



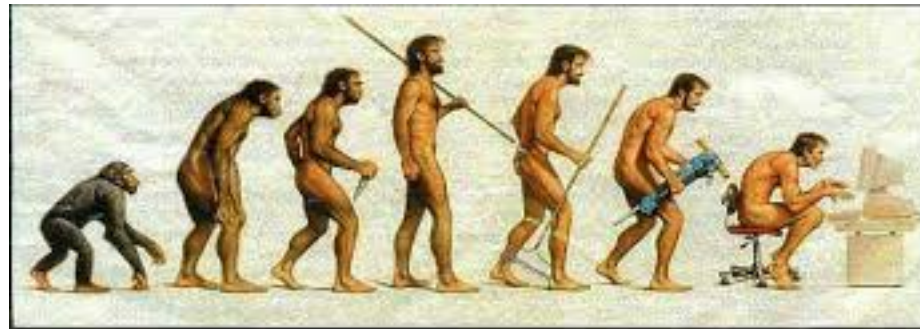
avalanchetechnology

Spin Programmable Storage Solutions

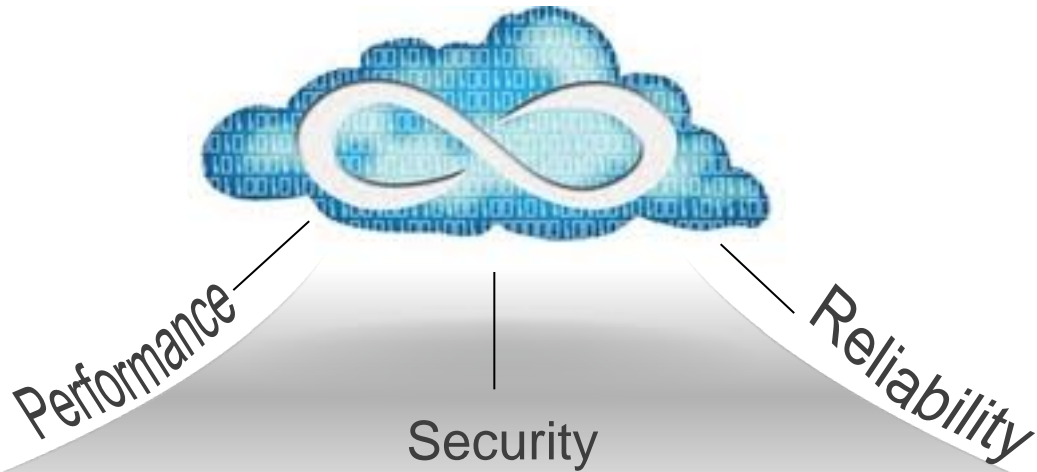
“Start ‘Spinning’ with STT-MRAM”

Avalanche Technology Inc.

Hamid Haidari
Sr. Director, WW Sales







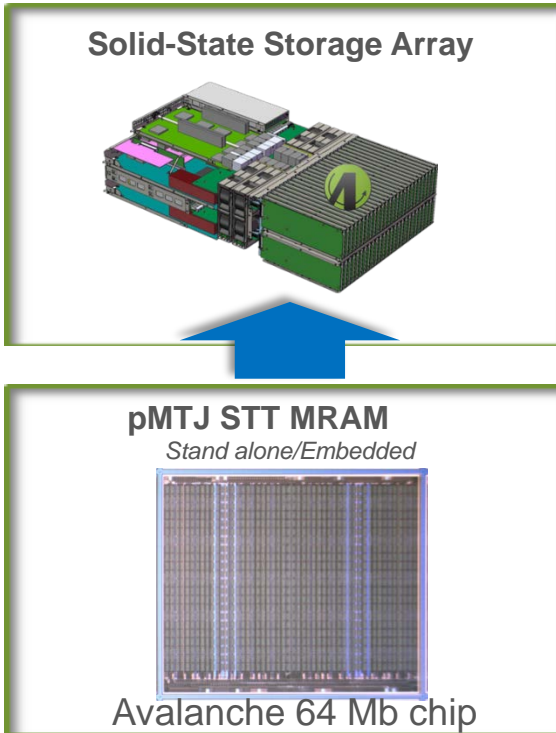
STT-MRAM A Powerful NVM Technology

DRAM	SRAM	NOR FLASH	NAND FLASH
High Performance	High Performance	High Read Speed	Low Cost
Cell size (4-6F2)	Embedded	Non-Volatile	Non-Volatile
Average Density	Cell Size (~100F2)	Low Write Speed	High Density
Power Consumption	Power Consumption	Cell Size	Low Performance
Scalability Beyond 2X	Scalability Beyond 2X	Scalability Beyond 3X	Scalability Beyond 1X

STT-MRAM Delivers Best Attributes of all Memory Types

- High Performance -- DRAM/SRAM
- Low cost; Non-volatile; Increasing Density; Low Power -- NAND
- Replaces Embedded SRAM at 1/6th the size; 0 leakage
- Scalable 1Xnm, Leverages Standard CMOS Processing

