TOSHIBA

Leading Innovation >>>

> PROMISE TECHNOLOGY LEVERAGES TOSHIBA STORAGE TO OPTIMIZE MEDIA AND ENTERTAINMENT WORKFLOWS WITH INNOVATIVE SOLUTIONS THAT WORK FASTER, SMARTER AND EASIER

PROMISE® TECHNOLOGY, INC.

INDUSTRY

Storage Solutions

CHALLENGE

- Provide high quality low latency, high bandwidth, cost-effective storage solutions
- Meet market demands with innovative, resilient, performance-based storage solutions
- Deliver outstanding professional services, engineering and technical support

SOLUTION

PROMISE Storage Solutions for Rich Media, Surveillance, IT, Cloud Environments rely on the following hard disk drive offerings from Toshiba including:

- > Toshiba MG04SCA for PROMISE VTrak Series
- > Toshiba DT01ACA for PROMISE Pegasus2
- Toshiba MQ01ABD Series 5400 RPM¹ 2.5-inch² SATA HDD for PROMISE Pegasus2 mini 4-bay RAID storage solution
- Toshiba MG04ACA Series and Toshiba MG04SCA Series for PROMISE Vess Series

BENIEFITS

- Extremely reliable Toshiba products and quality collaboration
- Promise is now more focused to address future trends with whole solutions and business-agile technology
- Robust support of intensive media workflows and heavy bandwidth requirements

Promise Technology, an award-winning storage innovator, continues to captivate global audiences with answers to escalating content and capacity demands, tighter deadlines, accelerating workflows, and efficiency requirements. Toshiba is a preferred storage device partner for PROMISE's most popular products.

Founded in 1988 in San Jose, California, PROMISE Technology wanted to pioneer excellence in its products, partnerships and people. Today the company is responsible for many innovations, and its products for the media and entertainment market helped to launch PROMISE as a favorite of video editors and content creators. PROMISE has won several awards for Storage at MacWorld, Computex and NAB.

PROMISE has about 500 employees, more than 16 million deployments worldwide and continues to shape new storage possibilities and strategic alliances. Its suite of solutions spans rich media, data center, surveillance, and cloud offerings, including scale-out platforms, unified storage and more. From R&D, manufacturing and operations to global logistics, sales and support, PROMISE Technology is equipped to handle many aspects of the customer life cycle.

"PROMISE has a rather large footprint in the market. As the market transitions from attached storage to cloud-based environments, we have evolved from providing block-based RAID storage components to comprehensive, converged solutions for desktop, SAN, NAS & Cloud," says Vijay Char, PROMISE vice president of business development and WW QA/support.

> PROMISE PRODUCT LINEUP WITH TOSHIBA HDD

The PROMISE portfolio of storage solutions boasts many standouts. Among the hits are PROMISE VTrak Series, PROMISE Pegasus2 Series, PROMISE Vess Series, and PROMISE VSky Series, all of which include Toshiba hard disk drive (HDD) innovation.



VTrak A/E/J-Class with Toshiba Enterprise Capacity HDD

VTrak A-Class Series is an all-in-one shared SAN appliance designed for rich media multi-user collaboration and optimizing video-centric environments.

VTrak series includes Toshiba MG04SCA 7200 RPM 3.5-inch enterprise capacity HDD, which is engineered for nearline business-critical workloads and delivers optimum capacity, big data management, performance and data reliability. Toshiba HDD designs are excellent for low-latency, high reliability needs of these customers. VTrak with Toshiba HDDs saves rack space and correlating energy costs. VTrak series has qualified the latest generation MG04SCA. The MG04SCA 512e format provides storage capacity efficiency for video edit-intensive jobs. Additionally, the MG04SCA is equipped with 12.0 Gbit/s SAS interface¹ which saves rack space, and reduces footprint and operational demands for business-critical servers and storage systems.

Pegasus2 with Toshiba DTO1ACA Series and MQO1ABD Series HDDs

Pegasus2 storage solutions bring accelerated 4k workflows, content editing, streaming and backup to the desktop.



