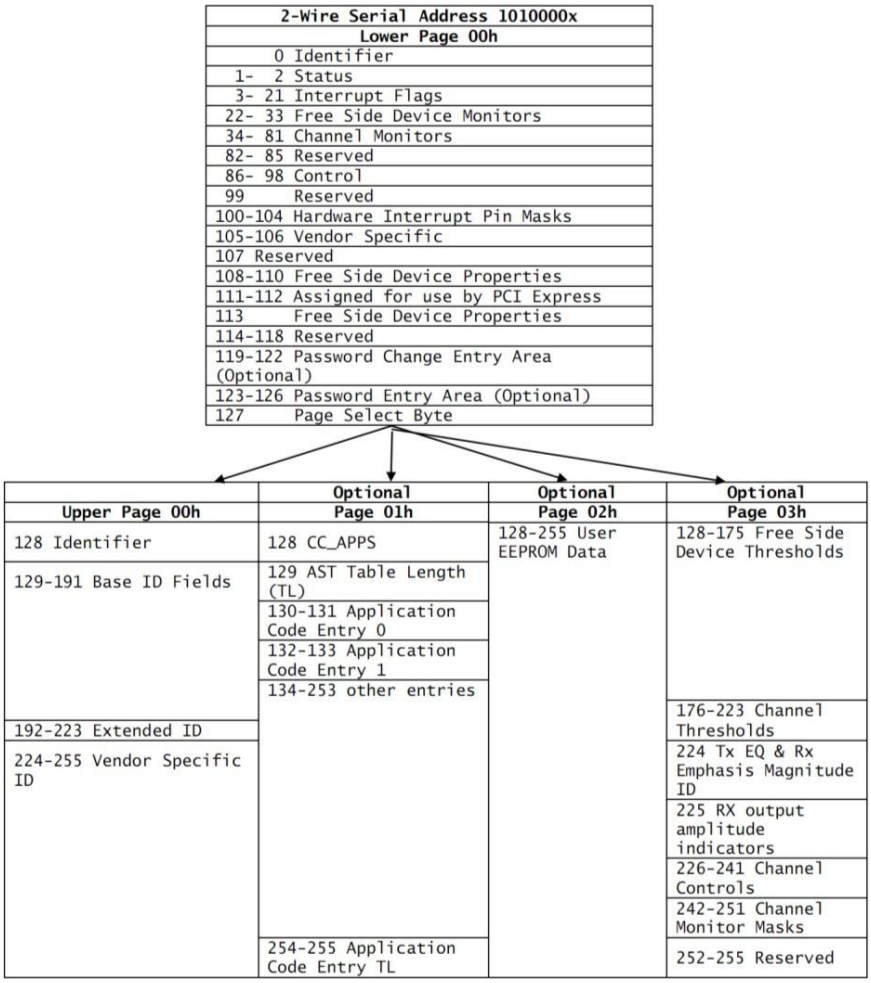
Parameter	Value	Units
Diameter	3	mm
Minimum bend radius	30	mm

Parameter	Value	Units
Length Tolerance	Length < 1 m: +5 /-0	cm
Length Tolerance	1 m ≤length ≤ 4.5 m: +15 / -0	cm
Length Tolerance	5 m ≤length ≤ 14.5 m: +30 / -0	cm
Length Tolerance	Length≥15.0 m +2% / -0	m
Cable color	Orange (OM2), Aqua (OM3),Megenta(OM4)	-

9. Technical Figure 1



10. Technical Figure 2



11. Revision History

Version	Date	Description	Prepared by
V6	2025	Unified WincoTek datasheet format	WincoTek
V6.1	2026-10-23	Engineering and format review	WincoTek