



P1394b Acceleration Working Group

**Dave LaFollette
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PAL

Simple Beta Packet Format



- Assumes DATA_PREFIX and SPEED are present
- REQUESTs are
 - ◆ BOSS Request status
 - ◆ legacy signals (PARENT_NOTIFY, DISABLE, SUSPEND...)
 - ◆ training, operations
- Padding not drawn here

Discussion Topics

- **Do we need beta concatenated packets?**
 - ◆ Packet should end with DATA_END or DATA_END_ERR
 - ◆ Insert deletable requests for elasticity
 - ◆ Translate legacy concatenated packets to beta non-concatenated?
 - ◆ Translate beta packets to legacy concatenated?
- **Max packet lengths?**
 - ◆ Grow with bus speed?
 - ◆ Stop at S400 length?
 - ◆ < S400 length for beta packets?
- **When do bus resets occur?**
 - ◆ Always like short bus reset?
 - ◆ Anywhere a REQ might otherwise fall?
 - ◆ DP|SS|D|D...|D|DE|(REQ,ARBRST,GRANT,RESET)|REQ
- **Buffering, PHY Delay**
 - ◆ buffer 20ns? 1 incoming character?
 - ◆ Make arb_delay = PHY_Delay?

Discussion Topics Continued

- **How long are incoming requests remembered?**
 - ◆ Until DATA_PREFIX, SPEED, DATA_END, DATA_END_ERR, RESET
- **One or two byte request types?**
- **PHY-Link**
 - ◆ request types
 - priority is not needed
 - next cycle isoch
 - next interval asynch
 - ◆ timing
 - requests are okay any time
 - there may not be much idle time between receiving packets
 - ◆ requests are not cancelled
 - asynch requests for next interval are automatically upgraded
 - ◆ Indications to Link
 - DATA_END_ERR?