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Vijay Char
 Vice President Business
 Development & WW QA/
 Support

PROMISE Technology

capacity points, and performance. The robustness and versatility of the DT01ACA platform has made a solution of choice for a broad range of non-PC applications, including set-top-box/DVR, surveillance, gaming, and external storage.

When storage portability is the priority, Promise's Pegasus2 M4 (4TB) offering, which relies on Toshiba's 4th generation MQ01ABD series 5400 RPM 2.5-inch SATA HDDs, has become a solution of choice.

"It is critical to ensure that we can deliver resilient video editing solutions and performance at affordable prices. Since most of our storage solutions utilize HDDs, we select drives with the highest levels of performance and quality, to not only meet, but exceed the expectations of our customers. Toshiba hard disk drives optimize performance in ways that are consistent with our solution requirements," notes Char.

> PROMISE MIDRANGE SURVEILLANCE SUCCESS

PROMISE and Toshiba collaboration successes continue into storage systems for midrange surveillance applications. "We utilize Toshiba Enterprise Capacity HDDs in our midrange storage solutions which are particularly suitable for video surveillance," says Char. "We are leveraging our innovation, quality, value and reliability that we demonstrated in the block storage space, into solutions for larger, diverse markets. One of the reasons we choose to use Toshiba HDDs in our most popular solutions is they complement the characteristics of our solutions."

Vess A2000 Series with Toshiba Enterprise Capacity HDD

The Vess A2000 Series is a network video recorder (NVR) appliance. Although intended for midsize to large-scale IP surveillance deployments, it has also been used in on-line gaming and other video-centric markets.

The Vess series uses the Toshiba MG04 family of 7200 RPM nearline HDDs, delivering capabilities up to 6TB capacity.

These models are suited for high stream count applications, which can place demanding workloads on a hard disk drive.

In addition, these models are equipped with rotational vibration sensor (RVS) technology which is essential to the RAID architecture used in the Vess systems. Toshiba's RVS enabled HDDs compensate for transient vibrations that impact performance in multi-HDD (ex: RAID) system configurations. With RVS technology, frame drops can be significantly



minimized which is critical in surveillance applications. With these capacities and performance capabilities, Toshiba enterprise HDDs are well appointed for other demanding use cases such as scale-out cloud architecture and analytics.

HDDs with RV sensors are critical for storage systems used in high density architecture, such as the Vess system. RV sensors detect and compensate for disturbance, stabilize head control position and keep the head within the proper operating regions on the media. Minimizing frame drops is critical in surveillance applications. In short, RV sensor enabled HDDs provide a high level of performance which helps to reduce the number of frame drops. Minimizing frame drops is critical in surveillance applications.

> BROADCASTING BENEFITS, COMPETENCE AND A VALUE-ADD FUTURE

From designing solutions that fulfill constantly changing demands to driving new products into the market, PROMISE is well positioned for a successful future. Char also envisions a continued successful relationship with Toshiba.

"We've been doing business regularly with Toshiba over the past several years. We work with Toshiba Customer Support Engineers to develop joint qualification plans. We also leverage Toshiba resources to optimize how we can both bring our products to market and how requirements can be met at the same time," he says. "Toshiba brings us very special value, and we believe Toshiba staff is very competent, which helps us to be competent in return."

^{1.} Read and write speed may vary depending on the host device, read and write conditions, and file size

^{2. &}quot;inch" means the form factors of HDDs. They do not indicate drive's physical size

^{3.} One Terabyte (1TB) = 1,000 Gigabytes (GB). One Gigabyte (1GB) means 10⁹ = 1,000,000,000 bytes using powers of 10. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1GB = 2³⁰ = 1,073,741,824 bytes, and therefore shows less storage capacity. Available storage capacity will also be less if the computer includes one or more pre-installed operating systems, pre-installed software applications, or media content. Actual formatted capacity may vary.

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