New Technologies and New Standards Enable New Mobile Applications

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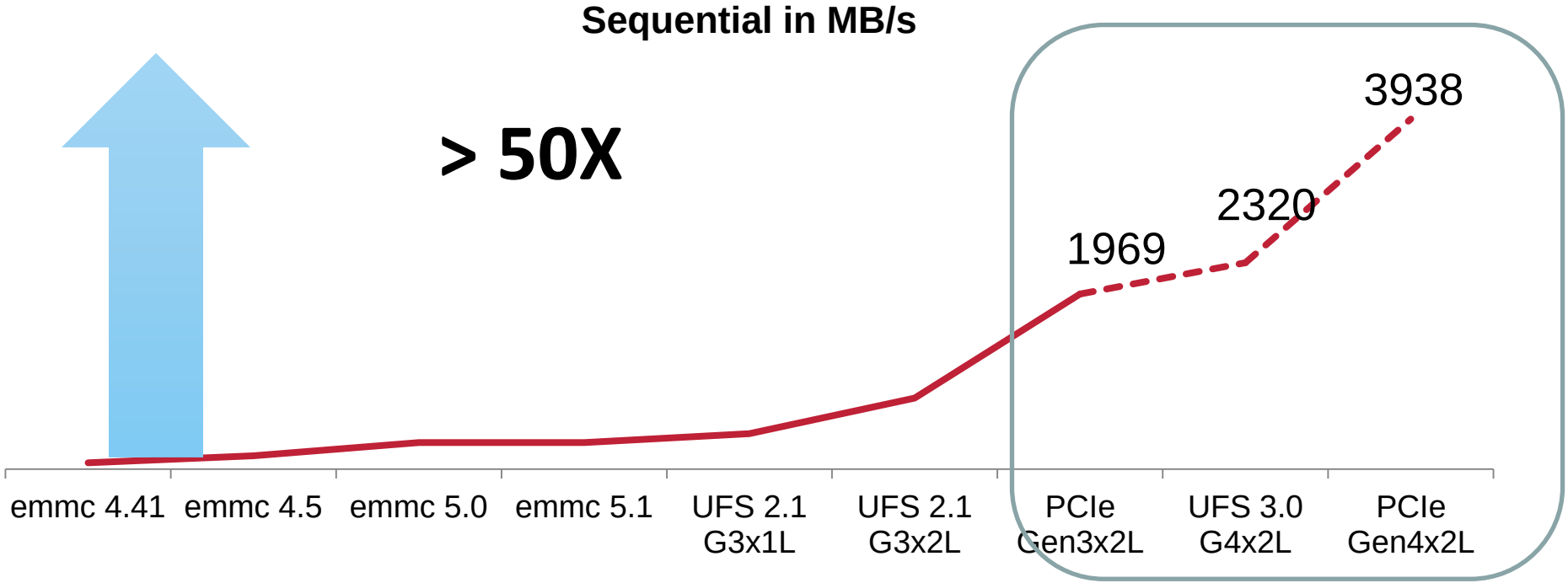
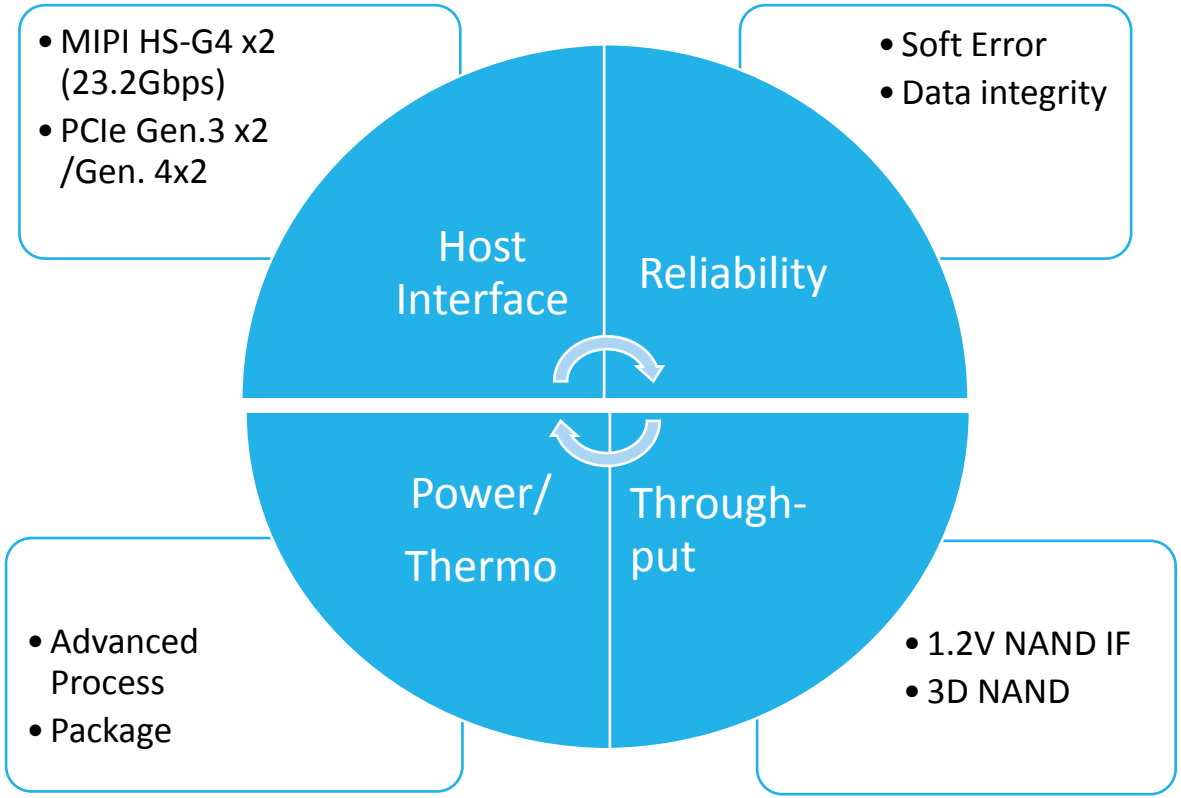
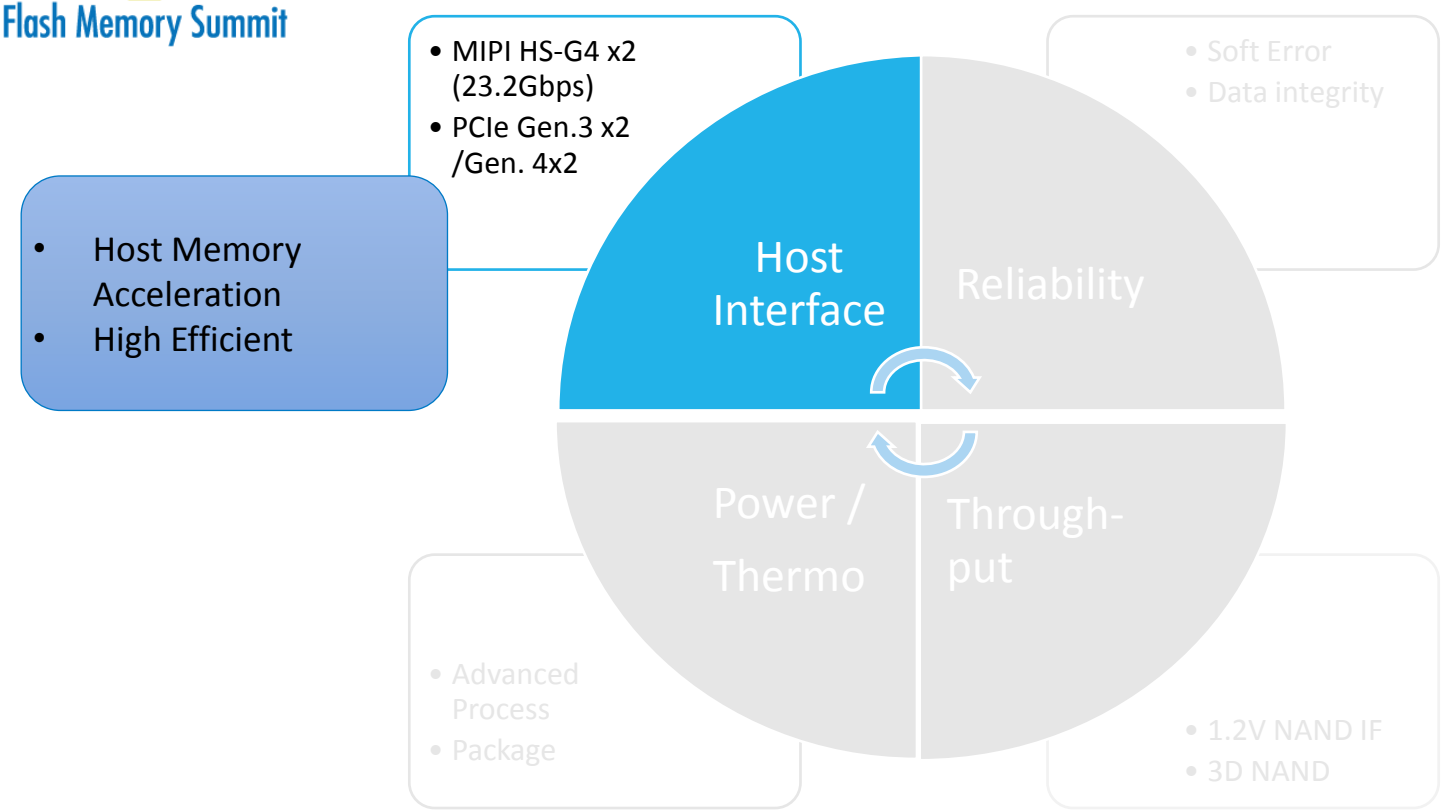
Mobile Storage Performance



