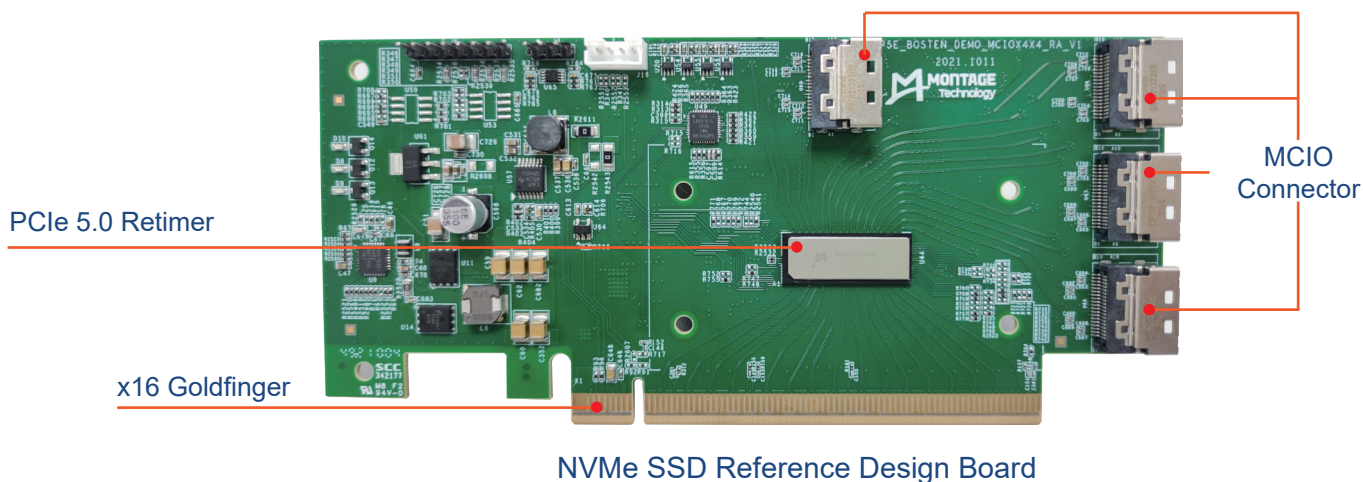


# PCIe 5.0 Retimer

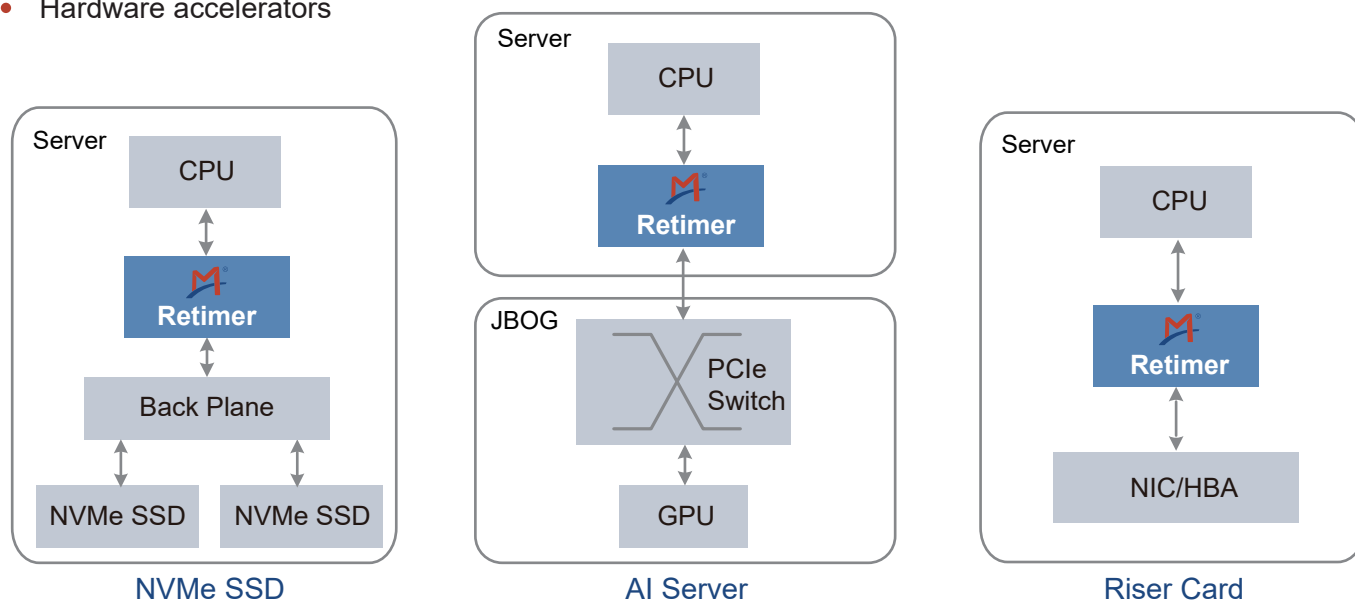
## Introduction

Montage Technology provides a 16-lane PCIe 5.0/CXL Retimer to improve the signal integrity and extend the effective transmission distance of high-speed signal, offering a robust and scalable PCIe interconnect solution for servers, enterprise storage, heterogeneous computing and communication equipments. The Retimer has industry-leading performance in terms of power consumption, transmission latency, etc., and demonstrates excellent interoperability with CPU, network card, SSD, GPU and PCIe switch.



## Typical Applications

- Servers
- Storage appliances
- Communication equipments
- Hardware accelerators



# Features

## High-performance PCIe 5.0 x16 Retimer

- 32 GT/s SerDes, capable of compensating for channel loss up to 36 dB
- Eliminate deterministic input jitter and random input jitter
- Support lane polarity inversion
- Support hot plug