Sand to System



Vertically Integrated

Large Markets



Enterprise Storage, Mobile,
Telecom & Computing (SAM \$15B)

Founded in 2006

Led by an Experienced Team



Industry Veterans Delivering
Innovative Storage Solutions

*Supported by extensive patent
portfolio*

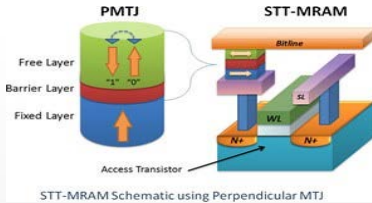
200+ patents filed
with 100+ granted /allowed

Backed by Top Tier VCs



Rapid Progress and Key Milestones

Value

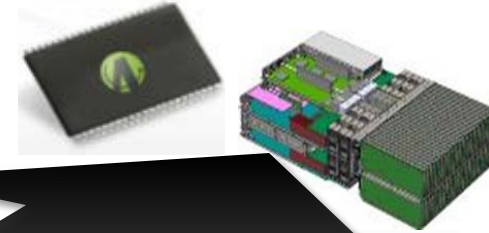
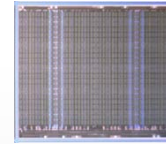


World Leading pMTJ developed:
TMR >150%
STT Efficiency >1

Tier 1 300 mm wafer
Fab Partnership

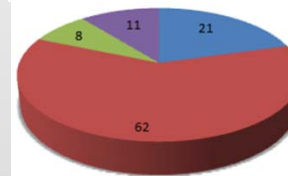


64 Mb Functional
Silicon (SPI)
(55 nm LL CMOS)



Storage Array
architecture,
development &
demos

Extensive Patent Portfolio:



200+ patents filed
with 100+ granted/allowed

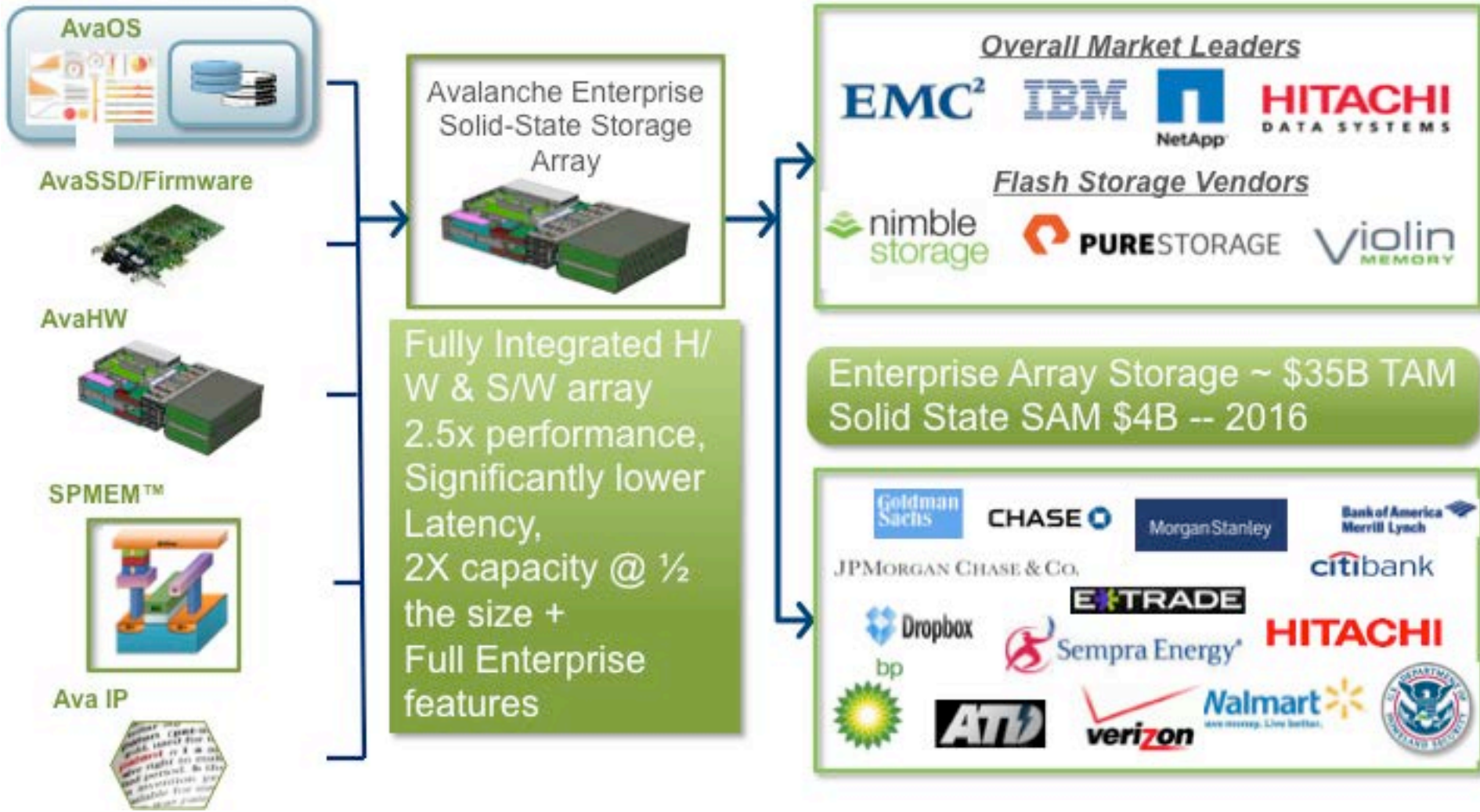
Early 300 mm Foundry
& Strategic MTJ Tool
Vendor Partnerships

