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Synchronizer Developers Manual

by

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1. Introduction

This application is designed to base its clock off of a SCRAMNet interrupt (from MTS controllers) and output a clock signal based on this. It also outputs trigger signals based on trigger information from MTS controllers on SCRAMNet.

2. Design

The application is written in Simulink and generates code for xPC Target OS.

It reads clock and trigger information from SCRAMNet and outputs this via DIO lines on a NI I/O board.

A configuration file controls which devices to trigger from and which devices to send this trigger to. The configuration file also controls the rate at which the clock is output to the devices. This clock must be a multiple of 2 and less than 1024 since our reference clock operates at 1024 Hz.

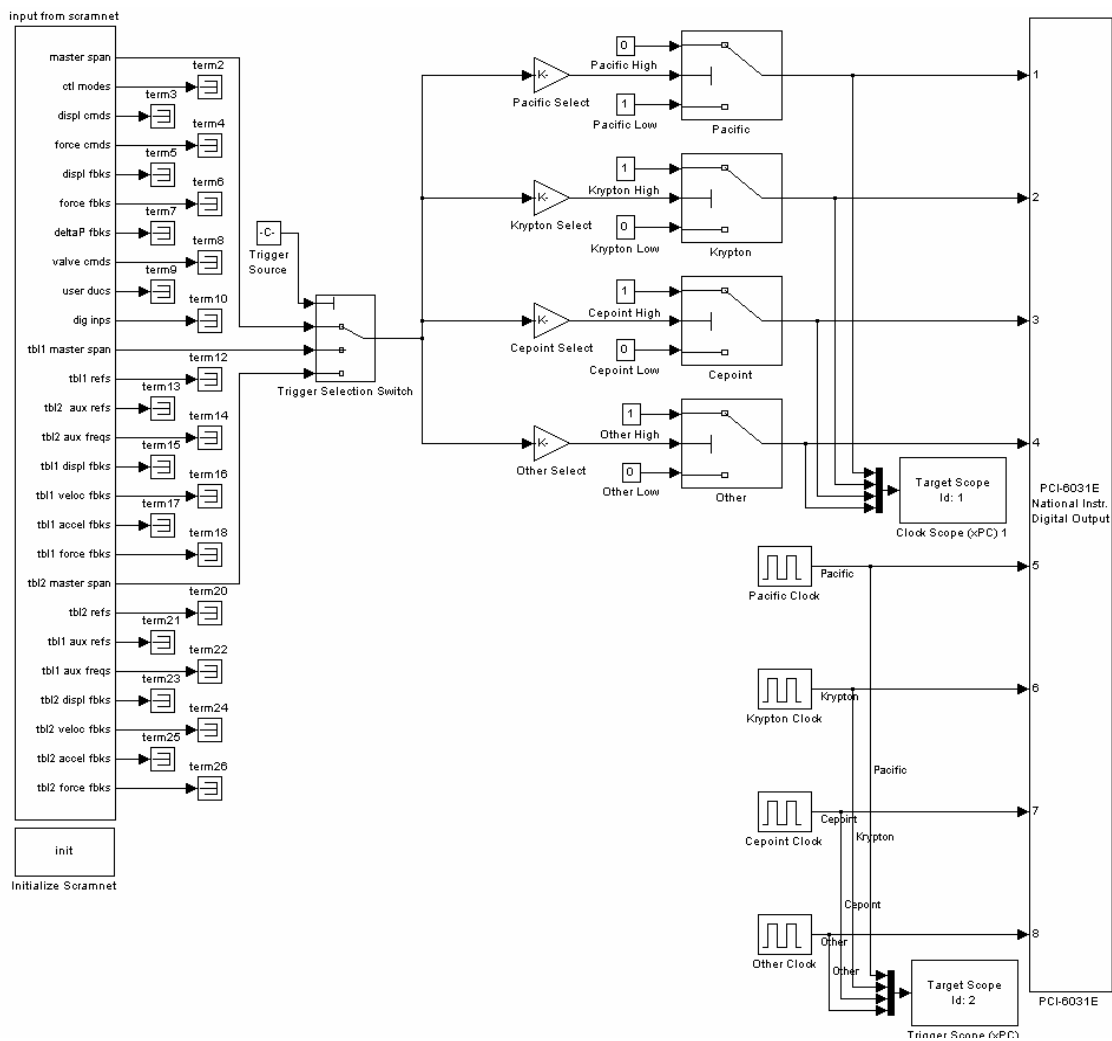


Figure 1: Synchronizer Simulink Diagram

3. Building

The application can be downloaded from here:
<http://nees.buffalo.edu/software/Synchronizer/>

See *Synchronizer Users Guide* for documentation on building and running the application.

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