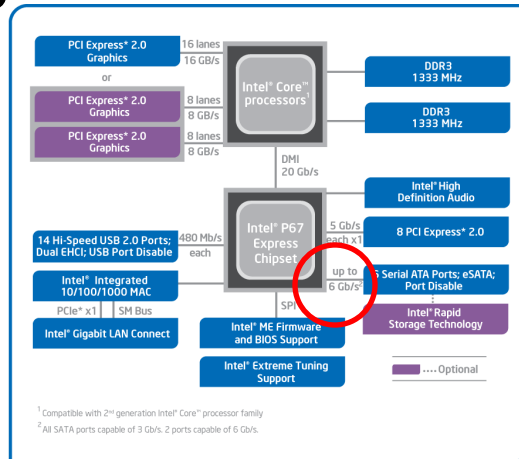
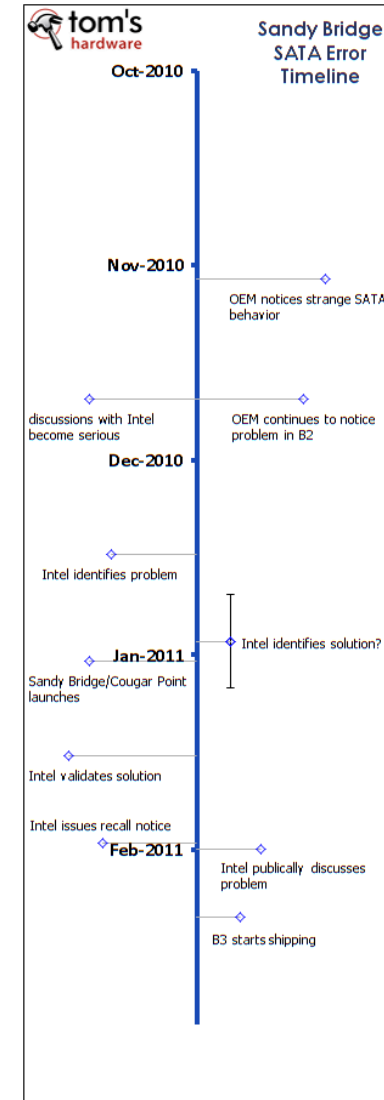


Sandy Bridge Recall



- OEMs notice degradation in 3 Gb/s SATA port of Cougar Point (Sandy Bridge chipset)
 - Failure rate 5-15%/3y
- Causes:
 - Physical: Low-voltage xistor connected to high-voltage supply
 - Management: Risk Assessment Hole
- Cost to Intel: \$1B



Risk Assessment Post Mortem

- Risk Assessment
 - Design Rule Check (SS required = 0)
 - Many exceptions manually invalidated.
 - How are they reviewed?
 - Si Validation (SS required = 1)
 - High-traffic I/O at accelerated stress not in validation suite.
 - How are Use Models determined, and reviewed?
- Learnings
 - This was caused by a failure in pre-Si Risk Assessment.
 - Use Model was incomplete.
 - Sample size had little to do with it.

Glenn's opinions.