

1 Introduction

This MCIO Add-in-Card (AIC) is designed for in-system evaluation of the M88RT61632 Retimer chip. It supports PCIe® 6.x and CXL® 3.x specifications, and is equipped with a PCIe 6.x CEM x16 gold-finger edge connector to plug into a PCIe 6.x host, and two SFF-TA-1016 74-pin x8 right-angle MCIO connectors to cable to external endpoint devices. Upon the system power-up and PERST# de-assertion, the host (e.g., CPU) and endpoint device will automatically establish the link via the M88RT61632.

The M88RT61632 is a 16-lane PCIe 6.x/CXL 3.x Retimer and suitable for a wide range of applications, including AI accelerators, servers and storage systems, providing stable and reliable PCIe/CXL link enhancement capabilities.

Refer to *M88RT61632 Product Brief* on Montage website, or contact Montage sales representatives to request *M88RT61632 Data Sheet* for more details.

2 Specification

Feature	Specification
Card Model	M88RT61632MCIOEVB
Card Physical Dimension	194.7mm x 68.9mm
Connectors	PCIe 6.x CEM x16 edge finger, SFF-TA-1016 74-pin x8 right-angle MCIO connector x2
LED Indicators	PCIe fundamental reset, Retimer FW load done, Power good
Lane Configuration	Flexible link bifurcation from 1 x16, 2 x8, 4 x4, and up to 8 x2 lanes per link
Debugging Interface	3.3V SMBus Header (Retimer), USB-C interface for chip debugging

3 Applications

This M88RT61632 MCIO AIC can extend the PCIe signal reach to enable rapid system deployment, making it easy to implement GPUs, NICs, switches and other devices in a system with MCIO connectors.

Figure 1. M88RT61632 MCIO AIC (Top View)

