



Vertically Integrated Systems

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EDITION: 2026-Q3

PRODUCT CATALOG

FIBER OPTICS & PHOTONICS

2026

SCOPE

Optoelectronic
components and
subassemblies

PRODUCTS

VCSEL / PD / modules /
IC / TX RX optical
assembly

LOCATION

Berlin / Germany

VI SYSTEMS GMBH

High-speed optoelectronics engineered as a system

Founded in Berlin in 2006, VI Systems GmbH is a fabless optoelectronics company that develops high-speed semiconductor components and electrical and optical assemblies for fiber-optic data communications, sensing, and LiFi. The company also supports advanced research in optical computing, THz generation, radio-over-fiber, integrated beam steering, and other emerging applications.

The product portfolio extends through VCSELs, PIN photodetectors, driver and receiver ICs, fiber-coupled modules, and transmitter and receiver assemblies, covering a complete chain of critical technologies.

VIS brings device physics, knowledge and experience in device modeling, epitaxial growth, processing technology, optical and electrical characterization, high-frequency packaging and link validation into one engineering workflow.

Production is coordinated in cooperation with experienced foundry partners. Selected technologies and products can also be transferred or licensed.

VERTICALLY INTEGRATED DEVELOPMENT AND MANUFACTURING PATH

From device physics to qualified optical components and assemblies

VIS combines stages that are often handled separately: optical-component and IC design, self-consistent thermo-electro-optical modelling, advanced epitaxy, technology prototyping, integration, characterization, iterative optimization, and subsequent transfer to production. Standard-compliant products and advanced customized solutions are developed within the same engineering workflow.

01 Device and IC design

VCSEL, photodetector and SiGe BiCMOS IC components are developed to match challenging optical, electrical and thermal targets.

02 Prototype integration

Optical chips, driver and amplifier ICs are assembled on high-frequency printed circuit boards or assembled into fiber coupled modules.

03 Characterisation

Capabilities include wafer-scale mapping; static, LIV, and spectral characterization at temperatures up to 150 °C; far-field beam profiling; spectrally resolved near-field measurements; high-speed S21 and S11 characterization; eye diagrams; and PAM-4 testing at 50 Gbaud and 114-228 Gbaud.

04 Transfer and manufacturing

Manufacturing is carried out through IC manufacturing, epitaxy, and III-V processing foundries. Customized manufacturing processes can be transferred or licensed.

HOW VIS CAN SUPPORT YOU

Technology and services

Customers can begin working with VIS at any stage: they can select a specific component, assembly, or solution, initiate a customized development project, and define an optimal path to production.

DESIGN

Custom optoelectronic components

Application-specific VCSELs, photodetectors, and integrated optoelectronic structures are developed and characterized.

OPTICAL / ELECTRICAL / THERMAL

INTEGRATE

Prototype integration and RF packaging

Optical chips, SiGe BiCMOS drivers or TIAs, RF access and fiber coupling elements combined in prototype modules and boards.

CHIP / IC / MODULE / BOARD

MODEL

3D simulation and analysis

1D and 2D optical, electrical, and thermal simulations predict optical modes, thermal profiles, and diffusion and depletion capacitances in LED and laser operating regimes.

DEVICE / PACKAGE / OPTICAL

TRANSFER

Technology transfer and licensing

Epitaxial design, technology process monitoring, characterization, qualification and manufacturing

IP / PROCESS

COMPONENT INTEGRATION

OPTICAL CHIP IC INTERFACE RF ASSEMBLY

+ HIGH-FREQUENCY ELECTRICAL DESIGN

+ OPTICAL AND ELECTRICAL CHARACTERISATION

+ CONTACT PAD AND ON-CHIP INTERCONNECT LAYOUTS

+ PROTOTYPING AND PRODUCTION ROUTES

DEVICE TO LINK CHARACTERISATION

Measurement capabilities

Characterization can be customized for manufacturing-related mapping, LIV, C-V, spectral, and static measurements. Selected devices can also undergo high-frequency, far-field, and spectrally resolved near-field characterization.

01

Wafer mapping

2-8 INCH / 25-150 C

Camera pattern recognition and automatic chip alignment support full-wafer electrical and optical screening.