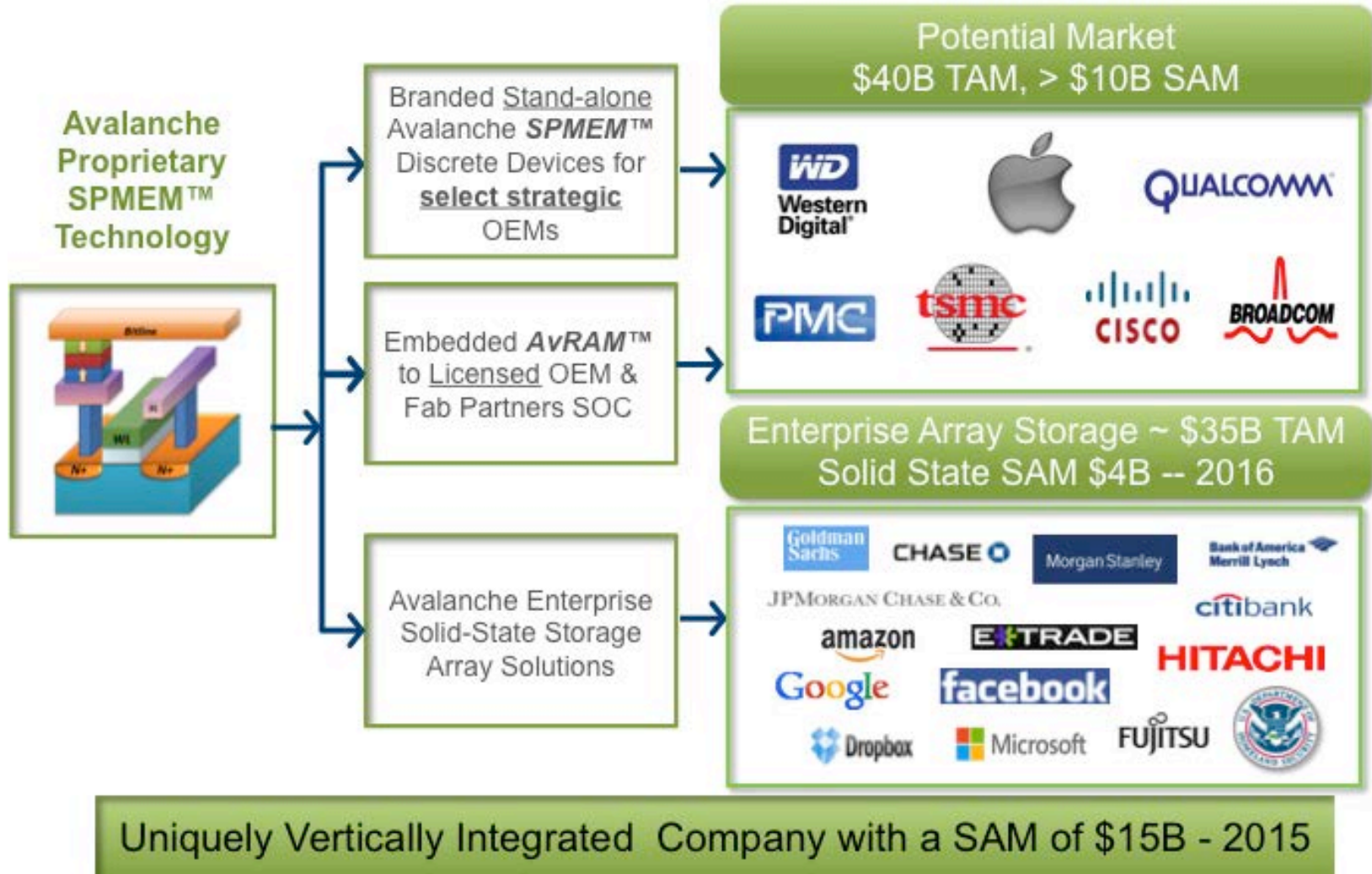
Multiple Tier 1
Customer
Engagements



Time

Market Strategy Enterprise Storage Array







Thank You!

Visit us at:
www.Avalanche-technology.com

