25th International Conference on Electronic Packaging Technology
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http://www.icept.org

Speech subject：The Trends of Optical interconnection technology in AI computing center

Speech leader: *Yuan ZHANG, Senior Teacher*

Speech Description/Objective:

With the release of OpenAI ChatGPT3.5 in 2023, LLM formally stepped into large-scale industrial use, generative AI brings ground-breaking changes to the world. The computing demands for large-scale model training soared, and AI computing centers increase dramatically , and they drives a lot of challenges such as large bandwidth, low latency, and intelligent management for the interconnection of data center networks. This has accelerated the upgrading and replacement of optical interconnection technology.

This article starts from the development needs of AI, describes the evolution and challenges of AI computing centers and their networks, and how to drive the rapid iterations of optical interconnection technology. In addition, it elaborates on the key technical challenges brought about by the trend of optical interconnection technology to optoelectronic packaging and proposes suggestions for the construction of a technical platform of 800G+ pluggable optical modules, CPO, and XPU OIO.

Speech Outline:

1）GAI brings ground-breaking changes to electronics
2）AI computing centers trends and challenges
3）Optical interconnection technology trends
4）Key technologies of optoelectronic packaging

Who Should Attend:

Package Engineers, Optical Engineers

Introduction of Speaker:

Yuan Zhang has over twenty-year expertise in research and development in advanced electronic materials, she also has acted as the chairwoman of one of IPC committee in china, and as the expert of strategic plan, she figured out several important industrial initiatives for some world leading companies.