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Subject: Re: Time protocols used for SADC

Posted by [Igor Konorov](#) on Sun, 02 May 2004 17:21:02 GMT

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There is a diploma thesis of Alexander Mann which describes the SADC and one of a method to extract the timing information. But it might be faster if I answer:

1. in the triggered mode the time of the signal is referenced to the trigger time and in self triggered mode it is referenced to a time ZERO. The time ZERO is defined by the TCS when it broadcasts the RESET signal. The trigger and the RESET signals are synchronous to the TCS clock.

Each frontend module including SADC counts the TCS clock. The counter is reseted by the TCS RESET signal. In this case the value of the counter corrected by the propagation time of the clock through the fibre is an absolute time or a time stamp.

2. the SADC detects the signal, calculates the amplitude and the time. The time is given by the clock counter(time stamp) after which the signal appeared and by 5 bits which define the timing of the signal respectively to the clock phase within the clock period.

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