

2017

FLASH MEMORY
SUMMIT
POCKET GUIDE

AUGUST 8-10

SANTA CLARA CONVENTION CENTER

AUGUST 7 PRE-CONFERENCE TUTORIALS



Flash Memory Summit

FlexiRemap®

True Performance of Flash Storage

AccelStor's FlexiRemap® technology is software that is based on the fundamentals of flash memory. It has been awarded Best-of-Show Technology Innovation at Flash Memory Summit 2016. Our proprietary algorithm enables AFAs powered by FlexiRemap® to meet data access demands more efficiently than can conventional HDD arrays or RAID systems. Powered by FlexiRemap®, NeoSapphire AFA can achieve 700K IOPS for 4KB synchronous write, or over 1M IOPS for 4KB random access.

NeoSapphire All-Flash Arrays



Presentation @Flash Memory Summit Session 201-B: Flash Arrays (Enterprise Storage Track)

Time: Wednesday, August 9th, 8:30 - 9:35 AM

Topic: NVMeoF Enterprise All-Flash Arrays Offer Top Performance

Speaker: Dr. Weafon Tsao, AccelStor Vice President



Support NVMe



Scale-up



High Availability



Artificial Intelligence



Virtualization



VMware Ready Storage



Windows Server 2016 Certified



DataCore Ready



Most Innovative Flash Memory Technology



accelstor

▶ Booth 132

www.accelstor.com

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- Chosen Voice
 - Circuit Cellar
 - Connetics USA
 - Coughlin Associates
 - IEEE-CNSV
 - Extension Media
 - Industry-Academia Partnership
 - NVM Express
 - OpenCAPI Consortium
 - OpenFabrics Alliance
 - TechTarget

Super Women in Flash

Tuesday 3:45 - 5:00 pm
Hyatt Regency Bayshore Room

Now in its third year! Join an engaging panel discussion about diversity, its impact on our organizations and role in building team leadership. Panelists from IBM, Intel and DDN. Refreshments, snacks and networking follow.

**Grand Opening Reception**

Tuesday 4:00 - 7:00 pm
Exhibit Hall

Celebrating the opening of the 2017 FMS Exhibition.

Beer, Pizza, and Chat with the Experts

Tuesday 7:00 - 8:30 pm
Ballrooms A-E

A unique opportunity to chat informally with experts on a number of topics.

**IT Brand Pulse****Innovation Leader Awards**

Wednesday 2:30 pm
Mission City Ballroom

Thirteen product categories, Special Achievement Award, and the Most Innovative New NVM Product, as voted by IT professionals.

**FMS Best of Show Awards**

Wednesday 6:30 pm
FMS Theatre, Exhibit Hall D

These awards celebrate innovation and recognize the top products and solutions of the year. Categories include consumer and business applications, technology, and customer implementation.

**Free! FMS Raffle**

Thursday 2:00 pm
FMS Theatre, Exhibit Hall D

Enter Thursday at FMS Theatre before 2:00, and you could claim an exciting prize! Must be present to win.

**Live demos of the latest products at FMS Theatre!**

Exhibit Hall D

The latest product presentations and giveaways.

sponsored by

**Intel Partners Pavilion**

Exhibit Hall C

Leading vendors share their latest offerings. Hear about chips, components, subsystems, enterprise storage, software, test equipment, and everything in between.

**Intel Café and Lounge**

Exhibit Hall C

FMS 2017 Technology Pavilion

Exhibit Hall C

Experience three of the hottest technology areas — NVMe, Persistent Memory, and Security — in the all-new Technology Pavilion!

TechTarget Market Research Sessions

Tuesday 3:40 pm

SESSION 103-B Know What the Enterprise Flash Customer Wants and Needs

Tuesday 4:55 pm

SESSION 104-B What do the 800-Pound Gorilla Customers Want in Flash Storage?

**Exhibition Hours**

Tuesday 4:00 - 7:00 pm

Wednesday Noon - 7:00 pm

Thursday 10:00 am - 2:30 pm

MARK YOUR CALENDAR!