Next Generation Mobile Storage Controller



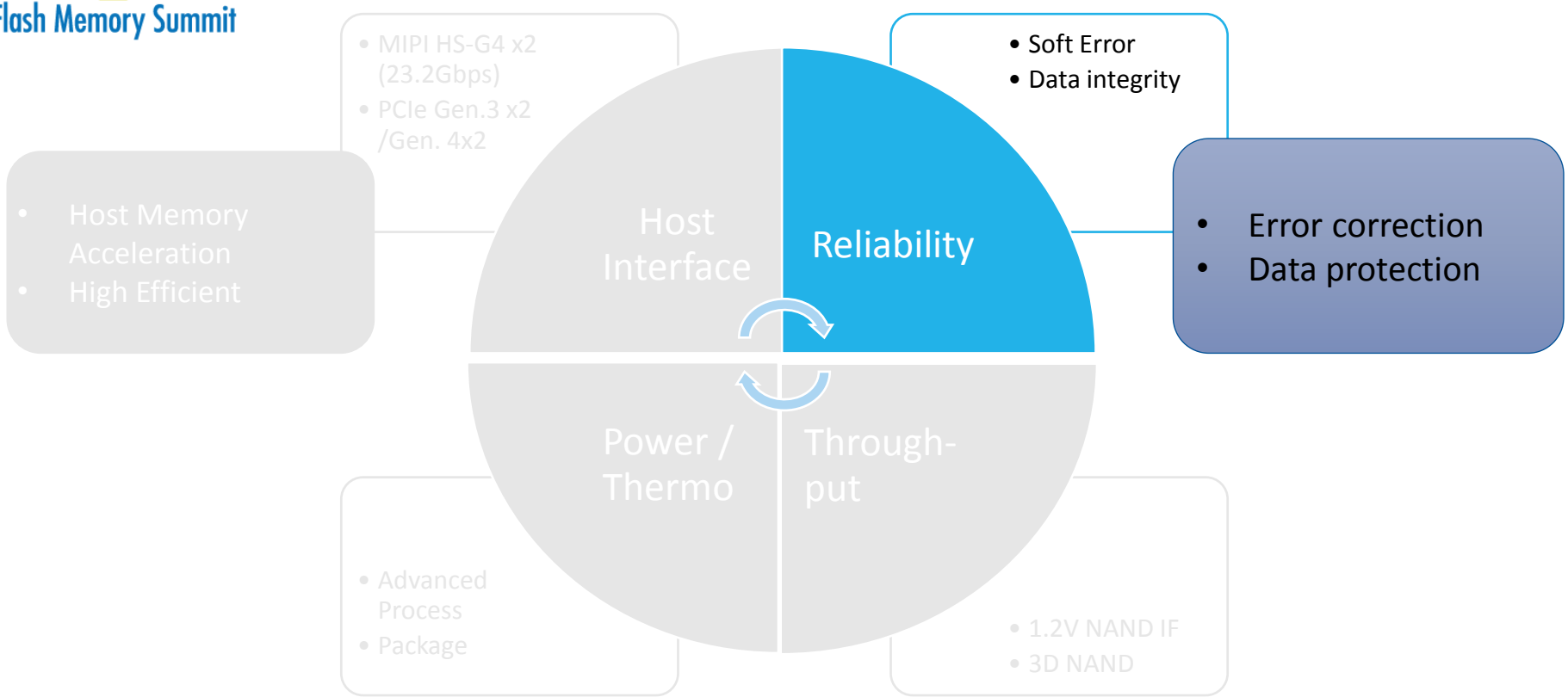
Next Generation Mobile Storage Controller



