

Photonic Boards Boost Computational Power of MicroTCA Based Systems

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vario-optics is manufacturer of photonic boards based on integrated planar optical waveguides. The technology has reached a high maturity level and is more and more used within several applications. It is obvious that this technology can also be used within MicroTCA based systems, providing higher bandwidth and lower power consumption besides a significantly increased robustness within harsh electro-magnetic environment. During the presentation an introduction into the technology will be given. The advantages of the optical on-board communication will be highlighted. Later, different applications based on photonic boards and their realization will presented with special focus on high-speed on-board communication. At the end, we will give an outlook on how a Micro-TCA-based system could look like in the future.

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