Flash Memory Summit

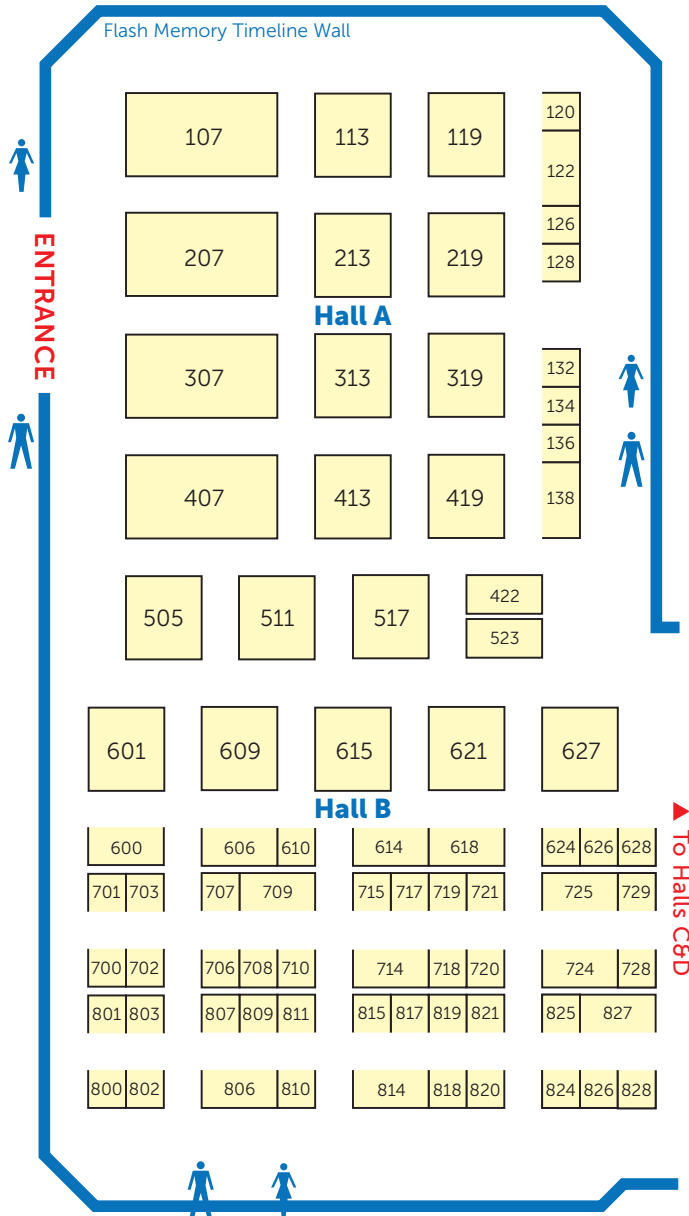
AUGUST 7-9 2018

Santa Clara Convention Center

Company	Booth		
AccelStor	132	E8 Storage.	113
Acute Technology	819	EasyCo.	639
ADATA Technology	714	Ellisys	912
Advantest	606	Everspin Technologies	319
AIC	801	FADU.	715
Amphenol	600	Fibre Channel Industry Association	828
Andes Technology	908	Flex.	947
Apeiron Data Systems	422	Flex Logix Technologies	834
Arasan Chip Systems	838	Gen-Z Consortium	739
Attala Systems.	848	Genesis Technology	854
Avery Design Systems	718	Hagiwara Solutions.	134
BPM Microsystems	651	Hyperstone	618
Brimo Technology	653	IAP / University Posters	833
Broadcom.	729	IEEE-CNSV	935
Brocade Communications Systems	634	Infinite Trading	939
Cadence Design Systems	624	Innodisk	601
Calypso Systems	824	Integrated Silicon Solution	910
Cavium	815	Intel	839
CEA LETI.	852	IntelliProp	821
Celestica.	906	IP-Maker.	717
Chelsio Communications	710	Jabil StackVelocity	850
Chosen Voice	945	JEDEC	803
Connetics USA	941	Kalray	836
Coughlin Associates	937	Kaminario	904
Crossbar.	219	Kazan Networks	702
DAPU Microelectronics	902	Kemet Electronics	701
Dera Storage	122	Kingston Technology.	827
DriveSavers Data Recovery	832	Kroll Ontrack	700
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		Microsemi	213
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		SerialTek	635
		Siglead	900
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		Silicon Storage Technology	120
		SiliconGo Microelectronics	645
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		Smart IOPS	609
		SMART Modular Technologies	627
		SNIA-SSSI	820
		Solarflare	638
		Starblaze Technology	647
		Swissbit	419
		Tektronix.	641
		Teledyne LeCroy	706
		Toshiba America Electronic Components	407
		Transcend Information	724
		UFSA	707
		ULINK Technology	720
		UNH-IOL	719
		Unigen.	628
		Unitest.	709
		VARTA Microbattery	128
		VIA Technologies	728
		Viavi Solutions	810
		Viking Technology	517
		VinaTech.	649
		Virtual Instruments	818
		Western Digital	207
		Winbond.	721
		Xilinx	126

