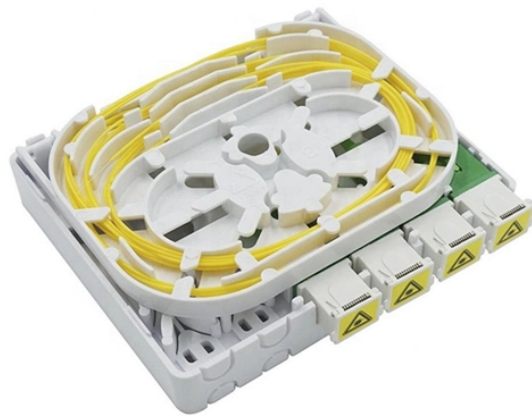


## PHY and optical module interface circuit



## PHY and optical module interface circuit



This design guide is intended to assist in the circuit design and board layout of the DP83865 Gigabit Ethernet physical layer transceiver. This design guide covers the following subjects:



Overview The QSFP-DD, QSFP, and SFP transceiver modules are hot-swappable and connect the electrical circuitry of the system with an optical external network.



Figure 3-7 shows an example schematic for a connection between an optical interface and one channel of the Ethernet PHY. Component details are shown in table 3-2 below.



Learn the roles of Ethernet MAC and PHY in networking. Understand how LINK-PP's optical modules and magnetic RJ45 connectors support Ethernet interfaces.



The ToR switch routes the frames and the optical module converts the medium from electrical to optical by implementing both electrical and optical PHY functions.



Figure 1. Ethernet PHY System Block Diagram  
These are the three things you should know about Ethernet PHY: 1. It is a transceiver that is a bridge between the digital world - including processors, ...



Modules such as Gigabit Interface Converter (GBIC) can be plugged into an Ethernet-based system that contains GBIC receptacles. Other modules, such as Small Form-Factor Pluggable (SFPs) defined by ...



Challenges in Optical PHY Layout and Routing The graphic below shows the high-level topology of a multi-lane Ethernet interface that would be found in networking equipment. This ...



Class Topics System and design issues relevant to high-speed optical interconnects Channel properties Modeling, measurements, communication techniques Optical interconnect circuits Drivers, receivers, ...



A. Pin Assignment & Description B. Recommended Interface Circuit C. Package Outline D. SFP Transceiver Host Board Mechanical Layout E. Electrical Connector Mechanical Layout F. Connector ...



Summary Ethernet PHY chips and optical transceivers form an inseparable pair in the high-speed physical layer of networks. PHY chips encode, modulate, amplify, and equalize electrical ...

## Contact Us

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