

PHOTRONICS (NASDAQ: PLAB)

Sector: TMT | Industry: Semiconductor Equipment and Materials

Investment Proposal Fall 2026 Aarav Patel | aaravpatel@ufl.edu

Business Overview

Photronics (NASDAQ: PLAB) manufactures photomasks, which are specialized templates used to transfer circuit patterns onto semiconductor wafers and display panels during manufacturing. The company's business is primarily categorized into integrated circuit photomasks (IC) and flat panel display (FPD) photomasks. Photronics operates a global manufacturing network across North America, Asia, and Europe with 11 facilities supporting local customers. The products range from mature node masks to advanced photomasks used in complex semiconductor processes. Photronics is considered a merchant photomask supplier, meaning it sells masks to semiconductor and display manufacturers rather than producing the chip itself.

General Investment Thesis

The market is mispricing Photronics as a cyclical semiconductor play while it is a high margin business in the middle of a fundamental transition toward advanced nodes, pricing recent demand delays and massive capex as a structural issue with the company. Since May 26th, the stock has fallen nearly 50%, reflecting concerns over weakening IC demand, limited market share expansion, and redundant capex compressing free cash flow.



However, recent results provide evidence that the underlying business is in fact more resilient than the market expects. Q3 revenue increased 3% YoY to \$216M as some previously delayed design releases recovered, while high end IC revenue reached a record 44% of IC revenue supporting margins. The broader idea is that Photronics is going through a transition that is not reflected in the valuation. Continued adaptations of higher value (28nm, 22nm, and 14nm) nodes allowed earnings to grow much faster than general photomask volumes. Additionally, expansion into Texas and Korea allows the original Boise location to focus on higher end production. At about 13x earnings and 15x free cash flow, Photronics is trading at around a 65% discount relative the industry average and peers. If delayed demand continues to recover, high end IC products expand, and the new capex projects start contributing to revenue, Photronics could demonstrate a stronger earnings power, and the stock will re-rate towards its implied value.

Catalyst #1

General Market Consensus: The market sees Photronics' recent pullback as a result of weakening underlying semiconductor demand, triggered by customer design release delays and a declining mainstream IC volume (down 5% QoQ and 9% YoY). Investors are treating the delayed tape-outs as unexplained losses instead of deferred demand. They assume that lower overall wafer correlates to a genuine photomask revenue decline.

What The Market Misses: The market is misreading the demand pullback as a cyclical decline, but the data shows a structural mix shift is in the works. They fail to realize that design release delays are temporary

bottlenecks that are caused by constraints in fab capacity and a customer node migration, not a permanent decline in demand. Photronics generates revenue based on photomask complexity and average selling price (ASP) instead of just wafer volume. The decline in mainstream IC is accompanied by a record increase in high end IC (reaching 44% of total IC revenue). This marks a significant shift towards advanced nodes (28nm, 22nm, and 14nm). These complex photomasks demand higher ASPs and higher margins, which means that Photronics earnings power can grow dramatically even during a time with moderate overall volume growth. I expect high end IC revenue to cross a 50% threshold over the next two quarters based on Q3 2026 high end IC percentage of 44% and projected Q4 revenue of \$217 million. This will force investors to rerate Photronics as a high margin cash flow business instead of a cyclical IC business.

Catalyst #2

General Market Consensus: The market views Photronics' growth potential as constrained because of captive photomask shops. The in house operations of companies such as TSMC, Samsung, Intel, and SMIC control about 2/3 of the global photomask market. As a result, investors tend to view Photronics as a company struggling to compete for a greater market share, as they currently own roughly 10% of the global semiconductor photomask industry.

What The Market Misses: The market is treating the 2/3 captive photomask market as a permanent boundary when Photronics' management is seeing that boundary soften. Major captive foundries are currently backed into massive capital projects as they pour billions into developing Extreme Ultraviolet masks for 5nm, 3nm, and Angstrom era nodes (which cost about \$10-20 million per set). Since they are constrained on floor space and resources, they are quietly outsourcing some mask production (14nm and 28nm nodes) to trusted companies like Photronics. The market is dismissing these node volumes but since Photronics charges millions per set, they are slowly generating higher revenue, and potentially a greater market size without having to outspend foundries on EUV capex. Management specifically mentioned that captive outsourcing is a long term growth opportunity and that the captive portion of the market could rise significantly.