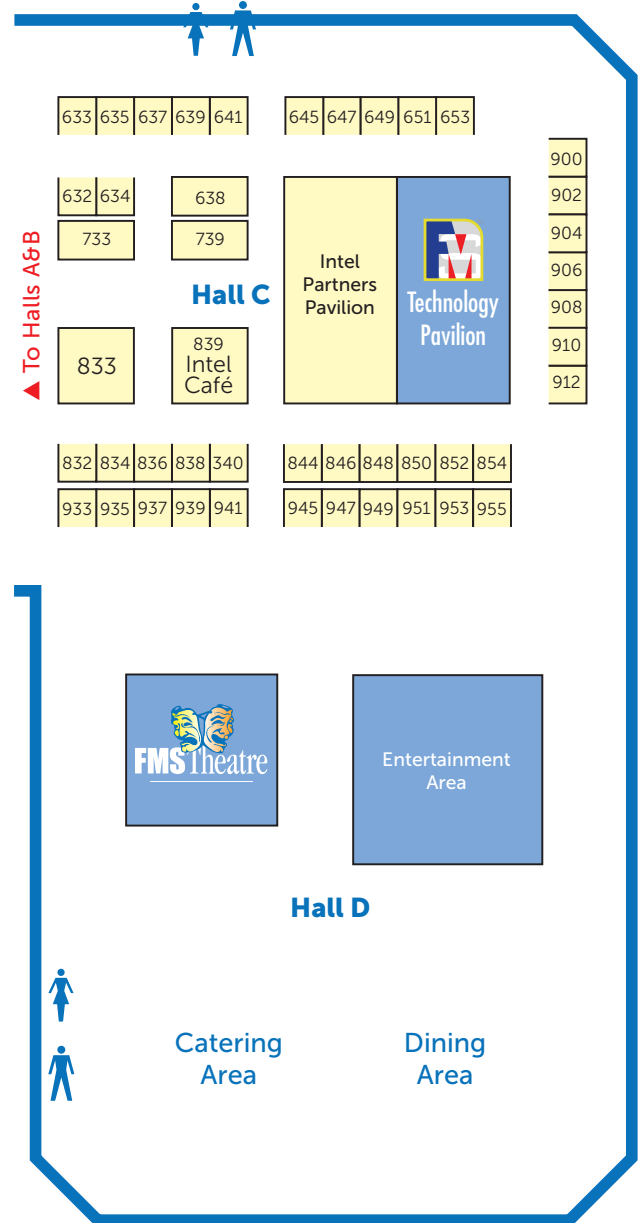


8 Exhibit Hall Floor Plan



Exhibition Hours

Tuesday 4:00 - 7:00 pm
 Wednesday Noon - 7:00 pm
 Thursday 10:00 am - 2:30 pm





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Your Life **Upgraded by FLASH.**

FLASH MEMORY SUMMIT 2017

Toshiba is leading the innovation of flash technologies that will make tomorrow's life changing solutions possible.