L-I-V and threshold current	Slope efficiency and spectrum	Responsivity, reverse bias and dark current
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02

High-frequency testing

40 GHZ SOURCE / 70 GHZ SCOPE

Chip-level electro-optical response and data transmission are evaluated with broadband laboratory equipment.

40 GHz detector / 400-1600 nm	NRZ or 4-PAM / PRBS7 to PRBS31	Eye diagrams up to 128 Gbit/s
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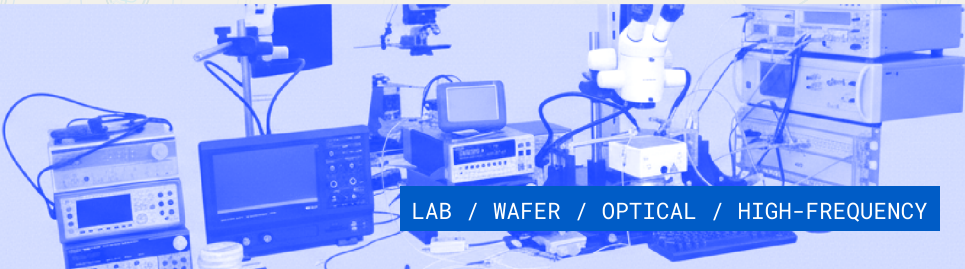
03

Beam and physical inspection

NEAR FIELD / FAR FIELD / MICROSCOPY

Near- and far-field measurements relate emission geometry to device design, alignment and package condition.

Mode control, polarization control, angular power distribution	Optical microscopy up to 1000×	FIB, SEM, TEM, EDX with local partners
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PRODUCT PORTFOLIO

Product families

01 **VCSEL chips** 08-11

02 **Photodetectors** 12-15

03 **Optical modules** 16-19

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05 **Optical assembly** 24-27

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PRODUCT FOCUS

VCSEL chips

VIS VCSEL chips cover 840 to 960 nm short-wavelength division multiplexing datacom, sensing, LiFi, and customized optical interconnects through multimode and standard single mode fiber.

RANGE 840–960 nm	SPEED CLASS 25G–228G
FORMATS 1x1, arrays, multi-aperture	STATUS Qualified / engineering

TECHNICAL OVERVIEW

VCSEL is a vertical-cavity surface-emitting laser that emits light perpendicular to the chip surface. VIS devices in this group are intended for short-wavelength fiber-optic links, optical WiFi, and sensing applications.

For datacom links, quasi-single-mode and multi-aperture single-mode versions provide narrow-spectrum, narrow-beam solutions for extended-reach transmission over multimode and standard single-mode fiber. MA-SM VCSELs provide high output power while maintaining a narrow spectrum.

850, 880, 910, and 940 nm VCSELs match the SWDM set. Parallel WDM transmission over a single multimode fiber has demonstrated aggregate rates of 500 Gbit/s with PAM-4 and 600 Gbit/s with DMT.

TECHNICAL DETAILS

VCSEL chips: applications and performance

TECHNICAL OVERVIEW

qSM and MA-SM VCSELs in the 840-960 nm range support single-lane 100G and 200G transmission over extended distances through multimode and standard single-mode fiber. Selection parameters are modulation bandwidth, wavelength, beam divergence, spectral width, number and shape of optical apertures, fiber coupling approach.

For sensing and optical-wireless applications, high-power MA VCSELs provide increased optical output power. V-MA-HP-C1 provides up to 50 mW at 850 and 940 nm while maintaining approximately 18 GHz electrical bandwidth and supporting operation up to 40 Gbaud.

qSM devices have been evaluated for transmission over 10 km of standard single-mode fiber with a measured transfer-function bandwidth above 20 GHz.

SELECTION:

WAVELENGTH

840-860, 870-890, 900-920 and 930-950/960 nm

FORMAT

1x1 chips and arrays; array pitch is typically 250 μ m

CONTACT

SG/GS or GSG for probing, wire bonding and selected flip-chip assembly

DATACOM

qSM or MA SM for narrow-beam 100G/200G-class links

SENSING

high-power MA versions where output power and coupling margin dominate

PAPERS AND DOCUMENTS

200G over 100 m MMF (2020)

T. Zuo, T. Zhang, S. Zhang, and L. Liu, "Single-lane 200-Gbps PAM-4 transmission for Datacenter Intra-Connections employing 850-nm VCSEL," in (ACP/IPOC), K. Xu, D. Simeonidou, C. Chang-Hasnain, N. Wada, X. Ren, Z. Zhukov, P. Perry Shum, Y. Ji, J. Zhang, X. Zhou, C. Lu, and L. Wosinska, eds., OSA Technical Digest (Optica Publishing Group, 2020), paper S3H.2.

