Dream Photonics - Tower PH18M:

Device Libraries and Packaging Solutions

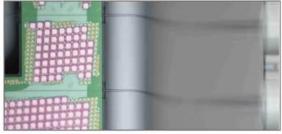


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Dream Photonics is excited to support the Tower silicon photonics PH18M fabrication processes with a portfolio of state-of-the-art device libraries and packaging solutions, engineered for the next generation of high-speed integrated optical interconnects and various emerging integrated photonics applications. Designed for performance and reliability, the hardware-validated libraries and PIC-fiber packaging solutions ensure a first-time-right design for the end-user and reduce the time-to-market.

Dream Photonics PH18M device libraries and packaging solutions provide a range of O-band and C-band devices and PIC-fiber attach solution using photonic wirebonding technology. Dream photonics additionally supports the PH18M design process by providing process design kit (PDK) enabled by open-source EDA tools.





Device	Description
Waveguides	<0.3 dB/cm propagation loss
Waveguide 1x2 Splitters	<0.05 dB insertion loss
Waveguide 2x2 Couplers	<0.2 dB insertion loss, >30 nm bandwidth
Waveguide Si-SiN escalators,	<0.05 dB insertion loss
Waveguide Crossing	<0.25 dB insertion loss, <-30 dB crosstalk
Waveguide Terminator	<-40 dB crosstalk
Waveguide converters, and tapers	<0.005 dB insertion losses
Edge Couplers Photonic Wirebonds	<2.5 dB insertion loss (to SMF28 fiber)
Thermal phase shifter	<0.2 dB insertion loss, <12 mW/π
Photodiodes	High speed and high responsivity variants