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REALITY



THE INTERNET
OF THINGS



AUTONOMOUS
CARS



MEDICAL
HPC



REAL TIME
ANALYTICS



NEXT BILLION
SMARTPHONES

Come visit us and see our life changing innovations in Hall A, Booth #407

Toshiba Keynote

Tuesday, August 8 at 12:10pm

toshiba.semicon-storage.com

Mission City Ballroom

Tuesday 11:00 - 11:30 am

KEYNOTE 1 How Flash Memory Will Affect Tomorrow's Automobiles

Henry Bzeih, Kia Motors America



Managing Director of Connected and Mobility Division

Although the automotive market for flash memory is currently rather small, it will grow rapidly as cars become more digital, more autonomous, and more connected. Drivers will expect an entire range of high-technology automotive features.

11:30 - 11:40 am

SPECIAL PRESENTATION Lifetime Achievement Award

Tuesday, 11:40 am - 12:10 pm

KEYNOTE 2 Advancements in SSDs and 3D NAND Reshaping Storage Market



Jim Elliott, Samsung Semiconductor
Corporate Vice President of Memory Marketing

Jaeheon Jeong, Samsung Memory Business
Executive Vice President of Research and Development

IT managers are embracing a new generation of storage designs. Rapidly improving 3D NAND and NAND-based SSD technologies are offering order-of-magnitude improvements in speed, density and size. Change is here now, as the market rallies behind the latest 3D cell technology, ultra-high capacity SSDs, high-performance NMVe, lower latency, and more.



Tuesday 12:10 - 12:40 pm

KEYNOTE 3 Flash Memory Is Going Places We Have Never Been Before

Shigeo (Jeff) Ohshima, Toshiba Memory
Technology Executive of SSD Application Engineering

Steve Fingerhut, Toshiba

Sr. VP/GM of Storage Products, Toshiba America Electronic Components



New flash applications are part of today's news: self-driving cars, enormous data centers, virtual and augmented reality, mobility of content and the ever expanding Internet of Things. Flash's future is limited only by our imaginations. Our view takes flash to the next level where upcoming storage technologies will change the very way that people communicate, work, and entertain themselves in the future.



Tuesday 1:50 - 2:20 pm

KEYNOTE 4 New Silicon Breakthroughs Help Next Generation Datacenters Meet Key Challenges



Currie Munce, Micron
Vice President of SSD Engineering

Eric Endebrock, Micron
Vice President of Storage Marketing

Technologies such as 3D NAND, QLC, and 3D XPoint can provide the necessary high density, low cost, and fast access times for enterprises to improve their competitive positions. They support the protocols and fabrics that enable storage to be shared across multiple applications, provide a logical basis for software designed specifically for flash memory, and lead to new levels of programming and management flexibility.



Tuesday 2:20 - 2:50 pm

KEYNOTE 5 Accelerating a Data-Centric Universe

Martin Fink, Western Digital
Executive Vice President and Chief Technology Officer

Without essential speed and scale, the soaring value and promise of data is at risk of stalling. Martin Fink will offer insights into the opportunities and obstacles in our data-centric universe. Among the topics explored will be the state of 3D NAND, Storage Class Memory technologies, and the architectural disruptions required to unleash fast data and big data applications.



Tuesday 3:00 - 3:30 pm

KEYNOTE 6

Ahmet Houssein, Solarflare
Vice President of Marketing and Strategic Development

Steve Pope, Solarflare
Co-Founder and Chief Technology Officer

Wednesday 11:00 - 11:30 am

KEYNOTE 7 How to Network Flash Storage Efficiently at Hyperscale

Manoj Wadekar, eBay
Principal Storage Architect



Michael Kagan, Mellanox
Co-Founder and Chief Technology Officer

Hyperscale data centers are using ever-larger amounts of flash memory to achieve the required throughput and latency at minimal cost. How can such large amounts of flash storage be networked efficiently? High-speed interfaces must be sized correctly to match application needs. Network topology must also be adjusted to match traffic patterns and application performance requirements. Scalability and flexibility are key factors as well, since data will keep increasing in size.



