

## Successful Case with Chenbro

“Toshiba’s industry leading 16TB Nearline Drive provide us the edge to realize the ultra-dense storage solution intended for our 4U JBOD Line-up”.

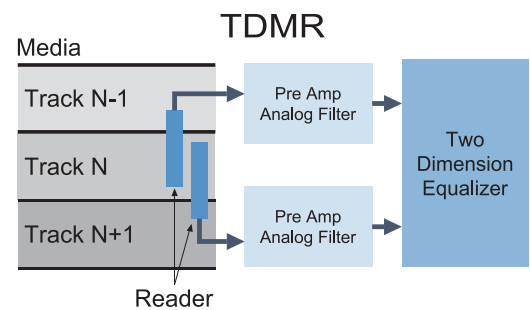
*Eric Hui, Vice President of Global Sales, Chenbro*

### OPTIMIZING STORAGE DENSITY IN ONE-METER DEPTH JBOD SOLUTION

Compared to the last generation MG07 series, Toshiba Achieve up to 1.54 Petabyte of high density storage capacity with Chenbro RM43596 96-Bay JBOD enclosure equipped with Toshiba MG08 series.

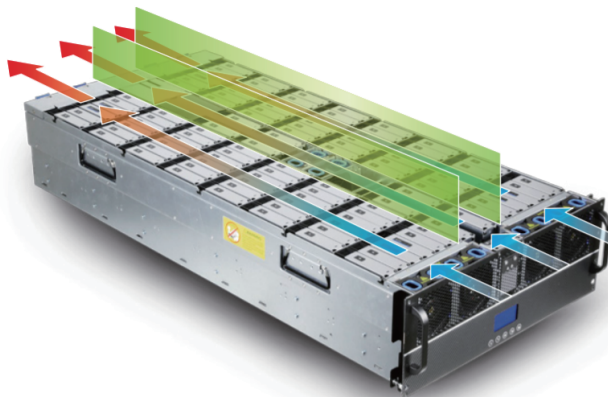
Two-Dimension Magnetic Recording (TDMR) to improve read signal integrity, up to 5% overall capacity improvement is projected.

High Speed Writer technology for higher areal density contributed by increased BPI, translate to 6% improvement in sustained data transfer speed.



### SUPERIOR RELIABILITY, SERVICEABILITY AND FLEXIBILITY

RM43596 is IPMI compliant with BMC modules, which enables remote monitoring by web interface. Through two external 12Gbps SAS expanders plus 4 pairs of internal expanders to automatically configure redundant pathways, it is designed to eliminate single-point connection of failure for operators to easily access data without disruption.



#### > INDUSTRY

Enterprise High Density Storage Solution.

#### > CHALLENGE

The need for maximizing storage capacity in cloud and high performance computing (HPC) with reliable redundancy feature set.

#### > SOLUTION

Chenbro 4U 96-Bay JBOD model with full hot-swap, tool-less and data redundancy designs, combined with industry leading capacity of Toshiba 3.5" Nearline hard drives for cloud- and core- data centers.

#### > BENEFITS

Assisted by New Generation Helium Based Nearline HDD<sup>1</sup>.

- System thermal performance is improved by reduced surface temperature per device.
- Optimized cost of ownership with lower power consumption during active idle.
- 33% capacity increase in comparison with mainstream 12TB Nearline HDD.

<sup>1</sup>Compared to MG07 series

## ENTERPRISE LEVEL STABILITY

CMR (Conventional Media Recording) technology to achieve stable random write performance without degradation.

TDMR (Two-Dimensional Magnetic Recording) technology improves the read accuracy by enhancing the signal detection and canceling noise due to inter-track interference.

PWC (Persistent Write Cache) accelerates write performance by enhancing NCQ (Native Command Queuing) with embedded DRAM, also prevents data loss during sudden power loss.

## COLLABORATION - STRIFE FOR DATA STORAGE EFFICIENCY

Chenbro is dedicated to provide high density storage solutions with the contribution of Toshiba' s latest 3.5" helium based Nearline HDD: MG08 series, which boasted the industry leading capacity at 16TB per device.

With the rapid growth of data generation from applications such as Surveillance, Artificial Intelligence and Edge Computing using 5G networks. Chenbro' s RM43596 can be widely deployed in backend storage nodes within datacenters for ultra-density data warehousing and archiving. Equipped with the patented hardware maintenance and device cooling mechanisms, Chenbro is committed to work with Toshiba to provide statement of benefits to existing and future customers.



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