

Wave Photonics announces integration with Luceda IPKISS

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Wave Photonics, a Cambridge-based startup focused on developing high-performance and fabrication-tolerant process design kits (PDKs) for silicon photonics and other integrated photonics processes, announces that all Wave Photonics' PDKs are now fully compatible with Luceda Photonics IPKISS software. This compatibility with Luceda IPKISS allows users to use Wave Photonics components optimised for a broad range of wavelengths, from visible to telecom bands, for different applications such as quantum, sensing and LiDAR.

Users can access Wave Photonics' PDKs, which comprise several thousand components spanning over 33 wavelengths from 493 nm to 1550 nm, including the SiNQ PDK, directed at the requirements of quantum technologists working with trapped ions or atoms, quantum dots, NV centres and a whole range of quantum systems. Users can also access Wave Photonics' telecoms PDKs, which support multiple wavelengths - O-band, E-band, S-band, C-band, L-band, and U-band.

All Wave Photonics components also come with fabrication-aware scattering parameters (S-parameters), which allows full circuit simulation. The accessibility of Wave Photonics' fabrication-aware S-parameters, coupled with the use of Luceda's layout and simulation capabilities, can help chip designers optimise performance, reduce costly design iterations and deploy photonic chips faster.

James Lee, Wave Photonics CEO, said, "Our PDKs now work out of the box with IPKISS – enabling users to quickly design and simulate a chip to see how it will behave. You can swap in different components and immediately see the impact on the whole circuit, including the impact of coupler choice on fibre coupling, before tape-out. Wave PDKs and Luceda's layout and simulation tools move us towards right-first-time photonics design for networking, sensing and quantum technology-focused customers."

Pierre Wahl, Founder and Chief Commercial Officer at Luceda, said, "We are happy that designers now have access to such a rich library of components across a broad range of wavelength bands. The Luceda Photonics design



platform allows designers to easily integrate those components in their designs and simulate the overall performance. Wave's libraries give designers more options and significantly decrease the design time and risk."

The ongoing partnership means that Wave Photonic's PDKs will continue to be updated as Luceda expands its offering.

To access Wave Photonics PDKs, use the link below to the PDK portal or get in touch with us at info@wavephotonics.com.

https://pdk.wavephotonics.com/login

To learn more about Luceda IPKISS, visit https://www.lucedaphotonics.com/luceda-photonics-design-platform

About Wave Photonics

Wave Photonics, based in Cambridge, UK, develops cutting-edge design technology to drive the advancement and mass adoption of integrated photonics. The company uses a fabrication-aware computational model, to facilitate the rapid development of PIC designs. The company empowers engineers to design their chips for a wide range of wavelengths and many challenging applications, including telecom/datacom, space-comm, sensing, quantum, optical computing, and diagnostic and healthcare sensing.

About Luceda Photonics

Luceda Photonics is a leading provider of photonic integrated circuit (PIC) design software and services. The Luceda Photonics Design Platform enables designers to design, simulate, and optimise photonic integrated circuits (PICs) and empowers photonic designers to quickly achieve their tape-out, getting their designs right the first time.

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