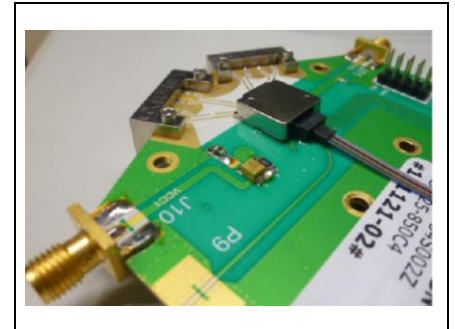


Up to 4 x 25 Gbit/s transmitter testboard (850 nm VCSEL)



Sample image only. Actual product may vary

Product Code: VHXR6204A-840

Preliminary

Product Description

The VHXR6204A-840 transmitter utilizes a 4-channel VCSEL chip array and driver IC integrated on an evaluation board. The multi mode ribbon fiber coupled transmitter board is designed for short reach ultrahigh-speed data communication applications of up to 4 x 25 Gbit/s. Each part is electro-optically tested to ensure a maximum performance.

Features

- up to 4 x 25 Gbit/s data rate
- high speed electrical connector (GPPO)
- ribbon-fiber coupled with FC/PC fan-out
- low power consumption

Applications

- 100G Ethernet
- 25G Ethernet channel testing
- Infiniband EDR
- Proprietary optical interconnects
- Research and development

Parameter	Typical (PD chips)	Notes
Emission Wavelength	850 nm	available from 835 – 865 nm
Power dissipation	< 200mW	
Rise Time (20% to 80%)	< 17 ps	

All product specifications and descriptions are subject to change without notice.

Please contact our sales department for additional information and to receive a quotation: sales@v-i-systems.com

Datasheet

VHXR6204A-840



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Electro-optical characteristics (at Tambient = 25 °C)

Preliminary

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
VCSEL						
Peak emission wavelength	λ	$P_{out} = 0.5mW$	840	850	860	nm
Operating temperature	T_{op}	ambient	15		35	°C
RMS spectral width	$\Delta\lambda$	$P_{out} = 0.5mW$			0.6	nm
λ_p temperature coefficient	$\Delta\lambda_p$			0.06		nm/°C
Relative intensity noise	RIN				130	dB/Hz
Rise/Fall time	$T_{r/f}$	20-80%		15		psec
Supply voltage	V_{cc}		0.3	3.3	4	V
Input resistance	R_i	differential		100		Ω
Data input differential voltage	V_{DF}	Peak-Peak	0.1		1.2	V

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Storage temperature	T_{st}	10	40	°C
ESD (Human Body Model)			Class 1	

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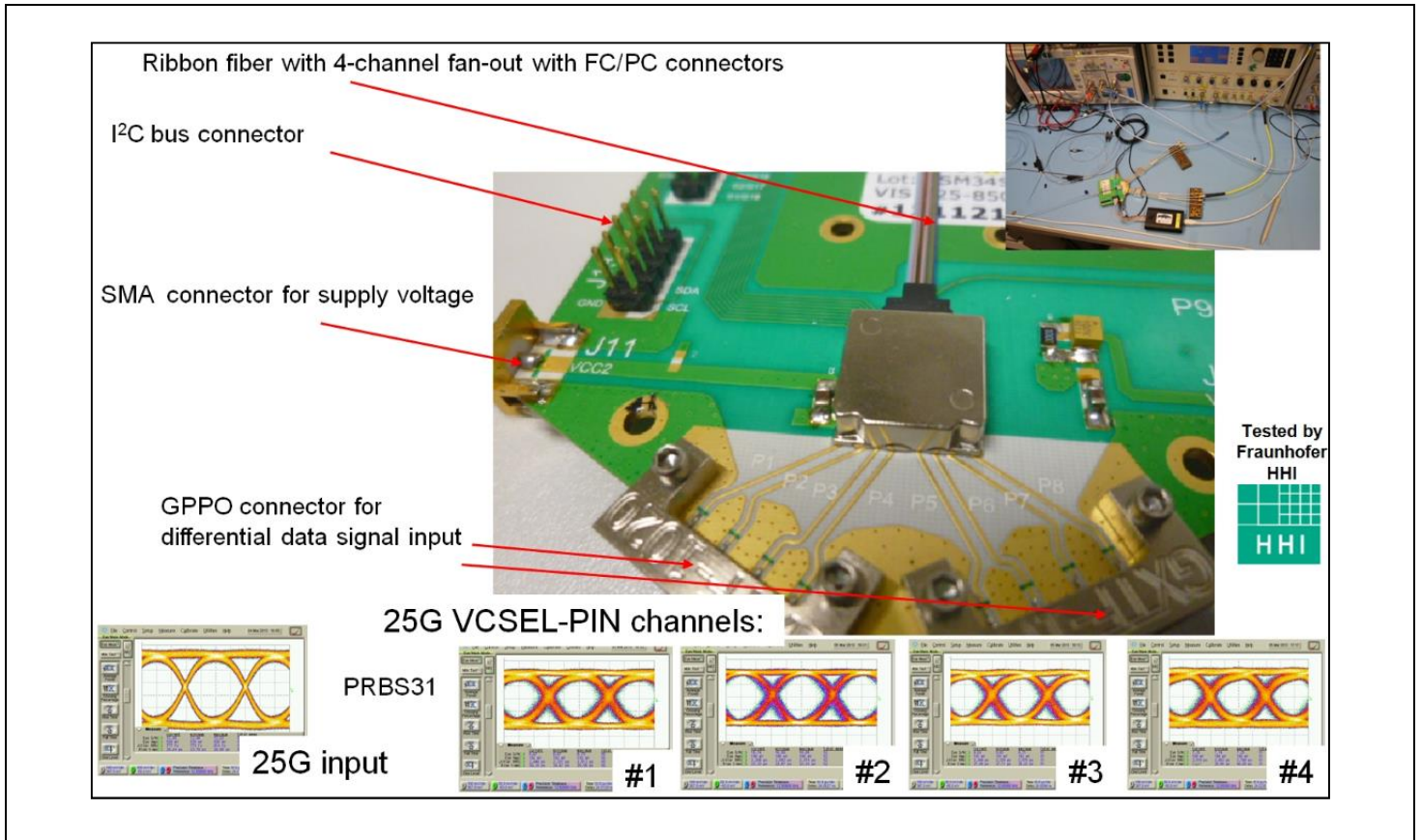
Datasheet

