

MultiLane Smart Loopbacks

A New Standard for Loopback Test Coverage

Next-Gen Ports Introduce New Challenges

MultiLane loopback modules are considered to be the most versatile port testing solutions available in the industry today. A product lineup covering ports speeds from 1G to 400G and beyond requires a broad feature set defined by evolving test requirements. As the 400G frontier introduces a new wave of transactional management requirements between ports and pluggables, **MultiLane Smart Loopbacks** equip system OEMs to certify all aspects of their designs from R&D to deployment.

More than a Loopback

In addition to configurable thermal profiles exceeding **23W** and optimal trace signal integrity, the **ML4062-TL2a** supports a variety of features crucial for firmware validation of new host designs:

- Fully programmable MSA memory pages
- Low speed signal status indicators
- Edge detection of control signals
- Raising alarm signals to any desired state
- LCD monitor to report real-time diagnostics

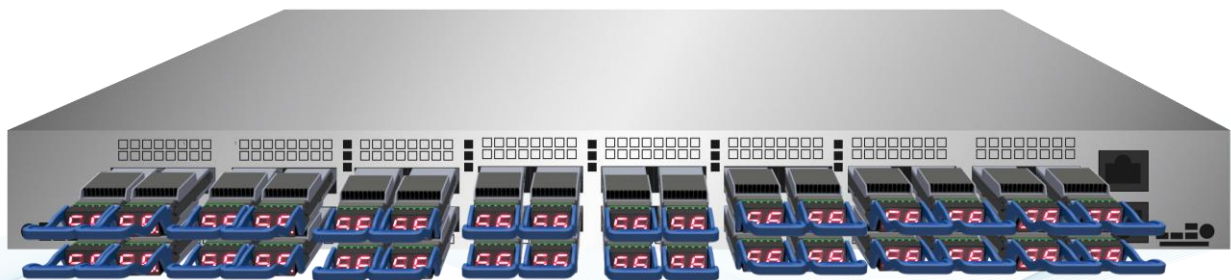
These features are defined in close consultation with the MSA standards contributors who define the rules of engagement for high speed pluggables. Hence, MultiLane anticipates the emerging demand of specific loopback features to ensure that relevant solutions are market-ready in a timely manner.



Customizability and Versatility: Pick your PN

MultiLane offers unprecedented customizability across all loopback lineups, especially the intelligent **ML4062-TL2a**. This includes setting the location and magnitude of thermal loads on the PCB itself, defining specific register content across memory map pages, and even forcing precise insertion loss/return loss impairments along the loopback traces.

System vendors are encouraged to minimize operational complexities and costs by defining a single feature set across their entire organization. Whether there is a need to validate switch power dissipation in a manufacturing environment, or to test CMIS implementation on a lab bench for a future product, a single MultiLane part number can cover it all. Learn more about our smart loopbacks [here](#).



For more information, please contact us at sales@multilaneinc.com.