Catalyst #3

General Market Consensus: Photronics reported \$255-305M of capex in FY2026. The capex is large relative to a company generating \$216M of quarterly revenue. The market's view on a capital intensive cyclical semiconductor supplier building up capex mid cycle is negative. Investors assume this is a defensive spend to maintain a competitive mainstream photomask business that will compress their free cash flow.

What The Market Misses: This capex is going into two specific projects that are not yet reported in the numbers at all. The first of these is an Allen, Texas facility that is expected to begin initial revenue generation later in the year. Management plans to optimize production by moving the smaller scale node projects into this facility, opening space in the original Boise, Idaho fab to fulfill the complex chip orders that demand higher ASPs. This project not only allows Photronics to expand manufacturing capability but to optimize revenue streams without having to expand aggressively around the country. This spending is also pre-funding revenue that hasn't hit the P&L statements yet. The second expansion is into Korea for 8nm capabilities, though the competition has a longer timeline. The market isn't pricing in the fact that the specific revenue Photronics funds is aimed at a strategic structural change rather than merely maintaining the existing business.

Comparative Analysis

<i>Company</i>	<i>Forward P/E</i>	<i>Price / FCF</i>	<i>EV / EBITDA</i>
PLAB	13.3	14.59	5.1

FORM	30.9	55.43	48.0
CAMT	32.7	53.03	104.1
KLIC	37.3	103.36	57.9
Semiconductor Equipment Industry	38.1	66.03	10.0 – 20.0

Photronics is trading at a Forward P/E of 13.3, a massive difference compared to the industry average of 38.10. This represents a 65% discount providing a strong margin of safety in a sector where peers are trading at significant premiums. What seems to be more interesting here is Photronics' P/FCF of 14.59 which sits significantly below the industry average of 65.03. FCF is a strong test for business quality, stripping away depreciation effects and shows actual cash generation. This goes to show that Photronics is operationally disciplined, trading at an 80% discount to peers.

Relative Multiple Rerating

At a current price of \$27.18 and Forward P/E of 13.3, PLAB's Forward EPS is \$2.04. While merchant photomask manufacturers typically trade at a discount to pure play equipment suppliers, PLAB's structural shift towards high end IC needs a rerating. A defensible 19.0x Forward P/E (still well below the 38.1x industry average) brings a \$38.76 price target after multiplying the Forward EPS to a target multiple. This rerating, explained by the earnings growth from high end IC and recovery of deferred demand, yields a 39% upside.

Risks

Securities Lawsuit & Insider Selling: A securities class action lawsuit has been filed against Photronics covering investors who purchased shares between 12/10/2025 and 05/27/2026. The lawsuit claims that the company made misleading statements regarding growth prospects, notably around a tax valuation allowance reversal that inflated Q1 earnings. Allegations are unproven but remain a headline risk that could pressure the stock. Additionally, there has been insider selling over the past six months, including over \$15 million in sales leading up to a Q2 earnings miss.

Geopolitical and Geographic Exposure Risk: Photronics generates approximately 82% of its revenue outside of the U.S. This geographic concentration exposes the company to geopolitical risks, including potential trade restrictions, tariffs, and supply chain disruptions. Management has noted that the business has already been affected by the loss of some Chinese customers due to U.S. shipping restrictions. Furthermore, earnings could be sensitive to macroeconomic factors such as currency changes across countries.

The captive market outsourcing risk: The second catalyst assumes that major foundries like TSMC, Intel, and Samsung will increasingly outsource photomask production to Photronics as they focus their own resources on EUV development for 5nm, 3nm, and Angstrom-era nodes. However, these foundries currently control about 2/3 of the global photomask market and could choose to maintain or expand in house production rather than outsourcing it. If that happens, Photronics' addressable market would remain near current levels, limiting the revenue expansion and keeping their market share constrained around 10%