VHXR6204A-840



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Eye diagram at 25 Gbit/s



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VI Systems GmbH Hardenbergstrasse 7 D-10623 Berlin

No. 140201-Rev 1.6

June 2016

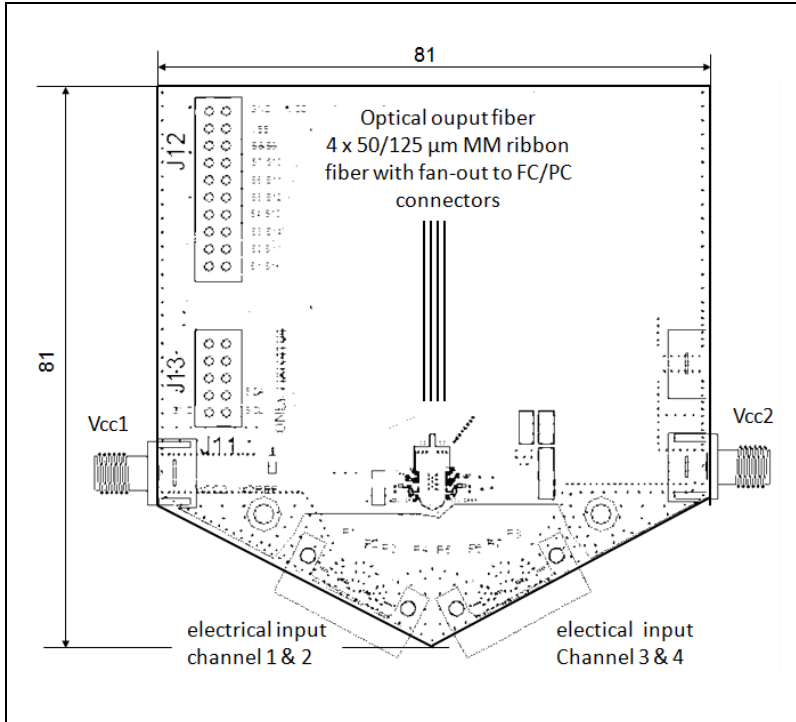
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VHXR6204A-840



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Mechanical drawing (in mm)



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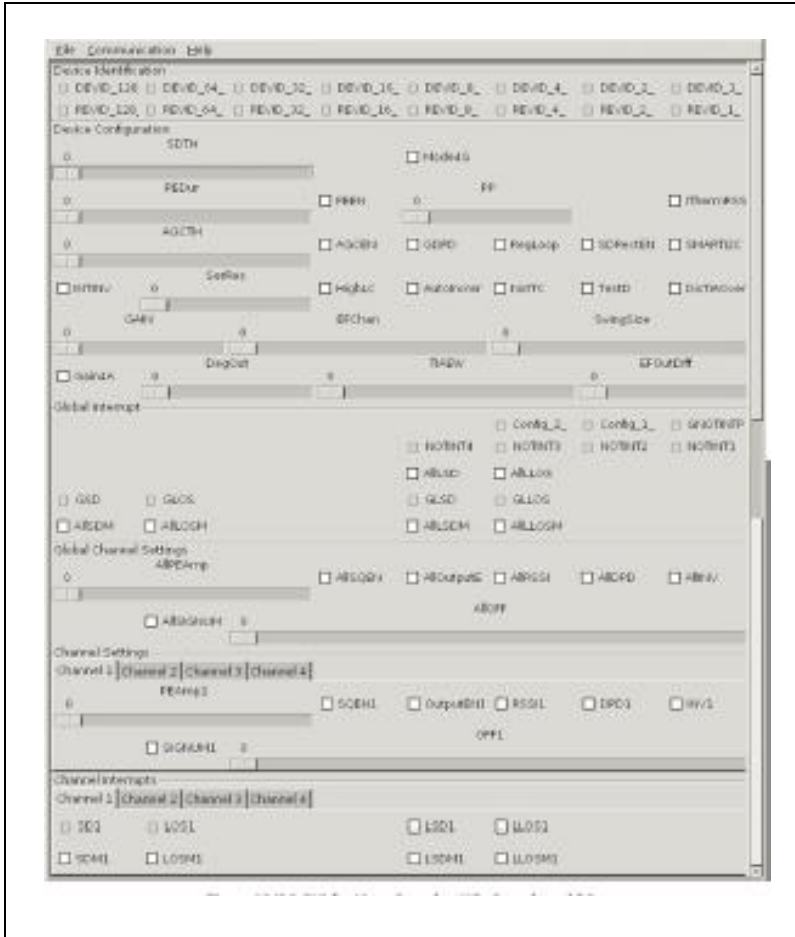
Datasheet

VHXR6204A-840



Vertically Integrated Systems

User interface (Windows based)



USB-to-I²C converter



LASER RADIATION. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS CLASS 1M LASER PRODUCT

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