



Leading Telecommunications Equipment Provider

From Supplier to Strategic Partner

How collaboration drove innovation for a leading telecommunications equipment provider

QUICK FACTS

Company

Leading telecommunications equipment provider

Customer Profile

A leading telecommunications equipment provider whose networking platforms depend on advanced optical technologies. It first engaged Semtech to help address a specific optical networking challenge.

Objectives

Find a second source for a critical optical technology without compromising performance:

- Meet demanding performance requirements
- Deliver the scalability and reliability telecom networks expect
- Look beyond the specification to the customer's long-term vision
- Improve performance and simplify deployment
- Support future platform requirements

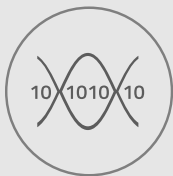
Results

A single design requirement became a platform-level partnership:

- Exceeded expectations on optical gain, wavelength coverage and reliability
- Became the foundation of a new generation of the customer's tunable laser platform
- Deployed across multiple networking systems
- Now used across almost all relevant platforms, per the customer
- Ongoing work on new gain-chip designs and wavelengths

Products and Services

- [Data center portfolio](#)



“ What began as a second source evaluation evolved into a long-term innovation partnership, demonstrating how early collaboration can create value far beyond a single design win. ”

INTRODUCTION

The best example of transforming customer engagement is when a customer stops viewing you as a supplier and starts viewing you as a partner.

That shift occurred with a leading telecommunications equipment provider that initially engaged Semtech to help address a specific optical networking challenge. Over time, the relationship expanded from solving a single design requirement to collaborating on future platform innovation.

For telecommunications operators, these equipment platforms play a critical role in supporting the growing demand for network capacity. Advanced optical technologies, including dense wavelength division multiplexing (DWDM), enable more data to travel over existing fiber infrastructure, helping improve efficiency and performance while reducing complexity.

CHALLENGE

Evaluating a second source

Several years ago, the customer was evaluating alternatives for a critical optical technology used within its networking platforms. The customer was looking for a second source capable of meeting demanding performance requirements while supporting the scalability and reliability expected in modern telecommunications infrastructure. What began as a supplier evaluation would ultimately become something much more significant.

Looking beyond the specification

Rather than simply reproducing an existing solution, Semtech's engineering team worked closely with the customer to understand its objectives and long-term vision. The collaboration focused not only on meeting specifications, but also on identifying opportunities to improve performance, simplify deployment and support future platform requirements.



SOLUTION

A new optical gain-chip design

Semtech's engineers worked closely with the customer on a new optical gain-chip design for its tunable laser platform, built to go beyond the original specification:

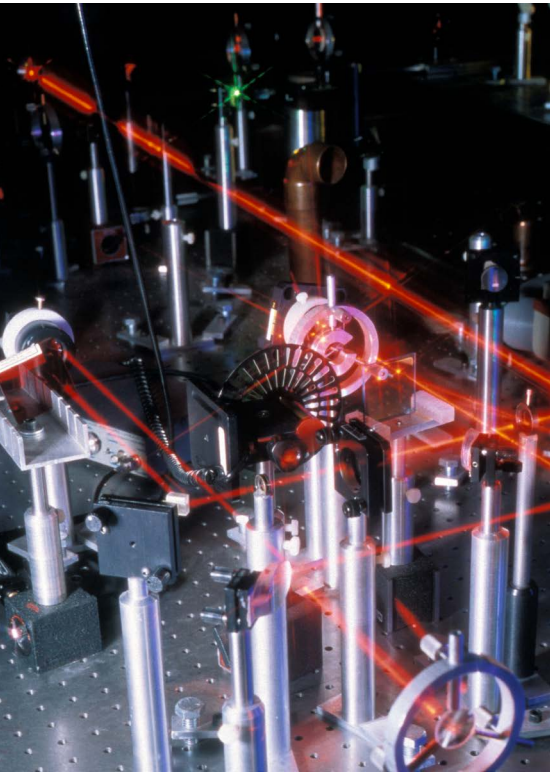
- **Higher performance:** Exceeded the customer's expectations across optical gain, wavelength coverage, reliability and overall system performance compared to prior versions of their platform.
- **Broader wavelength coverage:** Helped the customer achieve broader wavelength coverage, improved performance and greater flexibility in its ITLA.
- **Platform foundation:** Became the foundation for a new generation of the customer's tunable laser platform.
- **Broad deployment:** The customer redesigned its platform around the Semtech solution and deployed it across multiple networking systems.

A key building block for DWDM equipment platforms is an integrable tunable laser assembly (ITLA), a wavelength-tunable laser that can be set to transmit any of the desired wavelengths in the DWDM spectrum. It works like a single adjustable tool doing the job of dozens of fixed ones, and greatly simplifies the equipment suppliers' platform complexity.

BENEFITS

From sourcing decision to platform decision

- **Strategic platform decision:** What started as a sourcing decision became a strategic platform decision.
- **One component, many systems:** Instead of stocking a different laser for every wavelength a network might need, the operator can stock one ITLA component and configure it for whatever wavelength a given link requires. That flexibility lets the ITLA extend across multiple systems in the customer's portfolio.
- **Large-scale adoption:** The customer has told Semtech that the new design is now used across almost all its relevant platforms.
- **Multi-year anchor:** Telecom equipment platforms typically stay in service for roughly a decade, so a design win at this level anchors a multi-year relationship across the platform's full lifecycle, not just a single product cycle.



Today, Semtech continues to work with the customer on:

- Additional gain-chip designs
- New wavelength requirements
- Next-generation optical technologies intended for future platforms

As the customer's confidence in the partnership grew, so did the scope of collaboration. Part of that confidence has come from scale: the capability behind this design originally sat inside a smaller, newer supplier, and now is part of a larger, publicly traded company, which made the customer more comfortable in bringing Semtech into more of its roadmap. What began as a request for a second source evolved into an ongoing innovation partnership focused on helping shape what's next.

This progression reflects a broader shift in how Semtech engages with customers. Increasingly, the company's role extends beyond delivering individual components. By engaging earlier in the development process, collaborating closely with customers, and applying deep technical expertise to complex challenges, we believe Semtech helps customers accelerate innovation and bring differentiated solutions to market.

A customer that initially sought an alternative supplier now looks to Semtech for support on future technology development. A component opportunity became a platform opportunity, and a supplier relationship became a strategic partnership built on trust, collaboration and shared innovation.

Forward-looking Statements

This case study contains "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements are those other than historical information or statements of current condition and relate to matters such as future financial and operational performance; the Company's expectations regarding near term growth trends and market position; and its plans, objectives and expectations. These statements involve known and unknown risks and uncertainties that could cause actual results and events to differ materially from those projected and should be considered with the cautionary statements in the risk factors disclosed in the Company's filings with the Securities and Exchange Commission (the "SEC"), including Semtech's Annual Report on Form 10-K for the fiscal year ended January 25, 2026, filed March 23, 2026, as such risk factors may be amended, supplemented or superseded from time to time by other reports it files with the SEC. Forward-looking statements speak only as of the date made, and except as required by law, Semtech assumes no obligation to update them.

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