X. Chen, et al "Link Bandwidth and Transmission Capability of Single-Mode Multi-Aperture Vertical-Cavity Surface-Emitting Lasers at 100 G/Lane and 200 G/Lane over Multimode Fibers. Photonics 2025, 12, 147.
<https://doi.org/10.3390/photronics12020147>

N. Ledentsov, et al "Up to 600 Gbit/s data transmission over 100 m of single multimode fiber using 4x λ 850-940 nm VCSELs," in Optical Fiber Communication Conference (OFC) 2022, (Optica Publishing Group, 2022), paper Tu2D.3.

L. Chorchos, et al "Multi Aperture High Power 100G Single Mode 850 nm VCSEL for Extended Reach 800G Ethernet," in Optical Fiber Communication Conference (OFC) 2023, (Optica Publishing Group, 2023), paper M4C.8.

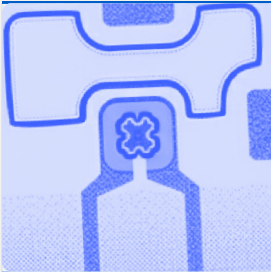
X. Chen, et al "Characterization of Chirp Properties of an 850 nm Single-Mode Multi-Aperture Vertical-Cavity Surface-Emitting Laser and Analysis of Transmission Performance over Multimode and Single-Mode Fibers", Photonics 2025, 12, 703.
<https://doi.org/10.3390/photronics12070703>

RECOMMENDED DEVICES

Datacom

VCSEL datacom 200G products

200G-class multi-aperture single-mode VCSEL chips for high-speed PAM-2 and PAM-4 datacom links. Engineering samples are available at 850, 880, 910, and 940 nm.



VM200 MA-SM

TYPE	multi-aperture single-mode 30 GHz
CONTACT	GSG
WAVELENGTH	840-860 nm · 870-890 nm · 900-920 nm · 930-950 nm

VERSIONS VM200 850 / 880 / 910 / 940 MA-SM

VCSEL datacom 100G products

Datacom VCSELs for 50G/56G and 100G/112G PAM-4 or NRZ links, including multi-mode and multi-aperture single-mode variants.



VM100 MA-SM

TYPE	multi-aperture single-mode 22 GHz
CONTACT	GSG
WAVELENGTH	840-860 nm · 870-890 nm · 900-920 nm · 930-950 nm

VERSIONS VM100 850 / 880 / 910 / 940 MA-SM



VM50 850

TYPE	multi-mode
CONTACT	SG / GS
WAVELENGTH	840-860 nm

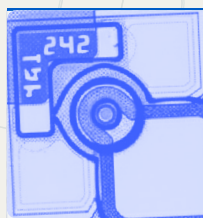
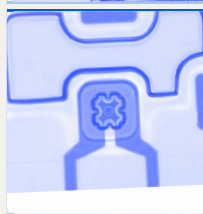
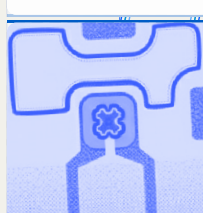
VERSIONS 50G-class datacom configuration

COMPARISON TABLE

Sensing + LiFi

VCSELS for sensing, LiFi and AI

High-temperature, high-power, and multi-aperture VCSELS for sensing, LiFi, beam switching, steering, and optical AI test setups. Individually addressable coupled-aperture variants are available on demand.

