Applications

- Data center & Networking Equipment
- Servers/Storage Devices
- High Performance Computing (HPC)
- Switches/Routers
- Telecom Central Offices (CO)
- Test & Measurement Equipment

Features

- Support 53.125G PAM4
- 100G to 100G Data Rate
- 3.3V Power Supply
- Hot Pluggable
- BER < 10^{-6} (pre FEC)
- BER < 10^{-15} (post FEC)
- Excellent SI performance
- RoHS Compliance

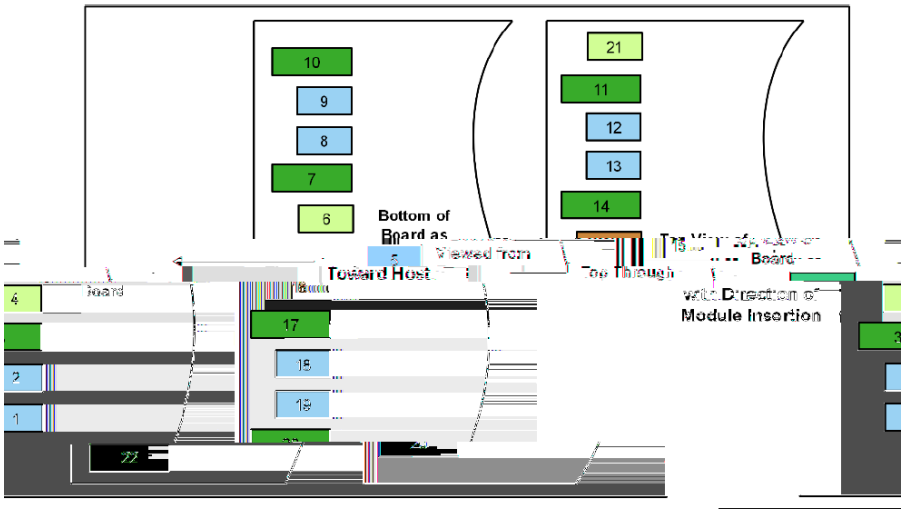
I ct

This datasheet pertains to the I ct o , meticulously designed for application in the telecommunications and data center sectors. It facilitates bi-directional transmission of 100Gb traffic per cable, accom

o ct

o	o		ct
1	ILdd Insertion loss at 13.28 GHz	17.16 dB (Max.)	IEEE 802.3cd Section Section 136.11.2
2	ILdd Insertion loss at 13.28 GHz	8 dB (Min.)	IEEE 802.3cd Section Section 136.11.2
3	ERL Minimum cable assembly	>11 dB*.	IEEE 802.3cd Section Section 136.11.3
4	RLcd Differential-mode to common-mode return loss	0.01GHz – 19GHz Equation (92–28)	IEEE 802.3cd Section 136.11.4
5	ILcd Differential-mode to common-mode insertion loss	0.01GHz – 19GHz Equation (92–29)	IEEE 802.3cd Section 136.11.5
6	RLcc Common-mode to common-mode return loss	0.01GHz – 19GHz Equation (92–30)	IEEE 802.3cd Section Section 136.11.6
7	COM	3dB (Min.)	IEEE 802.3cd Section Section 136.11.7
*Cable assemblies with a com greater than 4 dB are not required to meet minimum ERL			

