



Flash Memory Summit

# Top Ten Things You Need to Know About Flash Memory, that is

Rob Peglar

President, Advanced Computation and Storage

[rob@advanced-c-s.com](mailto:rob@advanced-c-s.com)

@peglarr

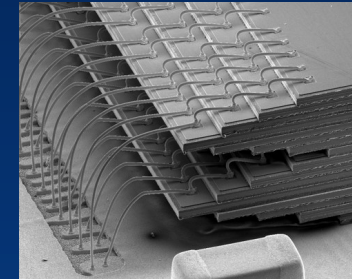
Santa Clara, CA  
August 2018



Flash Memory Summit

## How About Two Things?

- Where we're going
  - Denser designs –  $> \text{Gb/cm}^2$ 
    - More levels for 3D, QLC, minor litho shrinks for MLC/TLC 3D
  - Cheaper cost to manufacture per GB
    - Can we get to 5 cents/GB (\$50/TB)? I think so
- Where we're not going
  - Faster designs
    - In fact just the opposite (especially tProg)
  - More reliable designs
    - Hardly anyone willing to pay the price – burden on controllers

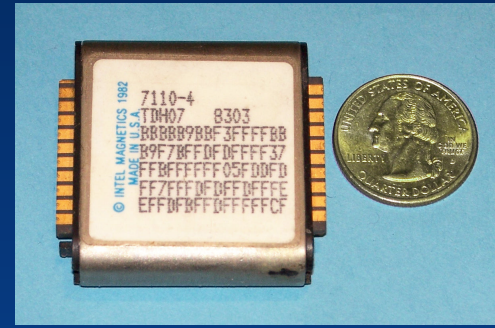




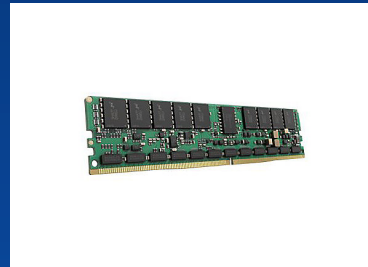
Flash Memory Summit

## How About One More Thing?

- Persistent Memory
  - No, not that kind →



- This kind →



- PM fundamentally changes computing



Flash Memory Summit

Oh, and maybe a NOR renaissance?

That's All Folks