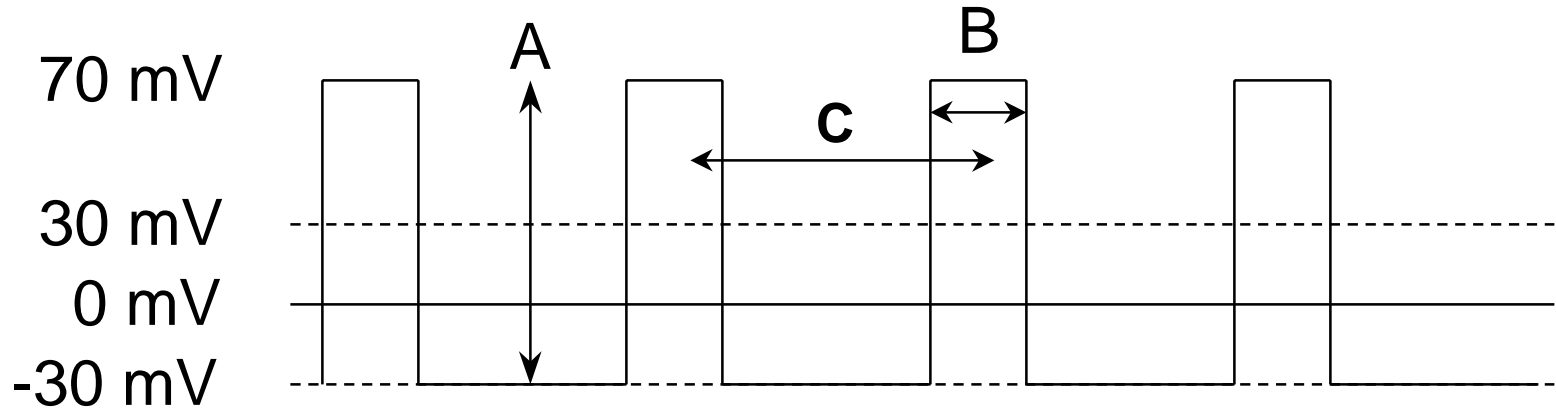# Proposal for receiver "bandwidth" specifications

Specifications are required on the dynamic response of SPI-4 receivers to protect against very "fast" receivers being implemented to meet the very tight timing budgets. SPI-4 receivers need to have a minimum level of protection against detecting small noise spikes.

Traditional frequency domain bandwidth specificatons are not suitable for use with SCSI receivers because the receivers intrinsically do not operate in a linear region
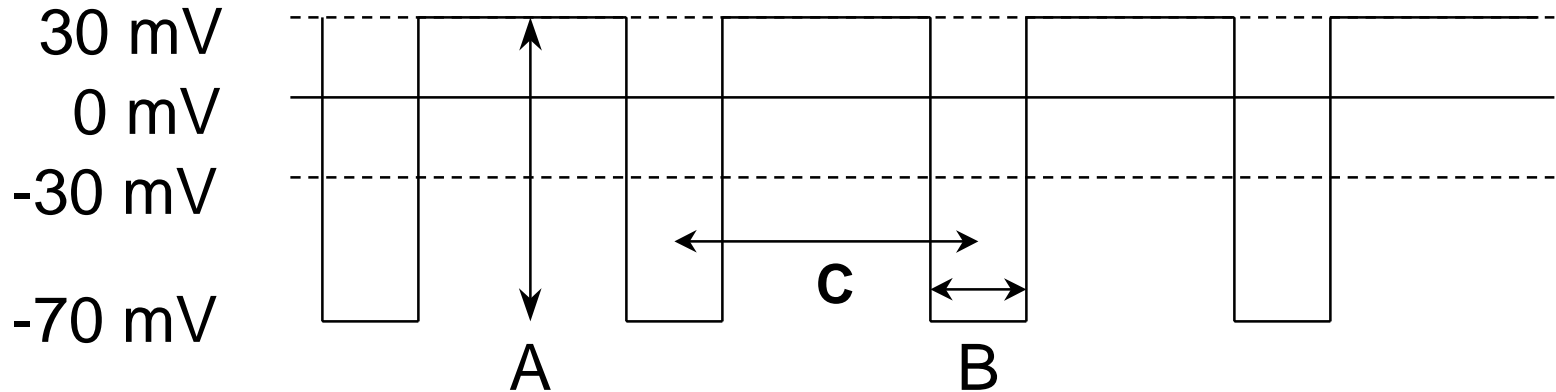
A time and amplitude scheme is required to verify that the receiver is not too "fast". Another way to state the requirement is that the receiver shall not detect pulses of certain amplitude and duration.

The remainder of this document is aimed at specifying the details of the pulses

Pulse train based at -30 mv

70 mV

A

B

c

30 mV

0 mV

-30 mV

Pulse train based at 30 mv

30 mV

0 mV

-30 mV

A

c

B

-70 mV

REQUIREMENTS:

SPI-4 receivers shall not change state
(even instantaneously) when presented
with a pulse train at the device connector
with the following properties:

Pulse amplitude, A, 100 mV or less
Pulse width, B, 2.0 ns or less
Repetition time C, 6.25 ns or greater