



SOI Nanophotonic Baseline Process

AMO offers research, development and small scale production of silicon nanophotonic devices and circuits. AMO's advanced baseline processes cover a wide range from single passive nanophotonic chips up to 6" wafer processing with active nanophotonic devices and two-level metal interconnects.

Frequently requested photonic components include the following structures:

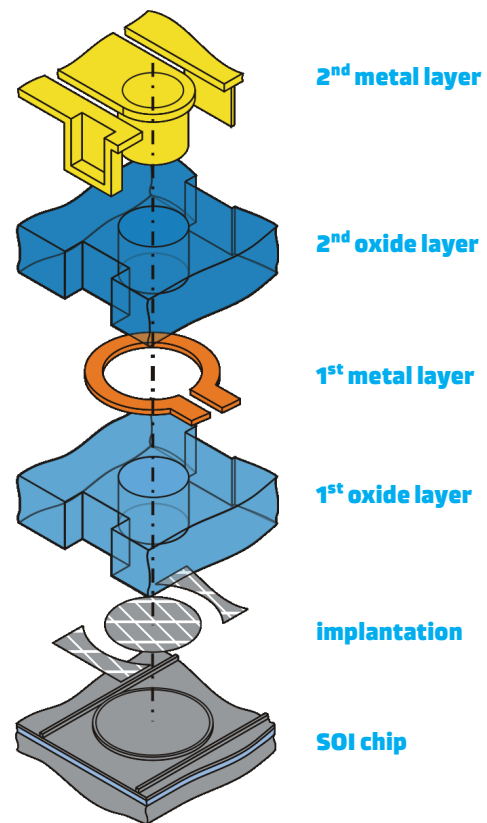
Photonic Components

Waveguides	Processes for strip, ridge, slotted and combined technology waveguides
Passive Devices	Processes for ring resonators, splitters, couplers, photonic crystals, etc.
Active Devices	Processes for n+ and p+ doping and metal interconnects
Heater Technology	Processes for integrated micro heaters based on titanium
Fiber-Chip Coupling	Processes for grating couplers and mode-size converters
Peripheral Structures	Processes for patterned top cladding, membrane etching, metal integration

AMO offers

Individual Service	<ul style="list-style-type: none"> for high flexibility and short turnaround
Combination of Electron Beam and Photolithography	<ul style="list-style-type: none"> for high throughput and ultra-high alignment accuracy
Flexibility	<ul style="list-style-type: none"> from single chip to wafer batch processing
IP Protection guaranteed	<ul style="list-style-type: none"> flexible IP protection schemes adapted to customers' needs
Modes of Cooperation	<ul style="list-style-type: none"> direct subcontractor project partner

Schematic drawing of an active silicon nanophotonic ring resonator modulator with heating elements and metal interconnects:



Contact

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