

1.7 Configuring the Waveforms of the Simulation

In our user interface, we would like to display some of the signals and measurements generated on the FPGA during the simulation. To stream signals from the FPGA at a rate faster than that of the CPU execution, we can assign certain VeriStand channels to the **Waveform Acquisition** engines.

- In the Configuration Tree, expand **Circuit Model >> Waveforms**. Notice that 32 Waveform channels are available to be mapped to different signal sources.
- Click **Waveforms** to open the configuration page.
- Map VeriStand Channel signals to the Waveform channels as shown below. The data from these channels will be streamed at the **Sample Rate (S/s)** specified at the bottom of the window.
- Click **Save**.

	Source	Element
WVF00 Circuit Model 1.Y01	Measurements	Circuit Model 1.Y01
WVF01 Circuit Model 1.Y02	Measurements	Circuit Model 1.Y02
WVF02 Circuit Model 1.Y03	Measurements	Circuit Model 1.Y03
WVF03 Circuit Model 1.Y04	Measurements	Circuit Model 1.Y04
WVF04 Circuit Model 1.Y05	Measurements	Circuit Model 1.Y05
WVF05 Circuit Model 1.Y06	Measurements	Circuit Model 1.Y06
WVF06 Circuit Model 1.Y07	Measurements	Circuit Model 1.Y07
WVF07 Circuit Model 1.Y08	Measurements	Circuit Model 1.Y08

The screenshot shows the 'Switches Settings' configuration window. The left sidebar contains a configuration tree with 'Switches' selected under 'Circuit Model 1'. The main panel has the following fields:

- Name:** Switches
- Description:** Configure the switches\gates (Ideal Switch IGBT, Diode, etc.) that are being simulated in the circuit model. For each channel, select which Group signal and Element should be routed to each switch.

The configuration table below shows the settings for six switches:

SW	Type	Group	Element	Polarity	Gs
SW01	Diode	CPU (VeriStand)	SW01	High	0.5
SW02	Diode	CPU (VeriStand)	SW02	High	0.5
SW03	Diode	CPU (VeriStand)	SW03	High	0.5
SW04	Diode	CPU (VeriStand)	SW04	High	0.5
SW05	Diode	CPU (VeriStand)	SW05	High	0.5
SW06	Diode	CPU (VeriStand)	SW06	High	0.5