	V25 series
	TYPE multi-aperture multi-mode · multi-mode
	WAVELENGTH 850, 940 nm
	WAVELENGTH V25 940 HP MA / V25 850 HAT 10-20 mW
VERSIONS V25 940 HP MA / V25 850 HAT 10-20 mW	
	V-MA HP 850C1
	TYPE multi-aperture x4 coherent
	WAVELENGTH 950-940 nm
	WAVELENGTH 950-940 nm
VERSIONS Sensing, optical wireless configuration 20-50 mW	
	S-series MA
	TYPE multi-aperture · multi-mode
	WAVELENGTH 934-948 nm · 930-950 nm · 845-855 nm · 935-945 nm 10 mA
	WAVELENGTH 934-948 nm · 930-950 nm · 845-855 nm · 935-945 nm 10 mA
VERSIONS 940-MC46 / 940-SG-MA-HP / 850-MA / 940-MC60	
	VM100 multi-mode
	TYPE multi-mode
	WAVELENGTH VM100 850 / 880 / 910 / 940
	WAVELENGTH 840-860 nm · 870-890 nm · 900-920 nm · 930-950 nm 7 mW
VERSIONS VM100 850 / 880 / 910 / 940	
	VM100 qSM
	TYPE quasi single-mode
	WAVELENGTH VM100 850 qSM / VM100 910 qSM
	WAVELENGTH 840-860 nm · 900-920 nm 3 mW
VERSIONS VM100 850 qSM / VM100 910 qSM	

PRODUCT FOCUS

High-speed photodetectors

VIS top-illuminated InP-based PIN photodetector chips are designed for SWDM receivers. The overall responsivity range is 400-1600 nm. Device selection requires a balance between aperture diameter, wavelength, bias, and modulation bandwidth. The intrinsic transit-time bandwidth reaches 200 GHz at optimum bias, while the low series resistance supports flexible circuit design and RC cut-off compensation through inductive matching.

RANGE 400–1600 nm	SWDM COATING 840–960 nm
RESPONSIVITY 0.5 - 0.7 A/W	FORMATS C1 / C4

TECHNICAL OVERVIEW

A photodetector converts an incoming optical signal into electrical current for the receiver chain. VIS PDs are bare chips with different aperture diameters, series resistance and bandwidth trade-offs.

D25 and D35 are suitable for 50 Ω matched systems and operation at up to 112 Gbit/s with PAM-4 modulation. Larger aperture surface allows better coupling tolerance for scalable manufacturing.

D70 and D85 address higher-speed receiver demands at 15 Ω TIA input. D70 targets about 70 GHz optical bandwidth. D85 is the 200 Gbaud-class SWDM option and has a 20 μm aperture, >0.5 A/W minimum responsivity at 850 nm, 85 GHz optical

TECHNICAL DETAILS

High-speed photodetectors: options

TECHNICAL OVERVIEW

D400G is the highest-speed photodetector chip. It uses a 16 μm aperture. At a 25 Ω load, modulation bandwidth exceeds 60 GHz and is suitable for up to 424 Gbit/s PAM-4 transmission per channel. The device provides a broad responsivity range of 400–1600 nm, with optimum performance in the SWDM spectral range.

C4 arrays are available for D70 chips with the standard 250 μm pitch used in fiber-ribbon applications.

Responsivity is wavelength-dependent. Quantum efficiency is high within 400–1600 nm spectral range.

SELECTION POINTS

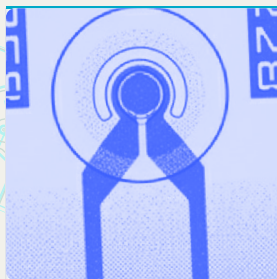
RESPONSIVITY	0.5 A/W class at 850 nm; 0.6 A/W at 910/940 nm
APERTURE	31 μm for D25/D35, 25 μm for D70, 20 μm for D85 and 16 μm for D400G
LOAD	bandwidth values depend on input impedance of the amplifier circuit and matching interconnect impedance
ARRAY	C4 arrays at 250 μm pitch
COATING	SWDM reflectivity target <1% at normal incidence within 840–960 nm

COMPARISON TABLE

PIN PD chips

107 Gbit/s PD

PD versions are optimized for SWDM operation in 840-960 nm, while covering a broader 400-1600 nm range.

