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## **HiLight Semiconductor to demonstrate patented transmitter dual-loop control system for 10G-PON BOSA-on-Board platforms at OFC 2018**

HiLight Semiconductor are pleased to announce the demonstration of their patented dual-loop Laser power control technology for burst-mode laser driver applications. The technology will be demonstrated as part of a 10G-PON BOSA-on-Board (BoB) reference design featuring the company's HLC10Px 'Combo' CMOS transceiver ICs designed for 10G-PON ONU applications.

In addition to being designed in pure CMOS, HiLight's HLC10Px PON ONU 'Combo' ICs feature highly integrated 5-in-1 functionality: Limiting amplifier receiver, Burst-mode transmitter, Laser dual-loop power & extinction ratio control, PWM APD bias controller and an 8051 microcontroller with embedded firmware providing digital diagnostic monitoring. This is the first time all of these functions have been combined together in a CMOS transceiver IC for 10G-PON and HiLight believe the 10G-PON chipset will enable the transition to BOSA-on-Board ONU deployments – needed to drive volumes and bring down costs in ONUs.

“The 10G PON equipment market will show very strong growth from 2018 to 2023 according to our recently published forecast” commented Julie Kunstler, Principal Analyst at Ovum “Service providers are upgrading their networks to support bandwidth growth from residential users in addition to the use of PON for non-residential customers and applications”, Julie added “Ovum’s forecast assumes the availability of the BoB (BOSA-on-board) solution later this year. The BoB solution provided significant cost savings as GPON deployments began to ramp. We expect similar costs savings with BoB for 10G PON.”

Christian Rookes, VP Marketing at HiLight, commented “HiLight’s 10G-PON chipset provides customers with a PMD solution that can really help drive volume and bring efficiencies to 10G PON ONU deployments. As well as BOM cost savings, the HLC10Px includes our

patented dual loop transmitter control, which can help to reduce BoB ONU set-up and test times. In addition, HiLight's chipset solution is extremely low power – the complete BoB reference design consumes nominally around half a watt and less than one watt across temperature.”

Jess Brown, VP Sales, added “Having already shipped over 40 million ICs into the GPON market, I'm now excited that HiLight can help accelerate the volume deployment of 10G-PON BOSA-on-Board ONUs – especially into the Greater China market where customers continually look to us for BOM savings.”

**About HiLight Semiconductor Limited:**

HiLight Semiconductor Ltd. is a Venture Capital backed, Fabless chip company, founded in 2012 by veterans of several previous start-ups. Specialising in deep sub-micron CMOS, the company designs and supplies the world's highest performance PMD and PHY ICs for high speed fiber-optics based communications and networking/Datacentre applications.

At the time of writing the company has already sold around 50 Million ICs into the fiber based PON, Datacentre and Networking markets.

HiLight is headquartered in Southampton, UK, with design offices in Bristol UK and sales and local technical support offices in China, Taiwan and Japan.