Quantum™

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SPI-4 Spec Proposal for Ultra320

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- Table A.1:
  - Change V_A(non OR-tied signals) maximum from –TBD to –370 mV,
  - Change V_N (non OR-tied signals) minimum from TBD to 370 mV,
  - Change V_A (OR-tied signals) maximum from –TBD to –370 mV.
- Section A.2.2 paragraph 4: in 2 places change 320 mV to 370 mV.

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- Section A.2.1, weak driver amplitude:
  - Change min from 60% to 50%,
  - Change max from 78% to 66%.
- Table A.2
  - Change first 4 TBDs to 370 mV,
  - Change max equation "$V_A = 1.15 * |V_N| - 57$" to "$V_A = 1.11 * |V_N| + 26$",
  - Change min equation "$V_A = 0.85 * |V_N| + 50$" to "$V_A = 0.90 * |V_N| - 23$".
- Add receiver mask for isolated edges with AAF circuitry enabled, per diagram.

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- TI proposal for eye diagrams does not define “isolated pulse”.
- Eye diagram voltage must specified at the center of the pulse, not at the trailing edge.
- Specification should be based on bus characteristics, and not written around the Quantum AAF implementation.
  - Goal is to enable U320 operation on all working U160 buses.
  - Review of backplane data and finalizing the spec TBDs will take until the November meeting.

- Add AAF receiver mask for isolated assertion edge.
- Add mirror image mask for isolated negation edges.