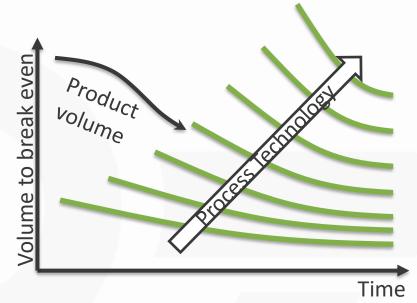# The Future of Legacy DRAM

Moore's Law is dead, and chasing cost reductions is expensive. The future of legacy DRAM has arrived.

Semiconductor technology will continue to progress and the *incremental* cost of a transistor will continue to fall, but the design cost of a die shrink must be amortized. Only highest volume, mainstream devices can afford to migrate.

As mature product shipments decline, the ROI of a die shrink falls below justification.

DDR4 and LPDDR4 will be mainstream with no 3rd party foundry support, and will be replaced by DDR5 or LPDDR5. DDR4 is high risk for embedded applications.

Legacy DRAM is the best long-term option for anyone other than the highest volume manufacturers:

- Fully Depreciated
- Robust Array Performance
- Cost Effective for new or incremental designs
- Low VRT
- Long term foundry support

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