

High speed modulator dies for 1.6T and 3.2T operation

Cutting edge electro-optic modulators based on silicon photonics enabling data rates beyond 400 Gbit/s at CMOS compatible drive voltages.

SilOriX high-speed modulators for 1.6T / 3.2T IMDD and coherent applications

High-speed silicon-organic-hybrid modulator chips featuring:

- Low V_{π} enabling driver-less operation
- High bandwidth
- IMDD and coherent applications
- Single ended configuration (differential configuration available soon)

Specifications

	DR4/DR8 1.6T / 3.2T PAM4* (O-BAND) AVAILABLE Q4/26	SP/DP-IQ 1.6T / 3.2T 16QAM* (C-BAND) AVAILABLE Q4/26
Drive voltage	< 1 V	< 1 V
Electro-optic bandwidth	f3dB $\leq$ 100 GHz	f3dB $\leq$ 100 GHz
Lanes	DR8: 8 x 112 GBd 8x 224 GBd	SP-IQ: 2 x 112 GBd 2x 224 GBd DP-IQ: 1x 112 GBd 1x 224 GBd
On-chip optical loss	< 9 dB	< 8 dB
Operating temperature*	-20 °C < Top < 85 °C	-20 °C < Top $\leq$ 85 °C
Maximum power input	< 20 dBm	< 20 dBm
Device footprint	4 mm x 2 mm	4 mm x 2 mm

*400G/lane ready SOH-modulators (single-ended, O- or C-band operation) for testing are already available and can be ordered – get in touch for a quote and specifications.