- Low power and low latency

## PCIe Standards and Compatibility

- Compliant with PCIe 5.0 Base Specification, backward compliant with PCIe 4.0 and below
- Support PCIe/CXL dual-mode operation
- Support mainstream package requirements

## Power Management

- Support PCIe L1PM feature
- Powered by 1.8 V and 0.9 V

## Clocking

- Use standard 100 MHz reference clock
- Support Common Clock, SRNS and SRIS
- Support 100 MHz reference clock output

## Reliability, Availability and Maintainability

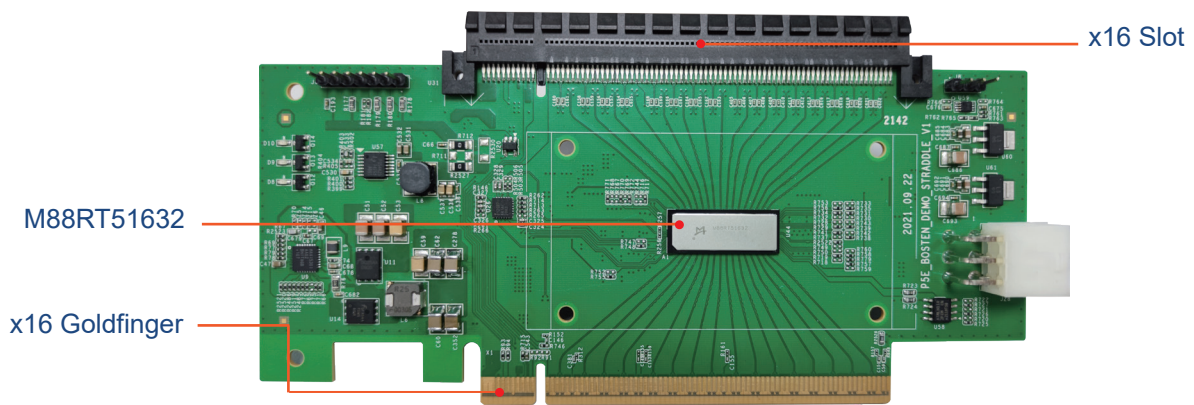
- IEEE 1149.6 AC-JTAG Boundary Scan
- Support Rx margining test and slave loop-back
- Support multiple DFX features
- Device configuration via SMBus or EEPROM

# Ordering Information

Part Number	Specification	Configurability	Max. Data Rate	Number of Lanes	Package
M88RT51632	PCIe 5.0	EEPROM I <sup>2</sup> C	32 GT/s	16	22.8 mm x 8.9 mm, 354-ball FCCSP

# Evaluation Board and Kit

## Evaluation Board



## Debugging Tool

