# SAP optical module



## Overview

Optical Character Recognition (OCR): Best Practices | SAP Help PortalOptical Character Recognition (OCR): Best Practices To get better extraction and enric.

## Key Takeaways

SAP optical modules are high-speed fiber-optic communication modules designed for advanced PCB integration, supporting data rates up to 800G/1. 6T using mSAP and HDI PCB technologies. OverviewSAP optical modules are used in high-bandwidth data communication applications, including AI servers, data centers, and high-speed networking.

These modules integrate laser diodes, photodiodes, and control electronics to transmit and receive optical signals efficiently, often in small form-factor pluggable (SFP, SFP+, XFP, CFP) or other advanced fiber-optic module formats.mSAP and PCB IntegrationModern SAP optical modules leverage mSAP (micro-scale Semi-Additive Process) and HDI (High-Density Interconnect) PCB technologies to achieve ultra-high precision and low signal loss. mSAP allows for smaller, denser, and higher-speed PCB layouts, which is critical for modules operating at 800G or 1. 6T data rates. Compared to conventional PCB processes, mSAP reduces signal loss and reflections, improving overall module performance and reliability.

### Key Design Considerations

When designing SAP optical modules, engineers focus on: Power efficiency: Minimizing heat generation to maintain stable operation. Laser diode control: Dynamic and precise regulation of output power. Photodiode sensing: Accurate detection and biasing for signal integrity.

© 2026 KENHARDT OPTICAL NETWORKS - All rights reserved

PC

B loss management: Ensuring low insertion loss and high signal integrity, especially at high frequencies (e.g., 56 GHz for 113 GBd modules),. ApplicationsSAP optical modules are widely used in: AI and high-performance computing serversData center interconnectsTelecommunication networks5G infrastructure They enable high-speed, low-latency data transfer while supporting compact and scalable designs for modern electronics.

### Resources

For engineers designing SAP optical modules, TI provides reference designs, block diagrams, and integrated circuits to accelerate development and optimize performance for various form factors and data rates. In summary, SAP optical modules combine advanced optical components with mSAP PCB technology to deliver high-speed, reliable, and compact solutions for next-generation data communication systems.

## Article Content

Optical Character Recognition (OCR): Best Practices | SAP Help Portal

Optical Character Recognition (OCR): Best Practices To get better extraction and enrichment results, bear in mind the following when uploading document files to SAP Document AI:

SAP Central Invoice Management

Currently, native optical character recognition (OCR) capabilities are available through the Document Information Extraction business service or

SAP Modules

SAP offers more than 60+ modules in ECC and S/4HANA versions, divided into functional, technical and industry-specific modules. These modules are designed to support different

SAP Invoice Scanning & Automation: Capture and Extract Invoice Data

To automate invoice processing in SAP end to end, many finance teams pair one of these with a specialized third-party extraction tool that uses Optical Character Recognition (OCR).

Use of Advance Packaging to Reduce Optical Module PCB Losses

*© 2026 KENHARDT OPTICAL NETWORKS - All rights reserved*

Advance optical modules are using mSAP (modified Semi Additive Package) to save cost and power – mSAP was developed in the last 7-10 years in support of smart phones and watches.

The Most Comprehensive Guide Of Optical Modules

Explore the ultimate guide to optical modules. Learn types, functions, performance metrics & how to choose the right module for your fiber network.

AT&S Empowers High-Speed Optical Module PCB

Together with globally renowned optical module manufacturers, find out how AT&S is empowering high-speed Optical Module PCB manufacturing to

List of all the SAP Modules

SAP MM, which stands for Materials Management, is a critical module within the SAP ERP (Enterprise Resource Planning) system. Its primary focus is on managing an organization''s

Optical Archive TCodes in SAP

Best matches for "optical archive" across SAP TCodes. Use the top matches below to jump directly into the most relevant items, or browse related searches for adjacent terms.

SAP Central Invoice Management

The SAP Central Invoice Management, inbound processing module enables the processing of invoices across multiple inbound channels. Currently, native optical character

SAP Transaction Codes – SAP Tcodes List PDF Module Wise

Find SAP Transaction Codes (Tcodes) list PDF by module including SAP FICO, MM, SD, PP, HCM, Basis, ABAP and more with detailed explanations and tutorials.

SAP SD (Sales and Distribution) TRANSACTION CODES

Note: Important List of SAP Sales and Distribution Transactions (T-Codes) that are used for configuration and implementation of SAP SD module, integration, and end-user level transaction

What is SAP Refx? – Overview of Re-Fx Module in SAP

Learn what is SAP Refx(Flexible Real Estate Management) module and how SAP Re-Fx lease contracts, real estates, automated postings, reporting and integration.

PDF document

*© 2026 KENHARDT OPTICAL NETWORKS - All rights reserved*

PDF document PDF document Read this PDF document online, download the original file, and browse related details on device.report. Additional coding instructions can be found in the Article File chapter

SAP Global Trade Services

Explore SAP Global Trade Services and learn about its capabilities to manage international trade and compliance. Access helpful resources to improve your knowledge.

Source Photonics to Expand Optical Chip and Module Production

Source Photonics is one of the world''s leading optical communications suppliers, with operations spanning optical chip R&D, wafer manufacturing, packaging and testing, and optical

AI Data Center Optical Transceiver Module Market 2025–2030

The AI data center optical transceiver market has entered a historic growth phase, driven by the exponential expansion of AI computing clusters and the accelerated migration from traditional copper

User Guide for SAP Signavio Process Intelligence

SAP Help Portal provides comprehensive user guides and resources for SAP Signavio Process Intelligence, assisting users in understanding and utilizing its features effectively.

## Contact Us

Continue your research online:

Website: https://kenhardtprimary.co.za
Technical inquiry: https://kenhardtprimary.co.za/project-desk.html
African project coordination: Century City, Cape Town, Western Cape, South Africa

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

© 2026 KENHARDT OPTICAL NETWORKS - All rights reserved