o



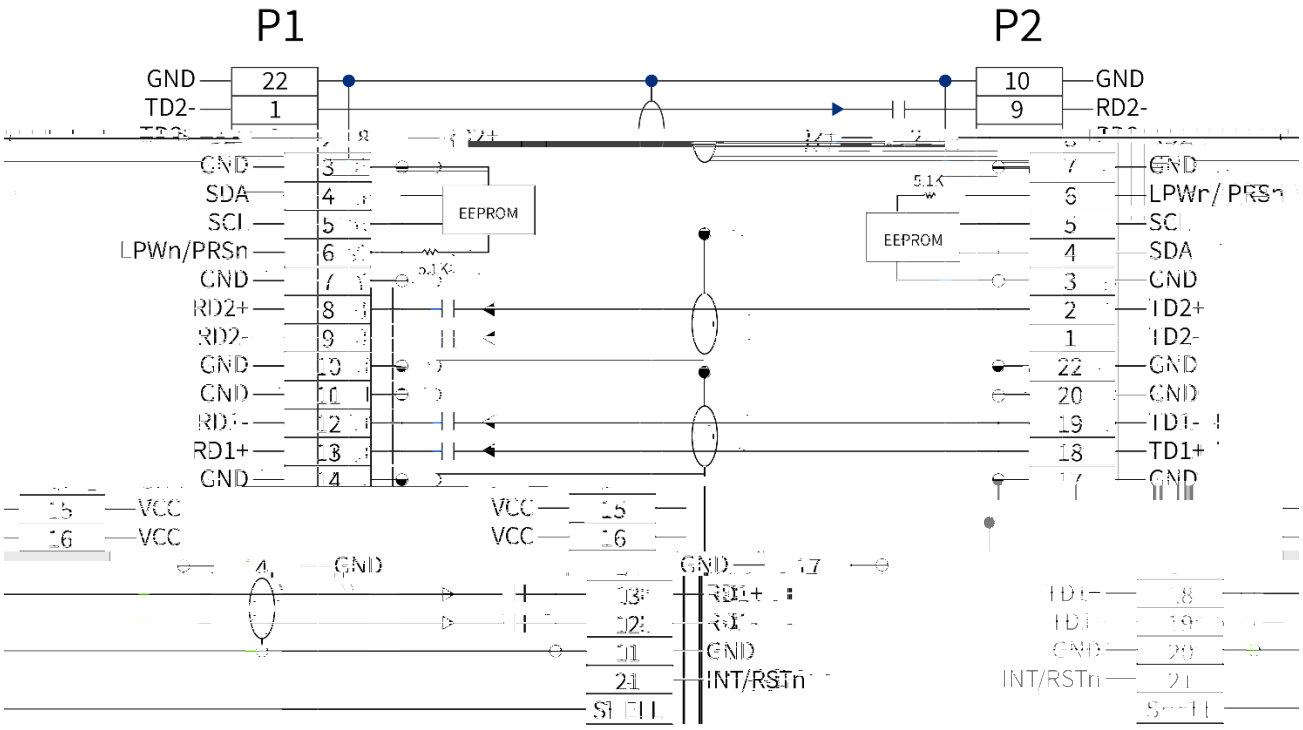
ct o

ct

ct

ct	ct	o	ct	o ct	
case		case	See2	Module case	
1	CML-I	TD2-	3rd	Transmitter Inverted Data Input Lane 2	
2	CML-I	TD2+	3rd	Transmitter Non-Inverted Data Input Lane 2	
3		Gnd	1st	Module Ground	5
4	LVTTL-I/O	SDA	3rd	2-wire Serial Interface Data Line	3
5	LVTTL-I/O	SCL	3rd	2-wire Serial Interface Clock	3
6	Multilevel -I/O	LPWn/ PRSn	3rd	Low Power Mode/ Module Present (Mod_Abs)	
7		Gnd	1st	Module Ground	5
8	CML-O	RD2+	3rd	Receiver Non-Inverted Data Output Lane 2	
9	CML-O	RD2-	3rd	Receiver Inverted Data Output Lane 2	
10		Gnd	1st	Module Ground	5
11		Gnd	1st	Module Ground	5
12	CML-O	RD1-	3rd	Receiver Inverted Data Output Lane 1	4
13	CML-O	RD1+	3rd	Receiver Non-Inverted Data Output Lane 1	4