	D25 / D35 SWDM
	APERTURE 31 μm aperture
	BANDWIDTH f-3dBo ~25 GHz at 50 Ω
	WAVELENGTH 400-1600 nm
VERSIONS D35-50-SWDMC1 / D25 50 SWDMC1	

200 Gbit/s PD

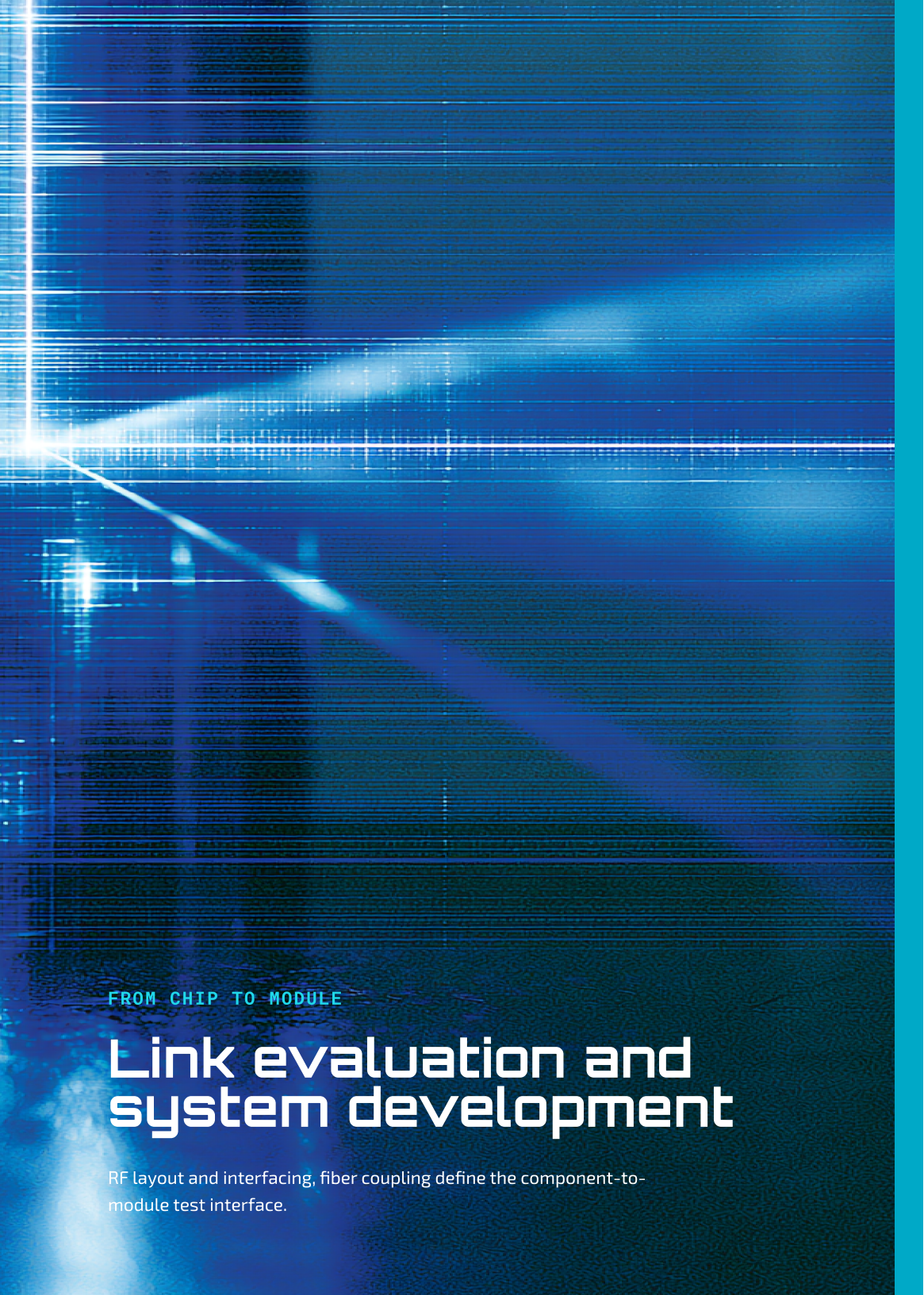
D70/D85 SWDM-C1 devices extend photodetector performance to 200 Gbaud per channel and, respectively, 70 GHz and 85 GHz optical bandwidth for SWDM links.

