

The logo for Advanced Micro Foundry (AMF) features the lowercase letters 'amf' in a white, sans-serif font, set against a dark red circular background. To the right of the circle, the words 'ADVANCED MICRO FOUNDRY' are stacked vertically in a smaller, white, sans-serif font. The background of the entire page is a dark red with a white circuit board pattern of lines and nodes.

ADVANCED
MICRO
FOUNDRY

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, a spin off from A*STAR Institute of Microelectronics (IME) - Singapore, is a leading commercial pure-play Silicon Photonics specialty foundry.

Customer Concept



Prototyping

Volume Production

Our multidisciplinary team of Optical and Semiconductor experts will work closely with your teams to ensure your utmost satisfaction through the development of solutions tailored to your needs.

DESIGN ENABLEMENT

- Most comprehensive device library (ready to use device design blocks)
- PDK Support — Available on Luceda, Lumerical, Mentor and Synopsys platforms
- Electro-Optical Testing



Sidewall Grating



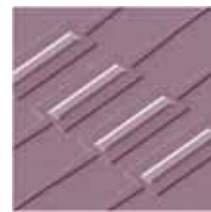
V-Groove



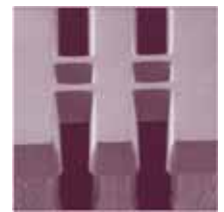
Passive Ring



Isolated Microring



Ge Detector
Array



Suspended
Edge Coupler

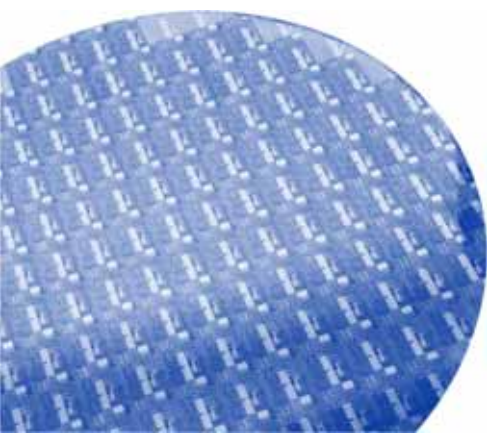
MANUFACTURING SOLUTIONS

- 200mm wafer platform
- 90nm equivalent lithography for low loss WG
- Silicon Germanium & Germanium Epitaxy
- MEMS OSA Processes for Wafer Level Assembly
- Low cost packaging building blocks/solutions
- Cu bumping, backgrinding & chip/wafer bonding
- Wafer Level Testing (Optical & Electrical)
- Comprehensive Defect Scanning & Quality Control
- On-time delivery assurance

FLEXIBLE SERVICES & SUPPORT

AMF team has a proven track record for the past fifteen 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 & Custom platforms for proof of concept
- Small Volume Prototyping services for product qualification
- Large Volume manufacturing services for product deployment



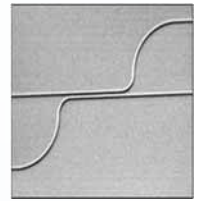
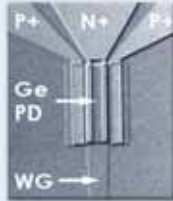
HIGH BANDWIDTH SOLUTIONS

- Proprietary building blocks for high-bandwidth Photonics Integrated Circuits for 400Gbps

STATE-OF-THE-ART BUILDING BLOCKS

PDK Devices	Performance
Edge Coupler	TE: 1.2-1.4dB/facet TM: 0.95-1.4dB/facet
Grating Coupler	< 4dB/facet
1X2 MMI	<0.1dB
2X2 MMI	<0.4dB
2X4 MMI	<0.5dB
Polarization Beam Rotator & Splitter	TE <0.1dB, TM <0.6dB PER ~20dB

PDK Devices	Performance
O-Band, C-Band Ge Photodetector	BW>35GHz, R >0.8A/W dark current=10nA
O-Band, C-Band High Speed MZM	EO BW=35GHz 56GBaud
Thermal-Optical Phase Shifter	Power consumption =2.5 mW/P π
Crossing	<0.15dB, crosstalk <-40dB
APD	Open for discussion



MULTIPLE SI PHOTONICS PLATFORMS

O-Band	<ul style="list-style-type: none"> Silicon-On-Insulator (SOI) High BW Modulators, Optical Phase Array, Sensors, Signal Processing etc.
Visible Mid IR	<ul style="list-style-type: none"> Silicon Nitride-on-SOI Integrated Silicon Nitride Layers, supporting Telecommunication wavelength & Visible to Mid-IR wavelength range. Details available upon request
Visible Mid IR	<ul style="list-style-type: none"> Silicon Nitride-on-Oxide Complete suite of SiN platforms with thickness from 100nm to 800nm for both PECVD and LPCVD SiN
Mid IR O-Band	<ul style="list-style-type: none"> Germanium-On-Silicon High Speed Photodetector, High responsivity APD, MIR Ge waveguide
All	<ul style="list-style-type: none"> Other Custom Platforms Assembly & wafer level packaging solutions, SOI platforms with various thickness (Available upon request)

AMF platforms support a wide range of applications

Interconnects



LiDAR



Sensors



Consumer Optics



YOUR IDEAL FOUNDRY PARTNER



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

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