

Preliminary

OC-192 Transponder module Specification Draft by OKI Draft: 0.2
QPS-0302-003

OKI CONFIDENTIAL

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OC-192/STM-64 SERDES Transceiver Module for VSR(600m) OAT1040x-V5-z-yy

1.Features

- Transmission Distance 600m
- Wavelength 1310nm
- Dispersion Penalty <1dB(3.8ps/nm)
- Optical Output Power -6 to -1dBm
- Minimum sensitivity <-11dBm
- 1:16 DeMUX with LVDS differential 622Mbps data outputs
- 16:1 MUX with LVDS differential 622Mbps data inputs
- TX/RX Loss of Lock
- Compact size 50.8x76.2x11.5(mm)
- Supply voltage; +3.3V ,+1.8V and -5.2V
- Low power consumption; <6W

Modification History

Rev.	Date	Originator	Comment
DRAFT0.1	Apr.26,2002	T.ITOU	
DRAFT0.2	May.29,2002	T.ITOU	Revision of Package Outline Block Diagram

2.Specifications

• Optical interface specifications

Parts Number	OAT1040x-V5-z-yy	Units
Parameter	For VSR(600m)	
Transmitter module		
Pout	-6 to -1	dBm
λc	1290 to 1330	nm
Optical output waveform	ITU-T G.691 STM-64 Unamplified Mask standard	
Extinction ratio	6	dB
Δλ20	3	nm
SMSR	30	dB
Jitter Generation	TBD	
Receiver Module		
Minimum sensitivity	-11	dBm
Minimum overload	-1	dBm
λc_rx	1290 ~ 1600	nm
Rx Return loss	-14	dB
Jitter Generation, Tolerance and Transfer	TBD	
Optical path		
D _{LRmax}	6.6	ps/nm
System Optical return loss	27	dB
Optical Path Penalty	1	dB

• Power Supply

Parameter	Symbol	Min.	Typ.	Max.	Units	I _{max}
Supply Voltage	Vdd1	3.13	3.3	3.47	V	0.1A
	Vdd2	1.71	1.8	1.89	V	1.2 A
	Vee	-4.94	-5.2	-5.45	V	0.3A
Power consumption			4	6	W	

•Operating Temperature(Case temperature)

0 to 65 degC

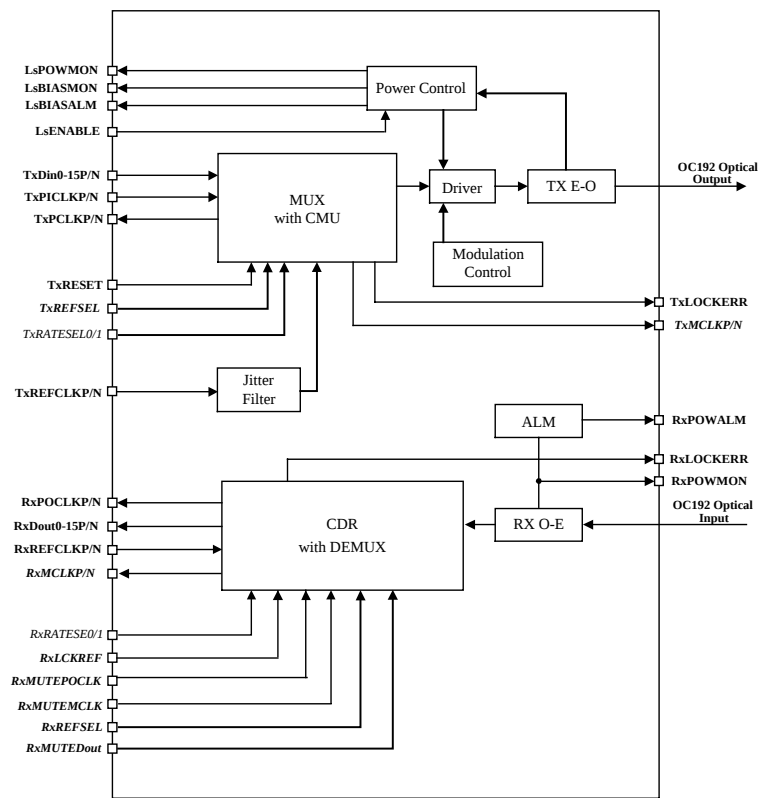
• Dimensions

	Dimensions	Units
Width	50.8	mm
Length	76.2	
Height	11.5	

•Connector

Optical	Select SC / FC / LC / MU
Electrical	300pin BERG MegArray@84502-10X

3.Block diagram



4. Ordering Information

OAT1040x-V5-z-yy

x		z		yy	
optical connector		Bitrate(Gbps)		Fiber Length	
S	SC	A	9.95	10	1m
F	FC	B	10.3(TBD)	05	0.5m
L	LC	C	9.95/10.3(TBD)		
M	MU	D			

5.Package Outline (Units : mm)

