



100Gb/s CFP2 Optical Transceiver

RTXM290-608

Features

- Direct LC receptacle optical interface*
- Single +3.3V power supply*
- Hot-pluggable*
- Operating optical data rate up to 112Gbps*
- Transmission distance up to 40km*
- AC coupling of CML signals*
- 1310 nm window cooled EA-DFB LD*
- Integrated SOA, PIN ROSA and TOSA*
- Low power dissipation(Max:9W)*
- Built in digital diagnostic function*
- Operating case temperature range:0℃ to 70℃*
- Compliant with RoHs*
- MDIO Communication Interface*

Application

- Local and wide area network (LAN and WAN)*
- Ethernet switches and router applications*
- ITU-T OTU4 OTL4.4 applications*

Standards

Compliant with IEEE 802.3ba

Compliant with CFP2 MSA hardware specification, Version 1.0 July 31, 2014

Compliant with CFP MSA management specification, Version 2.2 July 01, 2013

Compliant with ITU-T G.959.1

Compliant with RoHS&WEEE

Absolute Maximum Ratings

Parameter	Symbol	Unit	Min	Max

Recommended Operating Conditions

Parameter	Symbol	Unit	Min	Typ	Max

Management Interface Pins(MDIO)

Hard Requ

--	--	--	--	--	--	--	--

High Speed Electrical Characteristics

				()		
					Ω	
						()
						()
	△					

--	--	--	--	--	--

CFP NVR1

--	--	--	--	--	--	--

CFP NVR3

Network Lane BOL Measurement Registers

CFP NVR4

CFP VR1

Module Command/Setup Registers						

				Module Alarms and Warnings Enable	00Fh	
Module Analog A/D Value Registers						

CFP Host lane Lane VR1

Host Lane VR1

Host Lane FAWS Status Registers						
				Host Lane m Fault and Status		
Host Lane FAWS Latch Registers						
				Host Lane m Fault and Status Latch		

Table : CFP2 Pin-Map

1	GND
2	(TX_MCLKn)
3	(TX_MCLKp)
4	GND
5	N.C.
6	N.C.
7	3.3V_GND
8	3.3V_GND
9	3.3V
10	3.3V
11	3.3V
12	3.3V
13	3.3V_GND
14	3.3V_GND
15	VND_IO_A
16	VND_IO_B
17	PRG_CNTL1
	PRG_CNTL2
	PRG_CNTL3
	PRG_ALRM1
	PRG_ALRM2
	PRG_ALRM3
	GND

104	GND
103	N.C.
102	N.C.
101	GND
100	TX3n
99	TX3p
98	GND
97	TX2n
96	TX2p
95	GND
94	N.C.
93	N.C.
92	GND
91	N.C.
90	N.C.
89	GND
88	TX1n
87	TX1p
86	GND
85	TX0n
84	TX0p
83	GND
82	N.C.

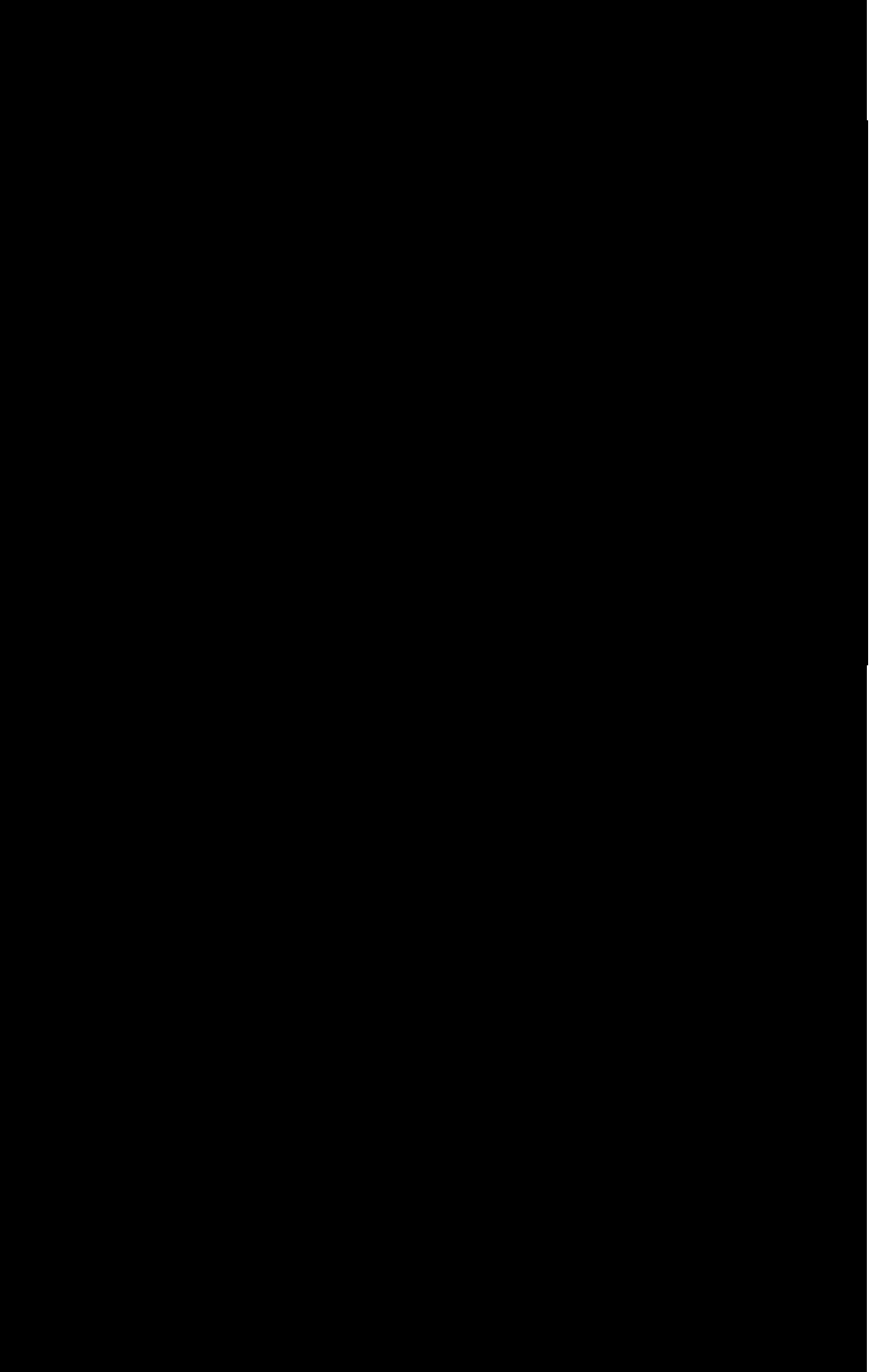
24	TX_DIS
25	RX_LOS
26	MOD_LOPWR
27	MOD_ABS
28	MOD_RSTn
29	GLB_ALRMn
30	GND
31	MDC
32	MDIO
33	PRTADR0
34	PRTADR1
35	PRTADR2
36	VND_IO_C
37	VND_IO_D
38	VND_IO_E
39	3.3V_GND
40	3.3V_GND
41	3.3V
42	3.3V
43	3.3V
44	3.3V
45	3.3V_GND
46	3.3V_GND
47	N.C.
48	N.C.
49	GND
50	(RX_MCLKn)
51	(RX_MCLKp)
52	GND

