S-Link to Gigabit Ethernet Adapter
New Frame Segmentation for LHCb Data Acquisition System

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** Simulation Results

Short Packet Mode
- Forwards S-Link Data from the FIFO to the Mac Controller
- Doesn't Send S-link Control Words
- Packet Header (LHCb Format, or other) is generated by the source.

Long Packet Mode
- Memorizes (RAM) the Header of the Packet
- Splits the Packet in Frames
- Forwards the S-Link Data from the FIFO to the Mac Controller
- Packet Header
- Is inserted in each frame
- LHCb Format (Length of Packet) is generated by the source.
- Doesn't Send S-link Control Words

Expected Performance is sufficient for any possible application in LHCb Data Acquisition System.