	D70 / D85 SWDM
	APERTURE 25 μm /20 μm
	BANDWIDTH f-3dBo ~70 GHz/85 GHz at 15 Ω
	WAVELENGTH 400-1600 nm
VERSIONS D70 SWDMCX / D85 SWDMC1	

428 Gbit/s PD

The highest-speed PD option provides f-3dBe above 60 GHz and is intended for 400G-class receiver experiments and compact high-bandwidth optical links.

	D400G
	APERTURE 16 μm
	BANDWIDTH f-3dBe >60 GHz at 25 Ω
	WAVELENGTH 400-1600 nm
VERSIONS 400G-class receiver component	



FROM CHIP TO MODULE

Link evaluation and system development

RF layout and interfacing, fiber coupling define the component-to-module test interface.

PRODUCT FOCUS

Optical modules

VIS optical modules are aimed for system development and fiber link tests

TYPE	FIBER
PD / transmitter	MMF / SMF
BANDWIDTH	APPLICATION
40 GHz	System development Link validation

TECHNICAL OVERVIEW

An optical module consists of a packaged chip integrated with high-frequency wire bonds and an HF connector. Fiber coupled and open chip versions are available.

The D60M-FC module is a fiber-coupled photodetector module based on a D400G-class chip. It covers 400–1600 nm spectral range, with dielectric coating optimized for 840–960 nm range. The module is matched to a 50 Ω transmission line and provides more than 40 GHz electrical bandwidth at a bias of 1–2 V.

Transmitter versions use 20–30 GHz multimode, single-mode, and multi-aperture single-mode VCSELs. Open-chip MA VCSEL modules address optical-wireless and sensing applications.

TECHNICAL DETAILS

Optical modules: selection and documents

TECHNICAL OVERVIEW

SWDM modules include the installed chip, fiber coupling, high-frequency connector. Transmitter modules at four wavelengths: 850, 880, 910, 940 nm enable four-channel transmission over multimode or standard single mode fiber.

The electrical modulation bandwidth f-3dB reaches approximately 30 GHz for transmitter modules and 40 GHz for photodetector modules with 50 Ω termination.

Connectorized modules are intended for system development and fiber optic or optical wireless evaluation.

SELECTION POINTS

PHOTODETECTOR

D60M-FC >40 GHz allows SMF/MMF pigtail, FC/PC optical connector and Anritsu V RF connector

400G PIN chip. 200 Gbaud PAM-4, >60 GHz bandwidth >0.4 A/W. 400-1600 nm

TRANSMITTER

VM100-850M VCSEL module at 200 Gbit/s-class

850/880/910/940 nm, 25-29 GHz bandwidth, single mode or multi-aperture single mode. Versions up to 50 mW CW

TYPES

Modules incorporate 65 GHz electrical connectors. Versions are available with or without fiber coupling.

PAPERS AND DOCUMENTS

N. Ledentsov Jr et al., "Up to 600 Gbit/s data transmission over 100 m of single multimode fiber using 4 $\times\lambda$ 850–940 nm VCSELs," 2022 Optical Fiber Communications Conference and Exhibition (OFC), San Diego, CA, USA, 2022, pp. 1-3.

COMPARISON TABLE

Receiver + transmitter

Optical photodetector modules

Fiber-coupled PIN photodetector modules with 50 Ω termination. PD modules do not include amplifier electronics, helping to maximize linearity and minimize signal distortion.

	D60M FC	
	BANDWIDTH	f-3dB>40 GHz
	FIBER	50/125 μ m MMF
	INPUT	400-1600 nm
VERSIONS Fiber-coupled		

VCSEL transmitter modules

VCSEL transmitter modules and transmitter subassemblies for 850 -940 nm range. VCSEL modules do not include amplifier electronics, helping to maximize linearity and minimize signal distortion.

