Trends and Considerations for Large-scale Interated Silicon Photonic Transceivers

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Silicon photonics technology has successfully achieved commercial applications in the optical communications. It is expected that silicon photonic transcivers for optical I/Os and CPOs will provide much higher interconnect bandwidth and integration density in the near future. This report will summarize the recent trends of silicon photonic devices and transceivers that supporting large-scale integration for short reach optical interconnects, and introduce the progress and achievements of NOEIC in this field. It will also discuss the opportunities and challenges for large scale silicon photonics.

Short Bio:

Dr. Xi Xiao is currently the General Manager of the National Innovation Center for Information Optoelectronics (NOEIC). His research is focused on the enabling technologies and commercialization of silicon photonics for information and communication. He has published more than 180 papers in journals such as Nature Communications, Science Advances, and Advanced Materials, and holds over 110 authorized invention patents.