Host Interface

- **Utilize Host Memory to reduce the table update**
- **Advanced Line coding (128b/130b)**

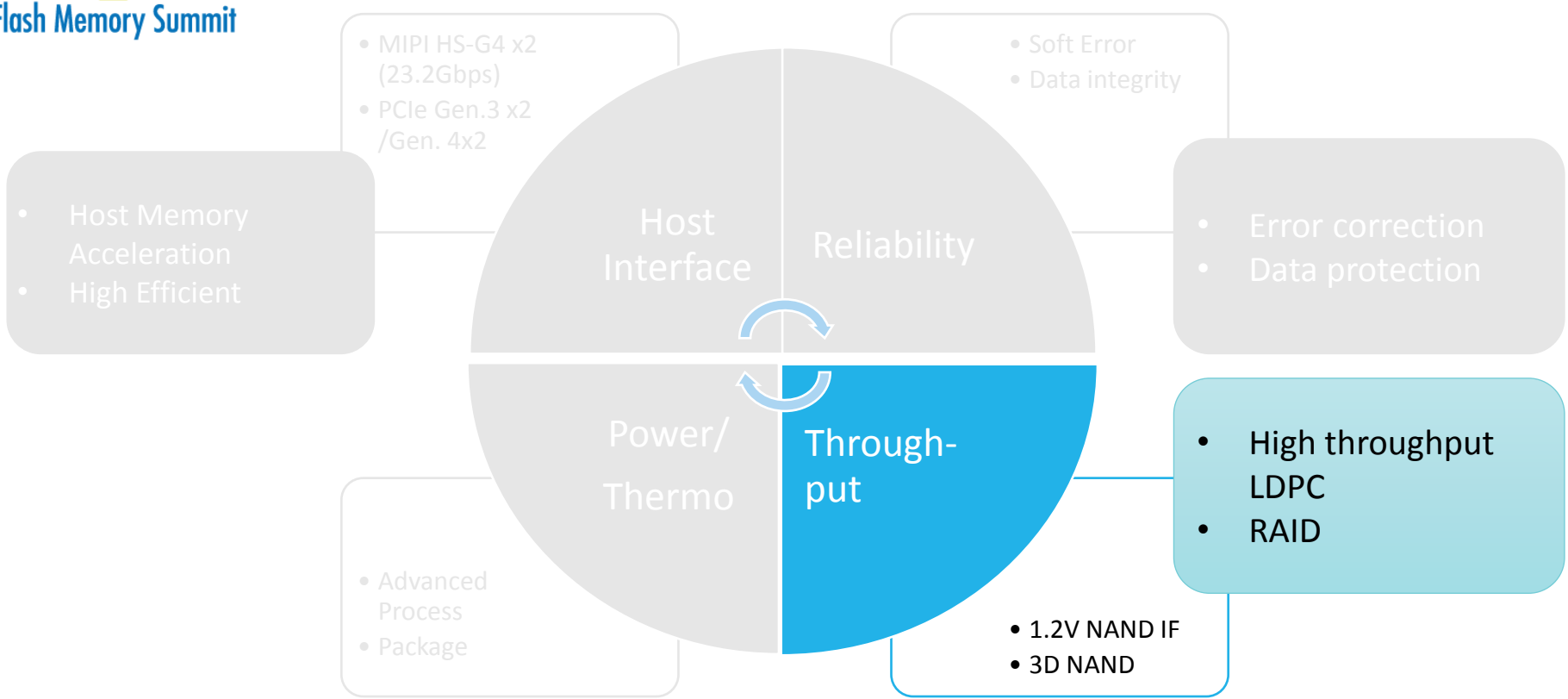
Next Generation Mobile Storage Controller



