

Your Ideal SiPh Foundry Partner

From Prototyping to Production

Located in Singapore Serving you Worldwide

For more information

Please contact: sales@advmf.com

YOUR IDEAL FOUNDRY PARTNER

AMF is a leading commercial pure-play Silicon Photonics specialty foundry serving customers in various market segments including telecommunication, data centres, LiDAR, etc. We aim at becoming the de-facto Si Photonics foundry by providing best-in-class solutions supported by our proprietary IP and services from our team of Optical and Semiconductor experts who will work closely with you to support your project from concept to volume production.

Customer Concept



Prototyping

Volume Production

COMPREHENSIVE PDK

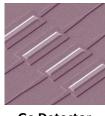
- Most comprehensive device library (ready to use device design blocks)
- PDK Support Available on Luceda, Lumerical, Mentor, Synopsys, Cadence & KLayout platforms
- Optical, Electro-Optical & Opto-Electrical Testing Services

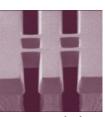












Grating Coupler

V-Groove

Splitter

High speed modulator

Ge Detector Array

Suspended Edge Coupler

HIGH PERFORMANCE DEVICES

- Proprietary building blocks for high-bandwidth Photonics Integrated Circuits for 400Gbps and above
- 80+ PDK devices (O-Band, C-Band, L-Band) available for integration in customer layout
- Application & Wavelength specific PDK

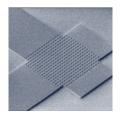
PDK Devices	Performance
Edge Coupler	TE: <1.4dB/facet
	TM: <1.4dB/facet
Grating Coupler	≈ 4dB/facet
1X2 MMI	≈0.15dB
2X2 MMI	≈0.18dB
2X4 MMI	≈0.5dB
Polarization Beam	TE <0.1dB, TM <0.2dB
Rotator & Splitter	PER ~19dB

PDK Devices	Performance
O-Band, C-Band	BW: > 70GHz (C-Band), > 40GHz* (O-Band),
Ge Photodetector	R ~ 1A/W, Dark Current < 20nA
O-Band, C-Band	EO BW> 40GHz
High Speed MZM	56GBaud
Thermal-Optical	Power consumption
Phase Shifter	<2 mW/Pπ
Crossing	<0.15dB, crosstalk <-40dB
APD	Please contact us for details

* O-band BW is limited by measurement tool capability













COMPREHENSIVE SERVICE OFFERINGS

MANUFACTURING SOLUTIONS

- 200mm wafer platform
- Glass Wafers platform
- 90nm equivalent lithography for low loss WG
- Silicon Germanium & Germanium Epitaxy
- MEMS processes for Photonics integration solutions

- Dicing and backgrinding services
- Wafer Level Testing (Optical & Electrical)
- Comprehensive Defect Scanning
- Inline and Outgoing Quality Control
- On-time delivery assurance

FLEXIBLE SERVICES & SUPPORT

AMF team has a proven track record for the past twenty years (since 2003) as the leading technology provider for Integrated Optics solutions. Through our newly upgraded cleanrooms, AMF also offers customized manufacturing services with competitive Cycle time, Quality and Reliability assurance

- MPW & Dedicated platforms for proof of concept
- Small Volume Prototyping services for product qualification
- Large Volume manufacturing services for product deployment

MULTIPLE SI PHOTONICS PLATFORMS

O-Band C-Band	Silicon-On-Insulator (SOI)	High BW Modulators, Optical Phase Array, Sensors, Signal Processing etc.
Β	• SiN-on-SOI	Integrated Silicon Nitride Layers, supporting Telecommunication wavelength
₽	• SiN-on-Oxide	Complete suite of SiN platforms with thickness from 100nm to 800nm for both
ВΑ	SiN on Glass Wafers	SiN Waveguide, Mirrors for Augmented/Virtual Reality solutions
ΑII	Other Custom Platforms	Assembly & wafer level packaging solutions, SOI platforms with various thickness (Available upon request)

AMF platforms support a wide range of applications



Data Centers



LiDAR & Sensors



AR/VR





ADVANCED MICRO FOUNDRY



For additional information, please contact us at the address below or visit our website

若需要更多信息,请发送邮件联系我们的工作人员或访问我们的网站

詳細について、下記のメールアドレスまでお問い合わせいただくか、当社のWebサイトをご覧ください

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