

Response to Architecture

Response to Metrics

- These metrics are great start.
- How do these correlate to application throughput/\$?
- What's the metric for a F/E bit?

Response to Issues & Problems

- In general, we agree.
- **Concern: What informs you in making decisions?**
 - How will you decide to fix the TLB?
 - Please consult us and use our codes.
- Suggestion: Think of FLASH as Cray SSD.

Response to Proposals

- Strongly agree with Smarter controller & SW interface, memory system concurrency, etc., however...
- **Concern: What are we giving up to get these?**
 - Does this slow down simple access?
 - Do we increase latency?

What you shouldn't have said

- Is comment on apps developers telling?
 - Is there mistrust?
 - We think we can handle the responsibility.
- We want access to advanced features, even though we are not library developers.
 - Good documentation.
- But don't want to be forced to use them everywhere.
 - Smart defaults.

Things you should have said

- Support for graceful evolution.
 - Current investments are huge.
 - No ephemeral features (codes live for decades).
- Stiff problem: Small changes in architecture can have major impact in applications performance.