The Event Counter determines the word count register to which the current word count is written when an event is done being transmitted. The Event Counter is incremented on the EOE signal. It counts from 0 to 3 and then resets.

This is the first of 4 timers. Each timer consists of a 20-bit counter and a comparator.

The 4 "stored" word counts are added here.

Here, the 4 stored word counts are added to the current word count. The result is the total word count.

This comparator compares the total word count to the word count max, stored in Control Register 3.

If the total word count is greater than or equal to the word count max, this Overflow register is set.

This counter counts the data words and Finder-word-count words. The output is the current word count. If the overflow bit is set, data words are no longer counted.

The S-LINK trailer word error flags, including the overflow flag in bit 1, are stored in this FIFO before being sent to the S-LINK interface.