Reliability

- More Soft bit error due to large SRAM density
- Error correction to prevent potential stuck
- Data protection/encryption

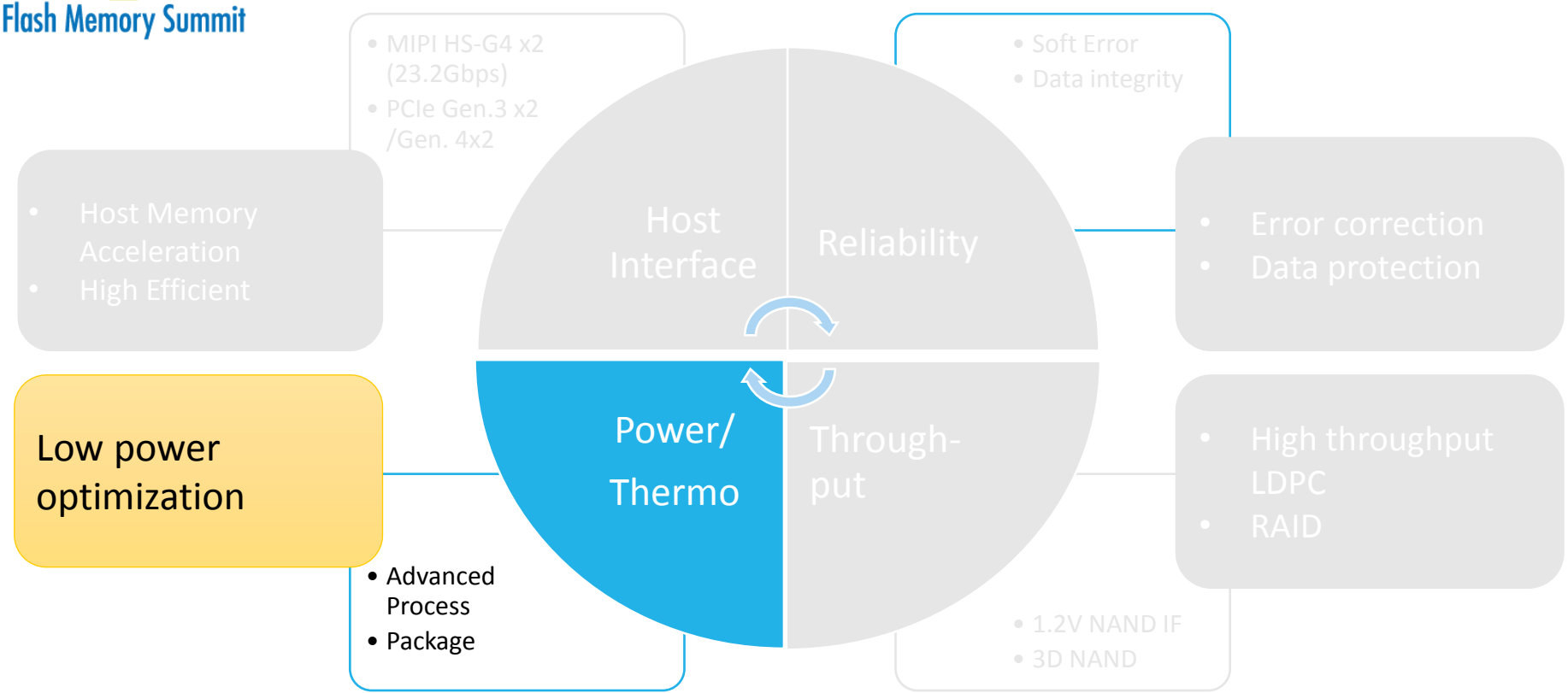
Next Generation Mobile Storage Controller



