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FOR IMMEDIATE RELEASE

Hosiden Corp.
ROHM Co., Ltd.

The Industry's First Ultra-compact High-speed Inter-substrate Optical Communication Module-Unit

ROHM Co., Ltd. and Hoshiden Corp. have announced jointly the successful development of the industry's first high-speed optical communication module-unit featuring a transmission rate of 2.5Gbps for inter-substrate communication within portable devices such as mobile phones.

Transmission data volumes in mobile phones continue to increase as a result of greater display resolution, improved camera picture quality, and the addition of video playback functionality, making inter-substrate transmission rate an increasingly important characteristic. However, the transmission rate through conventional thin coaxial lines or flexible cables that employ copper wiring is only about 500Mbps due to the effects of attenuation and fluctuation from bending, seriously hindering efforts to increase internal system data transmission speeds. Copper wiring also requires 40 to 50 wires, making the cable difficult to bend, causing problems during assembly. In addition, the connector and cable footprints are large, and the copper lines both generate and are susceptible to noise.

In contrast to this, the new module integrates a communication IC (processing), a laser diode (transmission), and a photodiode (reception) in a compact form factor (11.0mm × 3.25mm × 1.0mm) requiring only half the mounting area of conventional products. Optical communication is achieved with low power consumption (30mW) via intra-device transmission through an inexpensive single-core plastic fiber (0.6mmΦ), enabling transmission rates up to 2.5Gbps - 5 times greater than conventional copper wiring. The result is large data transmission at high speeds using only 1/10 the wiring, contributing to simpler device designs and greater flexibility. In addition, the optical transmission method completely eliminates EMI noise.

ROHM's unique optical technologies and high feature communication LSI technologies, which enabled the optical communication module of a laser diode, a photodiode and a plastic fiber, match Hosiden's optical connection design technologies and micro-machine technologies for internal optical wiring unit.

Pricing: TBD

Availability: 2010 (Samples and OEM quantities)

For further information, contact:

<Hoshiden Corp.>

For products inquiries of this release, please use below URL for your nearest
Hosiden sales office in web site.

http://www.hosiden.co.jp/web/english/web/frame/wnet_f.htm

<ROHM Co., Ltd.>

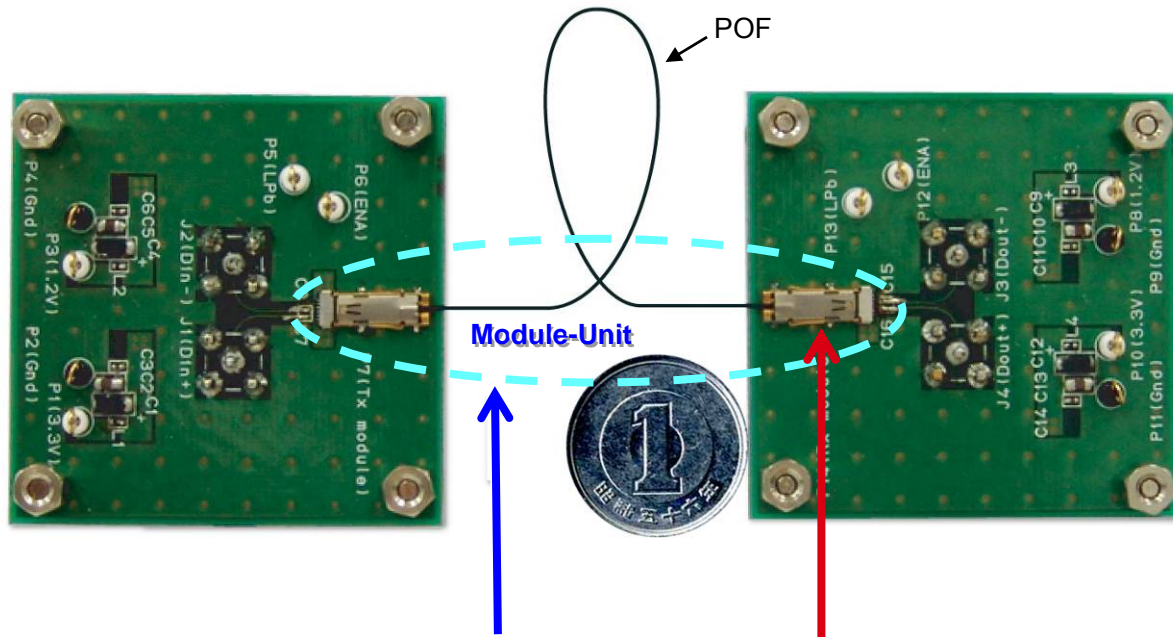
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New High-speed Inter-substrate Optical Communication Module for Portable Devices



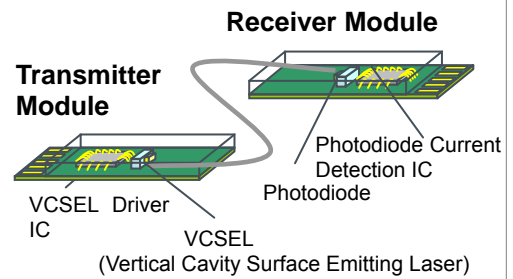
Internal Optical Wiring Unit (Hosiden)

Key Features

- Ultra-low profile (1.15mm)
- High reliability connection between the optical module and single-core fiber
- Unique and reliable fiber setting to optical module

Optical Communication Module (ROHM)

Internal Configuration



Configuration Comparison

