

ASML



What it does

ASML builds multi-million-dollar lithography machines that are used to manufacture cutting-edge semiconductor chips. It is critical to the proliferation of computing.

Why we own it

- ASML plays a unique role in the increase of computing power in society. It is an enabler of artificial intelligence and better consumer technologies.
- The trajectory provided by its new generation Extreme Ultraviolet (EUV) machines could see ASML grow handsomely for many years.
- It is a systemically important company with read-through implications to some of our other largest holdings. The likes of Amazon, Cloudflare, NVIDIA, Tesla and so forth all ride the wave of increased computing power.

How it could be worth many times more

- The top line can grow mid-to-high teens over the next 10 years. Operating margins and net margins could potentially reach close to 40% and over 30% respectively. Capital return could continue at ~70% of net income.

Where we might be wrong

- Lithography plays less of a key role in the proliferation of computing.
- Less profound improvements with each new generation of silicon technology.
- There is a prolonged downcycle and overall growth reverts to GDP type levels.
- Two key people – Wennink and Van den Brink – don't stay the course.

Short 10 questions

Can sales double in the next five years?

1

Yes. Given how critical lithography is to customers' technology roadmaps, growth of high-teens could be sustained for a long time.

Ten years and beyond?

2

The next generations after EUVs sustain ASML's dominance. As Van den Brink says of their progress: 'the laws of physics won't stop it so long as we have ideas – and we have plenty.'

Competitive advantage?

3

Technology (they are way ahead) and market share (dominant).

Is the business culture different?

4

A confident can-do culture espoused by Wennink and Van Den Brink that stays the right side of hubris.

Customers like you? Contribute to society?

5

Customers respect ASML for having the best machines and being at the forefront of technological advancement. Society has no idea how much it owes ASML – most of the conveniences and delights in our daily lives have been enabled by their lithography progress over the decades.

Are returns worthwhile?

6

Yes: currently operating margins are high 20%s and ROCE high 30%s.

Will they rise or fall?

7

They have fallen and risen with semiconductor cycles over the years, but the technological lead of their machines plus top line growth could see returns increase from here, with high-30s operating margins plausible.

How is capital allocated?

8

Significant spending on R&D to keep the technological lead. R&D continues at about 15% of total sales – a higher percentage of sales than the industry and an absolute figure which is a multiple of nearest rivals.

Could it be worth 5x as much?

9

ASML enables the accelerating global transition from physical to digital infrastructure.

What doesn't the market understand?

10

Market over-extrapolates cyclicity from the past without understanding the secular growth thanks to new generations of technology.

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