Wednesday 11:30 am - Noon

KEYNOTE 8 Transforming Storage with Innovations in Non-Volatile Memory

Bill Leszinske, Intel
Vice President of NVM Solutions Group

The convergence of advanced NVM technology, software and architecture has created new performance levels for storage, resulting in opportunities that simply weren't available before. Learn how breakthrough technologies, available today, greatly reduce latency and increase throughput. These innovative technologies are the foundation for products that deliver business and customer value through improved performance, capacity, manageability, and reliability.



Wednesday 1:00 - 1:30 pm

KEYNOTE 9 Mission Impossible: Surviving Today's Flood of Critical Data

Matt Rutledge, Seagate
Senior Vice President of Business Marketing

The amount of critical real-time data keeps growing at a tremendous rate with zettabytes (billions of terabytes) coming in the near future. New types of digital storage are essential to handle the flood. Today's storage technologies cannot do the job; innovative technologies and media-independent solutions must be developed, creating more powerful controllers, more flexible form factors, and higher-density structures.

Wednesday 1:30 - 2:00 pm

KEYNOTE 10 Using Storage-Class Memory in Next-Generation Designs

Siamak Nazari, HPE 3PAR
Chief Software Architect

As the storage industry shifts its focus to big data, predictive analytics and artificial intelligence, designers must change the way storage systems deliver data. A better approach is to use standard components along with a few specialized ASICs. Software data services can then benefit from both lower latency and higher performance. These new designs will gain the benefits of leveraging low-cost industry standard components.



Wednesday 2:10 - 2:40 pm

KEYNOTE 11 Deep Learning: Extracting Maximum Knowledge from Big Data Using Big Compute

Andy Steinbach, NVIDIA
Senior Director of Business Development

Deep learning (DL) is fundamentally changing the way data is used in computation. A key advantage is that the same techniques may be used for many applications, as compared to algorithms. Deep learning has been employed successfully in diverse areas, including health care, transportation, industrial IoT, finance, entertainment, retail, and high-performance computing. Examples will illustrate how the approach works and how it complements data analytics and business intelligence.



14 Keynote Presentations

Wednesday 2:40 - 3:10 pm

KEYNOTE 12 Using ARM-Based Processing for Efficient Hyperscale Storage

Scott Furey, Marvell

Associate Vice President of Enterprise Storage Business Unit



In the past, processors spent much of their time waiting for storage operations to occur. Now, with the emergence of high-performance, high-capacity all flash arrays, there are often more IOPS than the available processors actually need. One way to achieve a balance is to leverage low-power, cost-effective ARM-based embedded solutions. Costs could be even further reduced by implementing tiered storage.

Thursday 11:00 - 11:30 am

KEYNOTE 13 Accelerating NVMe Innovation for Emerging Applications

Derek Dicker, Microsemi

VP/Business Unit Manager for the Performance Storage Business Unit



As system designers plan the scale required to solve today's tough problems, they are requesting NVMe building blocks that are high performance, programmable, and well supported. Opportunities for products providing such building blocks abound. Examples include disaggregated rack solutions, custom-built high-performance NVMe SSDs, and a new class of FBOD (Flash Bunch of Disks) enclosures necessary for NVMe over Fabric applications.

Thursday 11:30 am - Noon

KEYNOTE 14 Creating the Fabric of a New Generation of Enterprise Applications

Jeff Baxter, NetApp

Strategist and Chief Evangelist

Flash memory has become central in enterprise data centers, but what comes next is even better. It's time for high-speed nonvolatile memory to be networked across the entire data center and beyond. Data centers will implement an overall "flash fabric" which will reduce latency dramatically and power a new generation of real-time applications. Transition cost and effort will be surprisingly low, as data centers will leverage existing fabric infrastructure and integrate public cloud resources to store inactive data cost-effectively.



Thursday Noon - 12:30 pm

KEYNOTE 15 From Rack-Scale to Network-Scale: NVMe over Fabrics Enables Exabyte Applications



Zivan Ori, E8 Storage
Co-Founder and Chief Executive Officer

Big data is here today, and applications must be able to handle exabytes of storage at affordable costs. NVMe over fabrics answers the call for huge, scalable processing systems. It allows designers to consolidate drives into large shared storage pools. The result handles the most exciting and most demanding high-performance use cases.

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Flash Memory Summit 2017, 8-10 August



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