

TC2200 / TC2201

PCIe® Gen4 NVMe™ DRAMless SSD Controller

Boot SSD
Gaming
OEM Client

Overview

The TC2200/TC2201 are industry leading PCIe Gen4 NVMe DRAMless SSD controllers designed to deliver outstanding performance, reliability, and power efficiency for a wide range of small form factor computing applications.

Architecture

The TC2200/TC2201 series supports DRAMless architecture with Host Memory Buffer (HMB) that enables low power and cost effective BOM designs.

FlexLDPC

Utilizing FlexLDPC technology, an in-house developed advanced LDPC error correction engine, provides best-in-class latency, quality of service (QoS), and endurance support for the latest TLC and QLC NAND Flash technologies.



SSD Form Factors

- M.2 2280
- M.2 2230
- U.2

Applications

- PC
- Laptops
- Gaming Consoles

Spec	TC2200	TC2201
Status	Mass Production	Sampling Q4'2022
Interface	PCIe Gen4, NVMe 1.4	PCIe Gen4, NVMe 1.4
Flash	4CH, up to 1600 MT/s	4CH, up to 2400MT/s
DRAM	DRAMLess	DRAMLess
Performance	Sequential, 5GB/s Random, 550K IOPS	Sequential, 7.4GB/s Random, 1M IOPS
Power	<1.5mW Controller PS4	<1.5mW Controller PS4
Data Integrity	End to end data protection SRAM SECDED protection 4KB LDPC ECC Plane-based/Die-base RAID	End to end data protection SRAM SECDED protection 4KB LDPC ECC Plane-based/Die-base RAID
Package	12mm x 12mm	7.5mm x 12mm