

3.7 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.Y08	Measurements	Circuit Model 1.Y08 Vab
WVF01 Circuit Model 1.Y09	Measurements	Circuit Model 1.Y09 Vbc
WVF02 Circuit Model 1.Y10	Measurements	Circuit Model 1.Y10 Vca
WVF03 PMSM VDQ 1.Curre	Dual PMSM BLDC	PMSM VDQ 1.Current Phase A (A)
WVF04 PMSM VDQ 1.Curre	Dual PMSM BLDC	PMSM VDQ 1.Current Phase B (A)
WVF05 PMSM VDQ 1.Curre	Dual PMSM BLDC	PMSM VDQ 1.Current Phase C (A)
WVF06 PMSM VDQ 1.Speed	Dual PMSM BLDC	PMSM VDQ 1.Speed (RPM)
WVF07 PMSM VDQ 1.Electr	Dual PMSM BLDC	PMSM VDQ 1.Electromagnetic Torque (Nm)
WVF08 Circuit Model 1.Y04	Measurements	Circuit Model 1.Y04 Vdc
WVF09 PMSM VDQ 1.Direc	Dual PMSM BLDC	PMSM VDQ 1.Direct Stator Current (id0) (A)
WVF10 PMSM VDQ 1.Quad	Dual PMSM BLDC	PMSM VDQ 1.Quadratic Stator Current (iq0) (A)

