

What's Inside Your Phone? NAND Flash Memory: Past, Present, Future



Deepanshu Dutta

Vice President, Flash Memory Technology,
Western Digital

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Zoom Link:

[https://purdue-edu.zoom.us/
j/99248876187](https://purdue-edu.zoom.us/j/99248876187)

Abstract

In this talk, we will discuss how NAND Flash memory has revolutionized the world of consumer electronics. We will cover past challenges the industry faced and how we innovated to overcome them, thus enabling continuous scaling of NAND Flash Cell in line with Moore's Law. We will dig into different aspects of Flash memory cell quality and how it impacts a typical consumer's experience. We will also look forward to the future of 3D NAND and talk about the difficulties that the industry faces, which will require new ideas from talented technologists with a new view of the problems.

Bio

Deepanshu joined SanDisk (later acquired by Western Digital) in 2006 after earning his Masters in Materials Science from UC Irvine and Undergraduate in Engineering Physics from IIT Delhi. He has led NAND Flash Memory Technology with a focus on Memory Cell development for several 2D/3D NAND generations and supported productization of those generations across the WD product portfolio, from USB drives and memory cards to SSDs. During his work, he has championed several innovations that are used today in Flash Memory based products, and he holds more than 140 US patents.

Hosts:

Muhammad Alam: alam@purdue.edu. **Peter Bermel:** pbermel@purdue.edu