81	N.C.
80	GND
79	(REFCLKn)
78	(REFCLKp)
77	GND
76	N.C.
75	N.C.
74	GND
73	RX3n
72	RX3p
71	GND
70	RX2n
69	RX2p
68	GND
67	N.C.
66	N.C.
65	GND
64	N.C.
63	N.C.
62	GND
61	RX1n
60	RX1p
59	GND
58	RX0n
57	RX0p
56	GND
55	N.C.
54	N.C.
53	GND

Table: Pin description

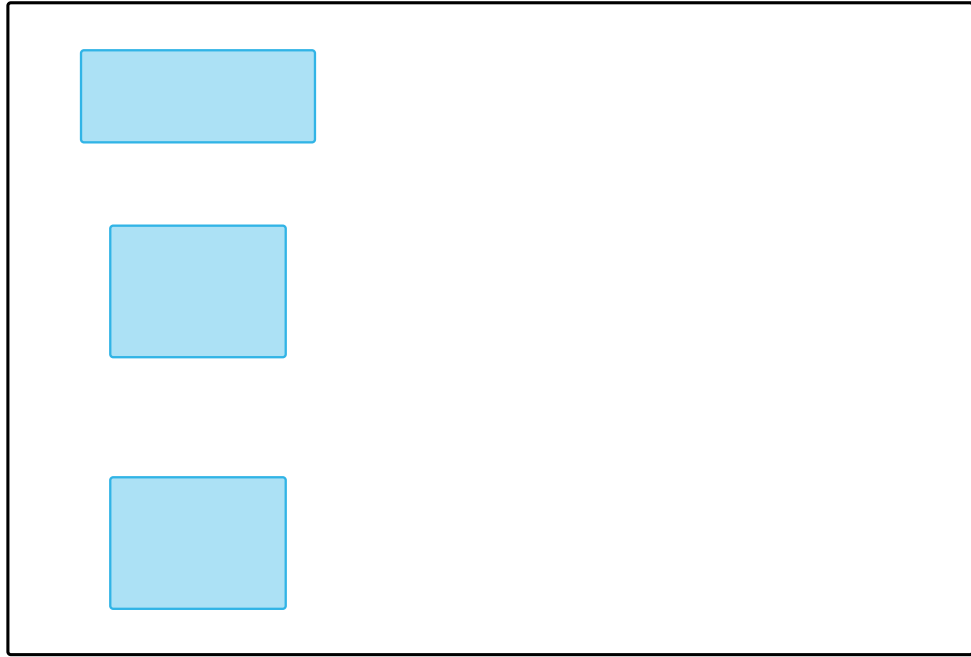
PIN#

	N.C.		No Connect
	N.C.		No Connect
	3.3V_GND		3.3V Module Supply Voltage Return Ground,can be separate or tied together with Signal
	3.3V_GND		
	3.3V		3.3V Module Supply Votage
	3.3V		



	GND			
	RX3p	O	CML	Output Data
	RX3n	O	CML	Inverted Output Data
	GND			
	N.C.			
	N.C.			
	GND			
	(REFCLKp)			
	(REFCLKn)			

Block diagram





Package outline

Regulatory Compliance

Feature	Test Method	Performance
[Empty table body]		



Ordering Information

Part No	Specifications	Application Code