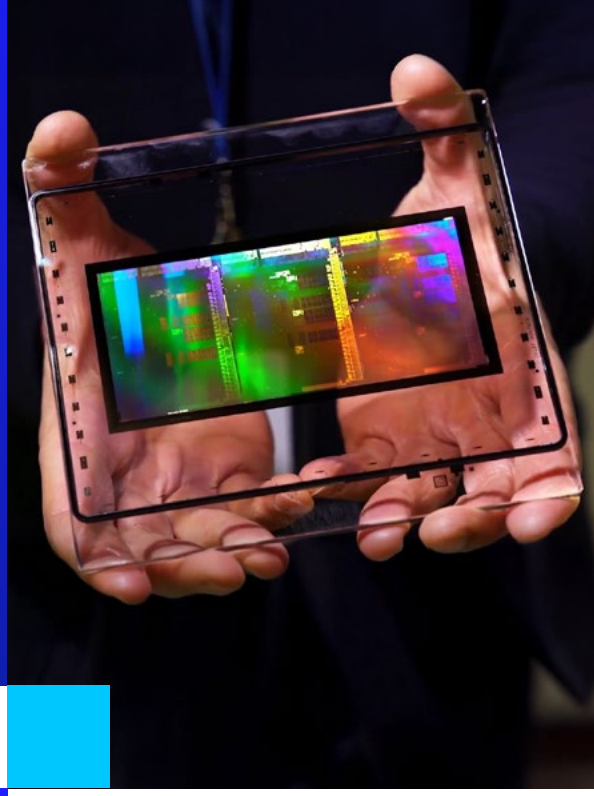
intel foundry

Intel Mask Operations



Every Intel chip begins with a mask. Intel Mask Operations (IMO) is an industry-leading mask technology and manufacturing organization, providing a critical step in semiconductor manufacturing. With key operations* at Intel's headquarters in **Santa Clara, California** and in **Hillsboro, Oregon**, masks are the foundation of every Intel product.

What is a Mask?

- The template that transfers circuit patterns onto silicon wafers
- A 6-inch x 6-inch quartz plate, ~¼-inch thick, built from computerized chip design blueprints

Role in Manufacturing

- Masks are used in photolithography to print each layer of a chip
- IMO produces thousands of masks – the blueprint for Intel's global manufacturing network
- Made in a Class 1 cleanroom – zero defects allowed
- 100+ high-precision masks needed to create a leading-edge chip

Capabilities & Differentiation

- End-to-end mask expertise: process technology, tools, development, materials, automation, and infrastructure
- In-house R&D – tight integration with development means higher performance and lower cost to customers
- Unique and robust supplier ecosystem

Sites and Operations:

Recognized for industry-leading mask technology and infrastructure unique to Intel

Santa Clara, CA
Established in 1986

Hillsboro, OR
Established in 2014

- Supports technology development and manufacturing
- Covers nodes from 32nm to 1.4nm, including EUV and HiNA
- ISO-certified
- Long-standing presence tied to Intel's early manufacturing development
- Continuous role supporting advanced process technology
- 24/7 manufacturing and customer service

For more information go to **intel.com/foundry**

*Enables production across Intel fabs in Oregon, Arizona, Ireland, and Israel.