Performance/Throughput

- **1.2V 3D NAND can support 1200MT/s above**
- **2KB/4KB LDPC is expected for high throughput and higher performance**
- **Multi-core CPU**

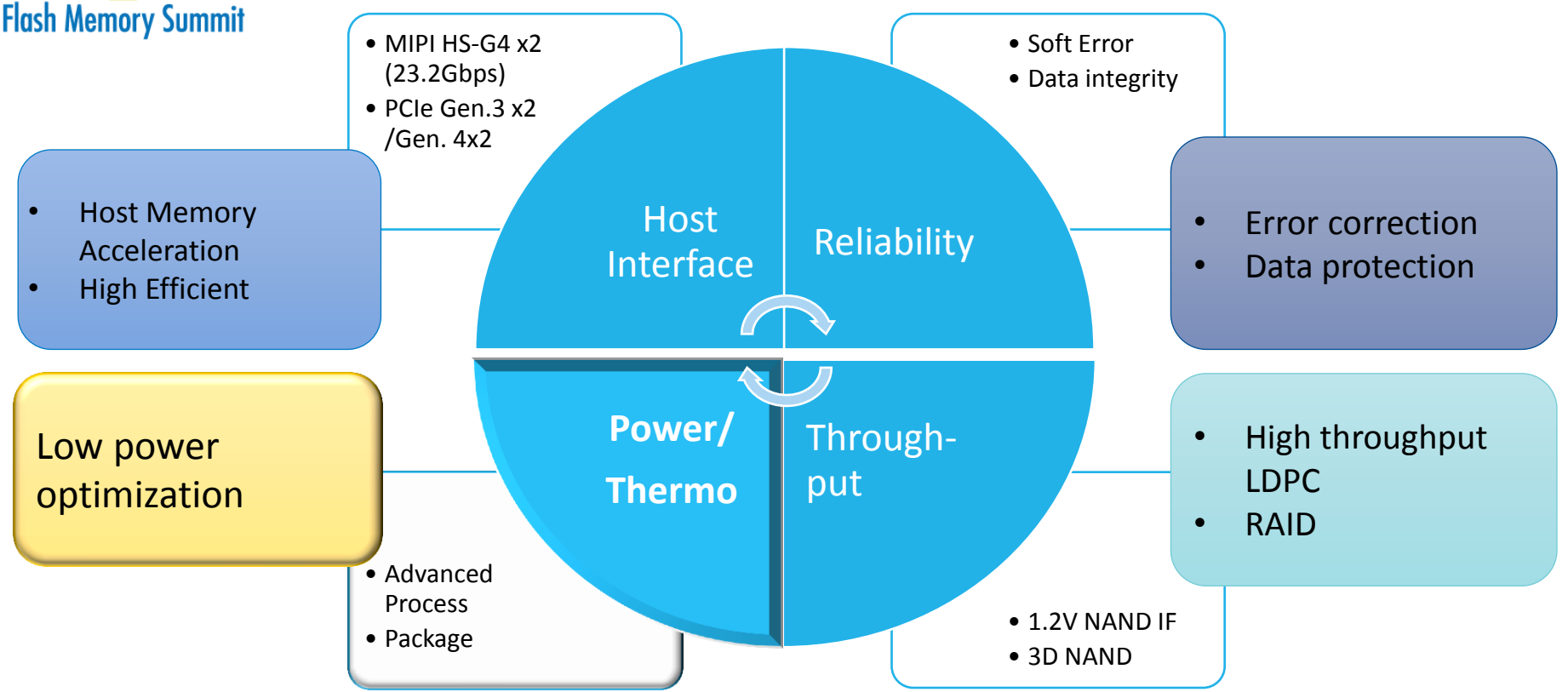
Next Generation Mobile Storage Controller



Power Consumption/Thermo

- **Advanced process with superior low leakage**
- **SRAM, Logic cell (SVT, HVT cell)**
- **Wire-bonding vs Flip-chip**

Next Generation Mobile Storage Controller



Flash Memory Summit

Summary

- Optimize the design of PCIe PHY/NVMe
- Consider the design trade-off between performance and power consumption
- PCIe/UFS3.x aim for Mobile computing and Automotive applications

Visit us at the Booth 413

Thank you

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