The Story of An Innovative Flash Memory Startup that Changed the World

Aryeh Mergi Interviewed by Brian Berg
FMS Lifetime Achievement Award: Outstanding Leadership

- Creation and/or promotion of an important flash technology, or a technology to supersede flash
- Leadership of a major flash company or business effort
- Bringing flash technology to a new and important application
for innovations including embedded flash for cell phones, flash file systems, USB flash drive.
M-Systems was created with a Dream
1989: Tape Replacement (CR-502)

- Use in Submarines
1990: SCSI Flash Disk

• Flight tests

- FFS II: Fighting against Microsoft/Intel
- SCM
- The battle at the PCMCIA committee
- PCMCIA Cards:
1993-2000s: DiskOnChip

- BIOS replacement
- PC/FD
1994: Switch from NOR to NAND
1998-2004: DiskOnKey (became the USB Flash Drive)

1998: Idea for the device
1999: Patent filed
2000: Joint announcement with IBM at COMDEX
2004: U3 joint venture with SanDisk
DiskOnChip in Mobile Phones

• 2000: began effort to get DOC into Cell Phones
  – And here comes all the others – Ericson, Motorola, Samsung, LG, HTC, Sony…
2006: The acquisition by SanDisk

• The 4 Divisions of M-Systems:
  – USB Flash Drives
  – Mobile (MDOC/embedded flash)
  – SSD
  – Security and SIM cards
• And… X4
• SanDisk vs. M-Systems
  – SanDisk: Sand => Silicon Chips
  – M-Systems: Systems, i.e., PC, Smart phones
OVER $1B REVENUES IN 2006

growth of x24
2008: Co-founded Xtremio

• All Flash Array
• Acquired by EMC in 2012
• Now Dell EMC Xtremio
2017: Pliops

DEVELOPING THE NEXT GENERATION NAND FLASH STORAGE PROCESSES