NVMe in End User Computing (EUC)
Dell's Vision

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Agenda

- Dell Storage vision in End User Computing (EUC)
- NVMe application examples
- EUC NVMe adaption
- Keys for success
- Challenges & opens

Storage in End User Compute

Background

- Digital content growth across multiple users & devices.
- Smart phone mobility behaviors penetrating traditional End User Compute
- Remote data service as one of primary storage solutions

Vision

- Data storage baseline experiences:
  - Lowest $/GB
  - A blend of performance and capacity
  - Best in class performance , form factor & power
- Define Dell differentiated experiences at the “Usage/Application” level through data management

NVMe Application in Dell EUC Examples

Professional Applications

- ✓ Low Latency media creation/editing
- ✓ Large data set file manipulation –CAD, Simulation,..

Gaming

- ✓ Fast loading times
- ✓ “Next level” transitions

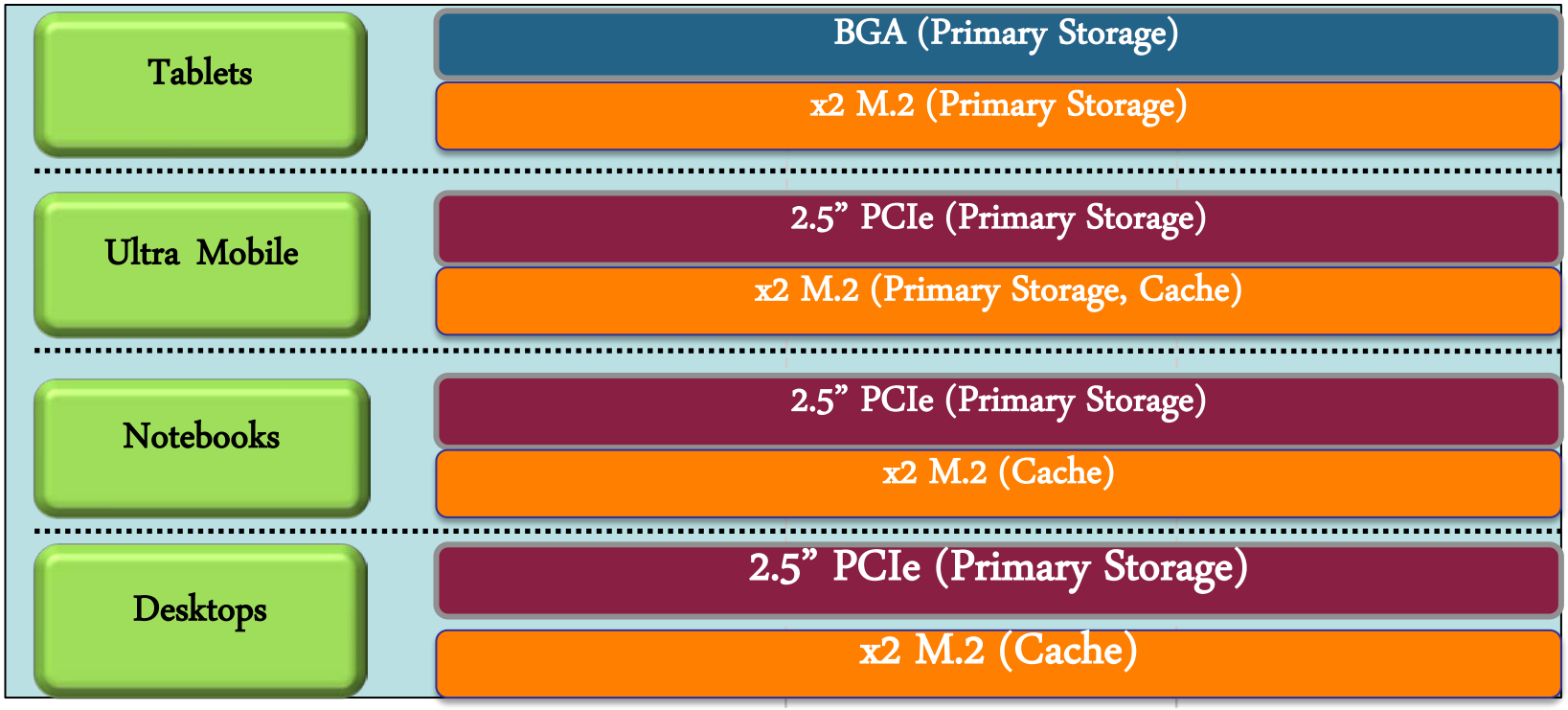
Compelling overall value prop: the next step in storage performance!

- ✓ Best in class performance
- ✓ Feature equivalency with SATA devices
- ✓ Platform for system level differentiation

Dell EUC NVMe Adaption

Adaption plans: Seamless transition

- ✓ Minimum impact to baseline platforms design & cost
- ✓ Interchangeable with ALL existing SATA devices



Keys For Success

Eco System enablement

- Chipset support & validation
- Interface & lane flexibility & availability
- One system image to support all SATA and PCIe Storage devices

Industry standards

- Connector/cable definition
- Clocks
- Low power
- Ultra small form factors?

Challenges & Opens

- Cost premium on host connector for broad adaption
- One cable and host connector for SATA and PCIe storage devices
- Support SRIS (Separate Refclk Independent SSC)
  - Cables and notebook, no REFCLK.
  - Cable definition and impact on shielding
- 8639 connector adaption is challenging in Dell Client system
  - Must maintain plugin compatibility with SATA devices