WIRING TABLE



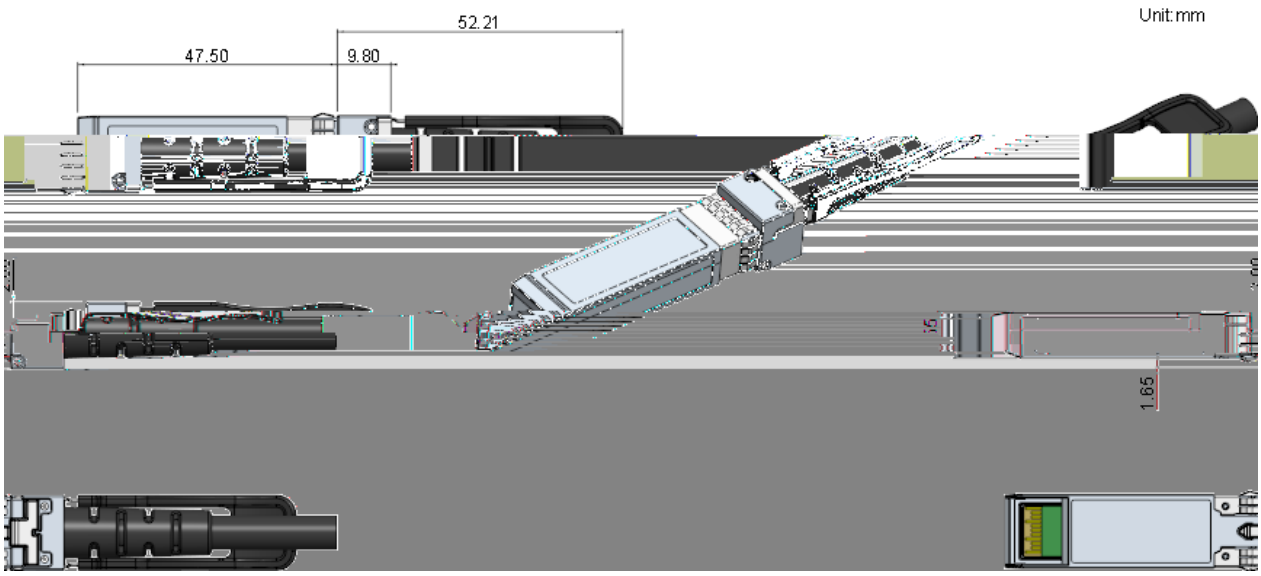
ZHAOLONG
Cables & Interconnects

64-82	19	Custom Area	Vendor or module type specific use
83-84	2	Inactive Firmware Version	Version Number of Inactive Firmware. Values of 00h indicates module supports only a single image.
85-117	33	Application Advertising	Combinations of host and media interfaces that are supported by module data path(s
118-125	8	Password Entry and Change	
126	1	Bank Select Byte	Bank address of currently visible Page
127	1	Page Select Byte	Page address of currently visible Page

Page 00h Overview

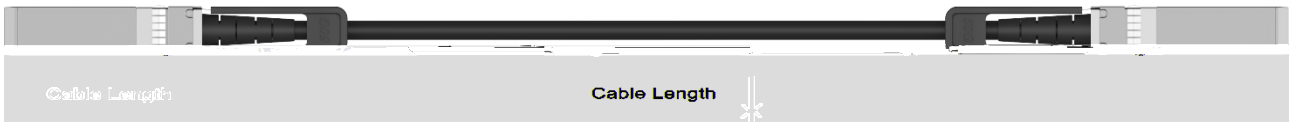
128	1	Identifier	Identifier Type of module
129-144	16	Vendor name	Vendor name(ASCII)
145-147	3	Vendor OUI	Vendor IEEE company ID
148-163	16	Vendor PN	Part number provided by vendor (ASCII)
164-165	2	Vendor rev	Revision level for part number provided by vendor (ASCII
166-181	16	Vendor SN	Vendor Serial Number (ASCII)
182-189	8	Date Code	
190-199	10	CLEI code	Common Language Equipment Identification code
200-201	2	Module power characteristics	
202	1	Cable assembly length	
203	1	Media Connector Type	
204-209	6	Copper Cable Attenuation	
210-211	2	Cable Assembly Lane Information	
212	1	Media Interface Technology	
213-220	8	Reserved	
221	1	Custom	
222	1	Checksum	Includes bytes 128-221
223-255	33	Custom Info NV	

Note: For the above, refer to


Unit:mm
52.21
47.50
9.80
1.65

ct o

Unit:mm



ct	ct ct	ct	l
D56-100G-DAC-3005	DSFP56 100G Direct Attached Copper Cable, 30AWG-0.5M	±30	30
D56-100G-DAC-3010	DSFP56 100G Direct Attached Copper Cable, 30AWG-1.0M	±30	30
D56-100G-DAC-3015	DSFP56 100G Direct Attached Copper Cable, 30AWG-1.5M	±40	30
D56-100G-DAC-3020	DSFP56 100G Direct Attached Copper Cable, 30AWG-2.0M	±40	30
D56-100G-DAC-2820	DSFP56 100G Direct Attached Copper Cable, 28AWG-2.0M	±40	28
D56-100G-DAC-2825	DSFP56 100G Direct Attached Copper Cable, 28AWG-2.5M	±50	28
D56-100G-DAC-2625	DSFP56 100G Direct Attached Copper Cable, 26AWG-2.5M	±50	26
D56-100G-DAC-2630	DSFP56 100G Direct Attached Copper Cable, 26AWG-3.0M	±50	26

o ct

The performance figures, data, and any illustrative material presented in this datasheet are typical and must be explicitly confirmed in writing by ZHAOLONG before they are deemed applicable to any specific order or contract.

By ZHAOLONG's policy of continuous improvement, specifications may change without prior notice. The publication of information in this datasheet does not imply exemption from patent or other protective rights held by ZHAOLONG or other parties. Additional details can be obtained from any ZHAOLONG sales representative.

A01