# AtlasOne PAM-4 DSP Optical Module Applications

**Part No.**

AtlasOne

**Product Type**

50G PAM

**Market Segments**

Wireless, Carrier

**Applications**

- LR Transceivers
- ER Transceivers

## Features

- High performance, versatile and adaptive digital core
- Low Power
- Integrated Laser Drivers

## Description

The Marvell AtlasOne™ 50Gbps PAM4 optical DSP is a next generation solution for 5G wireless and carrier networks. The Alas optical DSP supports multiple industry standard protocols for link distances up to 40km. Atlas is equipped with an industry leading PAM4 digital core for optimal performance across a range of applications. In addition to the digital core, the platform integrates the PMD Tx layer including a selection of laser drivers. Additionally, the platform leverages the host side SERDES and API library from the Polaris PAM4 DSP, which is the industry's most widely deployed solution.

The high performance, mixed signal electronics in AtlasOne are complemented by a full suite of performance monitoring tools that deliver an extensive range of real-time data telemetry.

The AtlasOne optical DSP utilizes high volume, mass production CMOS and is mechanically implemented in a small form factor BGA package.