	VM 200 SWDM SELF INJECTION LOCKED (SIL) SM	
	TYPE	VCSEL transmitter module
	FIBER	50/125 μ m MMF, SMF Hi780
	WAVELENGTH	850 / 880 / 910 / 940 nm
VERSIONS Fiber-coupled VCSEL transmitter module		

	VM100-850M	
	TYPE	VCSEL transmitter module
	FIBER	50/125 μ m MMF
	WAVELENGTH	850 nm
VERSIONS Fiber-coupled VCSEL transmitter module		

	HF MA modules	
	TYPE	VCSEL HF module with MA chips
	FIBER	50/125 μ m MMF
	WAVELENGTH	850 / 880 / 910 / 940 nm
VERSIONS Fiber-coupled VCSEL transmitter module		

OPTICAL + ELECTRICAL

Electrical interfaces

Driver and receiver ICs should be evaluated independently to confirm compatibility with the optical components and input/output circuits. Recommended before integration with an optical component.

PRODUCT FOCUS

Integrated circuits

VIS ICs provide the electrical interface for optical chips: VCSEL/DFB drivers on the transmitter side and TIAs on the receiver side. Selection depends on signal direction, control pins, supply, power requirements, and assembly options.

DRIVER A56 series	TIA T56 series
SUPPLY 3.3 V	RATE Up to 100 Gbaud

TECHNICAL OVERVIEW

An IC either drives an optical source or amplifies a photodetector signal and converts it into an electrical output. A56 devices are VCSEL/DFB drivers on the transmitter side and T56 is a transimpedance amplifier on the receiver side.

A56 drivers are intended for directly modulated VCSELs/DFBs. They take a differential 100 Ω electrical input and provide a single-ended output to the VCSEL/DFB anode.

A56-230C and A56-105C share the same role but differ in power budget and controls. A56-230C provides bandwidth-extension and pre-emphasis controls, with 200 mW no-load power dissipation. A56-105C is the lower-power (100 mW) version.

TECHNICAL OVERVIEW

Integrated circuits: options

TECHNICAL OVERVIEW

T56-250C is a transimpedance amplifier that supports operation up to 100 Gbaud, operates from a single 3.3 V supply, and converts single-ended photodiode current into a differential output. Receiver IC operation depends on PD performance, bias, gain and peaking controls.

The electrical interface must be defined before assembly, including pad arrangement, optical-chip topology, bond-wire length, supply decoupling, and the RF section. RLC circuit optimization of the board is important.

Evaluation boards expose the required supply and control contacts before a custom layout is developed for an industrial receiver or transceiver.

CRITICAL PERFORMANCE POINTS

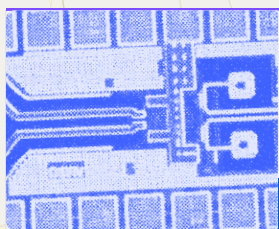
DRIVER	A56 drives VCSEL (or similar current and voltage) DFB laser from a differential 100 Ω input
CONTROL	bias, modulation swing, zero crossing, bandwidth extension and pre-emphasis on A56-230C (230 mW) A56-105C (100 mW)
TIA	T56 converts PD current into a differential 100 Ω electrical output
SUPPLY	A56 and T56 operate from 3.3 V
BOARDS	evaluation boards and the related TX/RX assemblies are available upon request

COMPARISON TABLE

IC + IC testboards

VCSEL driver ICs

Driver ICs for high-speed optical transmitters (VCSEL based or DFB-based)

	A56 driver series	
	TYPE	VCSEL driver IC
	DATA RATE	up to 100 Gbaud
	SUPPLY	3.3 V
VERSIONS A56-230C / A56-105C		

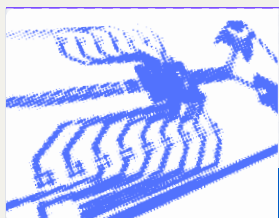
Transimpedance amplifiers

Transimpedance amplifier ICs for photodetector signal conversion to electric signal

	T56-250C	
	TYPE	TIA IC
	DATA RATE	up to 100 Gbaud
	GAIN	3.0 kΩ differential
VERSIONS Receiver-side electrical interface		

IC evaluation boards

VIS evaluation boards integrate driver and receiver ICs and provide convenient access to voltage-control pads for performance optimization. The evaluation board supports matching with selected VCSEL, DFB, or PIN optical components. Optical components can be integrated after the evaluation and optimization stage

	TX / RX IC evaluation boards	
	TYPE	Evaluation boards for Transmitter-IC and Receiver IC
	DATA RATE	Up to 100 Gbaud
	VERSIONS Driver IC / receiver IC testboards	



INTEGRATED PATH

Integrated transmitter and receiver paths

Optical assemblies combine the selected component, coupling interface and laboratory connection.

