



AIO Core Announces Industry-First Ultra-Low Power and Extremely Compact Silicon Photonics Engine for 100 Gbps transceiver.

Product Release and Presentation at OFC 2018 Exhibition.

Tokyo, Japan. – March 13, 2018

AIO Core, a company incorporated in April 2017 having head office in Tokyo, Japan, announces availability of its I/O core product line. The I/O core is an innovative silicon photonics optical engine designed for ultra-low power and small size transceivers. The novel I/O core transceiver comes in a 5mmx5mm chip scale package, Deci Dime Sized. I/O Core was first demonstrated in O-band using 4x25Gbps (density 400Gbps/cm²) transceiver.

“This product release opens the door for applications such as high speed multi-lane 100 Gbps and higher rate Datacom links and active optical interconnects with ultra-high density”, said Mr. Kazuhiko Kurata, Chief Technology Officer of AIO Core Co., Ltd. “This optical engine enables real application of Silicon photonics I/O core in datacenter links and chip-to-chip communication in servers”, he added.

The optical engine includes a novel compact packaging concept for silicon photonic components including low voltage drive modulator, high sensitivity planer PIN photo diode, and laser diode with passive alignment along with low power CMOS driver and receiver ICs in high density p-i-n structure.

As industry moves to higher data rates, optical interconnects are expected to penetrate shorter reach chip-to-chip and intra-chip (on-chip) links. The I/O core will be especially beneficial for system-in-package (SIP) architecture where a number of integrated circuit chips are enclosed in a modular fashion in a single package, thereby reducing the development time and cost. Silicon photonic devices having benefits of economies of scale are suitable for large volume applications at very low cost.

“AIO Core is committed to continuing innovation in silicon photonics and related technologies to realize the dream of an on-chip server, a miniature server-board in a single chip.” said Mr. Tomoyuki Fujita, Chief Executive Officer of AIO Core Inc. “High data rate optical engine with compact size and low power consumption is a key building block with unlimited applications in fields such as Datacom, Industrial, Medical and Consumer Electronics, and I look forward to having a handheld high-performance computer (HPC) in the near future”, he added.

I/O core optical engine will be displayed at the OFC 2018 Exhibition Floor in PETRA booth (# 4245).

Contact:

Tomoyuki Fujita

Chief Executive Officer

AIO Core Co., Ltd.

301, 1-24-4 Sekiguchi, Bunkyo, Tokyo 112-0014, JAPAN

Tel: +81-3-6265-3956, FAX: +81-3-6265-3957

E-mail: t-fujita@aiocore.com Website: <http://www.aiocore.com/>