



NEWSLETTER



BOOTH 1206

# 1<sup>ST</sup> CHOICE FOR MULTICHANNEL BER TEST



## New stabilized Phase Alignment for X-BERT and ParallelX™ Bit Error Rate Test Platforms.

Luceo Technologies GmbH announces the release of a new Phase Shift Module for their 10Gb/s test platforms X-BERT and ParallelX™. The new Phase shift module allows chip designers to vary the phase relationship between

multiple 10G Patterns. Applications include Multi-lane 10G chip, QSFP, and AOC design. Users can adjust individual channels to compensate for cable length and circuit impact. It's ideal for finding the worst case point for cross talk. Up to 12 channels can be controlled.

### Community site

Would you like to get further information about our products, application notes, and information on the latest technology?

Then join the Luceo Community by visiting our web-site at [www.luceotec.com](http://www.luceotec.com) and registering.

Sign up today!

<http://www.luceotec.com/community>



### Greetings

And welcome to the latest edition of the Luceo newsletter. We hope that you will find the content useful and informative, not only about Luceo products, but also about technology issues.

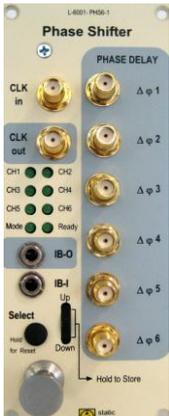
2010 has started with a bang, with business activity vastly increased over 2009. We take this to be a good omen for the fiber-optic industry in general, but also as a sign that the industry is recognising the need for high-quality, but at the same time affordable, test solutions. So we are greatly looking forward to participating in the OFCNFOEC event in San Diego this month, where we will be exhibiting new modules like the VOA (variable optical attenuator), and the new phase shifter for multi-lane testing.

With 40/100G testing becoming a major issue, this equipment offers multi-lane 10G BER testing at an affordable price.

As always, we are all working hard to introduce further modules over the coming months, to ensure that our customers will only ever need to upgrade, and not replace. Enjoy!

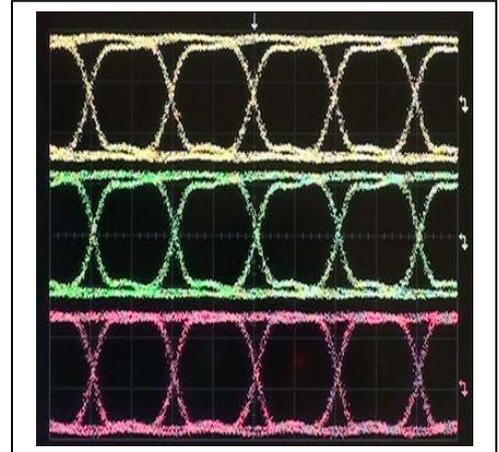
Rod Martin-Sales Director

**VISIT US ON BOOTH  
1206 AT OFC!**



Controls phases of all channels of ParalleX™ system  
 6 stabilized clock channels  
 Ref Clk-in and Ref Clk-out for cascading up to 12 (or more) channels  
 Manual or computer controlled adjustment  
 Phase shift > 2UI (10G)  
 Precision better than 5ps  
 Step size 1 ps

**Phase Shifter Module PHS6-1**



**New VOA Module**



The new VOAx-1 is a Variable Optical Attenuator (VOA) module that plugs in to the XBERT and ParalleX™ chassis. The VOA is available for single mode use (VOASx-1), or for multi mode use (VOAMx-1), and there is also an option for angled (FC/APC) connectors. Wavelength range is 800-1000nm for the MM version, and 1270-1350/1510-1590nm for the SM version. The module incorporates a 10/90% coupler, so that power to the DUT can be monitored in real time, possibly using the Luceo OPM-1 optical power meter module, or an external power meter. Variable attenuation range is 40dB for the MM version, and 55dB for the SM.

**New SFP+ O/E Converter Modules**



iCMSFP-1 is an SFP+ O/E, E/O converter module that plugs into the XBERT and ParalleX™ chassis. iCMSFP-1 incorporates a standard SFP+ module slot, which gives the user great flexibility to provide & plug-in an SFP+ module which meets their testing requirements. All MSA voltages are supported for SFP+ modules to 3.5W. Monitor and control functions can be changed via an easy to use GUI, including serial bus access of the SFP+ module. An identical module in terms of performance is the eCMSFP. This external module can be connected via cable to the X-BERT mainframe, and is very useful for device testing during temperature cycling or burn-in, due to the relaxed cable length requirement between the converter module and DUT.

**Why Modules?**

Luceo's test solutions are modular in concept. But why?

Actually this is no accident, but a carefully considered strategy, as modular systems give key benefits:

Not only can the equipment be configured the way you need it, thus saving costs on unnecessary features, but it can also be expanded and upgraded with great ease, merely by inserting new modules. And for high volume production, mainframes can be synchronized for multi lane use.

**Calendar**

OFC 2010, San Diego, USA  
 23. Mar - 25. Mar 2010

CIOE 2010, Shenzhen, China  
 06. Sep - 09. Sep 2010

ECOC 2010, Torino, Italy  
 19.Sep.-23. Sep 2010

FOE 2011, Tokyo, Japan  
 13. Apr - 15. Apr 2011

**LUCEO Technologies GmbH**

LUCEO Technologies GmbH was created by engineers involved in optical transceiver design, who recognized critical gaps in test and measurement equipment for optical component and transceiver characterisation. Luceo's test system is the first to combine a complete BERT test solution, with affordable cost and German build quality. Targeted at high volume production test applications, Luceo's equipment optimizes speed and ease-of-use, allowing users to achieve minimum cost-per-test. Founded in 2005, Luceo is headquartered in Berlin, Germany, with offices in the USA and UK. For more information, visit [www.luceotec.com](http://www.luceotec.com)