PRODUCT FOCUS

Optical Tx / Rx assemblies

Optical assemblies are single-channel transmitter and receiver boards intended for system development and test setups. The boards integrate optical chips, ICs, a high-frequency PCB, RF connectors, and fiber-coupling units into a compact assembly with convenient access to control voltages for link optimization.

USE Tx / Rx link	RATE 56 Gbit/s NRZ
FIBER 50/125 µm MMF	CONNECTORS Optical: FC/PC Electric: RF

TECHNICAL OVERVIEW

An optical assembly combines an optical chip, IC, board, fiber coupling, and RF access. It is used to evaluate a channel before custom packaging or board design.

T56-850TB is the transmitter subassembly: 850 – 940 nm VCSEL, A56 driver, coupling to 50/125 µm multimode fiber, FC/PC optical connector, 1.85 mm RF connectors.

R56-850TB is the matching receiver subassembly: a PIN photodetector and limiting TIA on a high-speed adaptor board with differential output. It covers 400–1600 nm wavelength range and is specified for up to 100 Gbaud.

TECHNICAL DETAILS

Optical Tx / Rx assemblies: selection and documents

TECHNICAL OVERVIEW

Unlike bare chips, TX/RX assemblies provide electronics matched to the PD or VCSEL, accessible voltage-control pins, a voltage input with a built-in bias tee, fiber coupling, high-frequency connectors, and a high-frequency PCB.

The transmitter and receiver assemblies are complementary units, but they can also operate independently in a range of applications. A limiting-amplifier TIA is preferable for PAM-2/NRZ operation up to 100 Gbaud. At low photocurrents, linear TIA operation can support PAM-4 or PAM-8 modulation.

SELECTION POINTS

TX	850-940 nm VCSEL, A56-230C driver, FC/PC output and 1.85 mm RF connectors
RX	D70/D85 PIN PD chip 400–1600 nm. Photocurrent is amplified by T56-250C limiting TIA, differential output
DATA RATE	Up to 100 Gbaud NRZ/PAM4; actual data rate limited by the pulse generator rise/fall times.
ENVIRONMENT	HF connectors, fiber connectors, HF PCB
INFORMATION	component and IC datasheets, publications

PUBLICATIONS AND REFERENCES

"Energy efficient 850-nm VCSEL based optical transmitter and receiver link capable of 56 Gbit/s NRZ operation" N. Ledentsov Jr et al., Proc. SPIE 10938, 109380J (2019) doi: 10.1117/12.2509916

"Development of VCSELs and VCSEL-based Links for Data Communication beyond 50 Gb/s," (invited) N. Ledentsov Jr et al, In Optical Fiber Communication Conference (OFC) 2020, OSA Technical Digest, paper M2A.3.

"High-speed 850 nm VCSEL based optical transmitter and receiver link capable of 56 Gbit/s NRZ and 100 Gbit/s 4-PAM operation" N. Ledentsov Jr., et al. Proc. VCSEL Day 2019, May 9-10, 2019, Brussels, Belgium

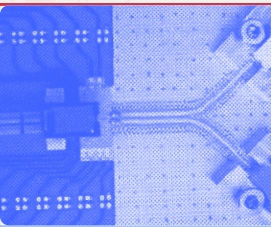
Datasheets at: <https://v-i-systems.com/products/?selected=vcsel>

COMPARISON TABLE

Tx / Rx assemblies

Optical Tx / Rx assemblies

Single-channel optical Tx and Rx assemblies for system development and link tests.

	T56 / R56 optical assemblies	
	RATE	Up to 100 Gbaud
	FIBER	50/125 µm multimode
	WAVELENGTH	400-1600 nm RX 840-960 nm TX
	VERSIONS	Receiver / Transmitter

SPECIFICATION / SAMPLE / CUSTOM

Product enquiries and technical coordination

Let us know the target wavelength, preferred modulation format, data rate, fiber type and the required form factor. VIS will recommend the closest available product, propose the necessary customization, or outline suitable development options.

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CONTACT AND LOCATION



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HARDENBERGSTR. 7

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