

5.6 Setting Default Values for the SPWM Generators

Sinewave Generators

Next, we can configure the signal generators used in the simulation.

- In the Configuration Tree, expand **Circuit Model >> SPWM Generators**
- Configure the SPWM Generators by confirming that the **Default Values** of the relevant channels are configured as shown in the table below.
- Click **Save**.

Frequency Engines	
Channel Name	Default Value
Frequency Engine 0	60Hz
SWG 0	
Channel Name	Default Value
Frequency Engine	0
Phase	0°
SWG 1	
Channel Name	Default Value
Frequency Engine	0
Phase	120°
SWG 2	
Channel Name	Default Value
Frequency Engine	0
Phase	-120°

SPWM Generators

Next, we can configure the **SPWM Generators** used in the simulation.

- In the Configuration Tree, expand **Circuit Model >> SPWM Generators**
- Configure the SPWM Generators by confirming that the **Default Values** of the relevant channels are configured as shown in the table below.
- Click **Save**.

SPWM Carrier	
Channel Name	Default Value
Carrier Frequency	5000Hz
SPWM Generator 0	
Channel Name	Default Value
Frequency Engine	0
Phase	0°
SPWM Generator 1	
Channel Name	Default Value
Frequency Engine	0

Phase	120°
SPWM Generator 2	
Channel Name	Default Value
Frequency Engine	0
Phase	-120°

System Explorer - Quad SCIM Constant Local Control.nivssdf*

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Version
1.9.0

Configuration
eHSx64_Quad_IM_SM_IO_7868R

Configuration Description
Design built for NI PXIe-7868R (18 AO, 6 AI, 48 DIO)
-1x eHSx64
-1x Quad Generic Machine Model with Encoders and Resolvers
-Signal Generators (Sine, PWM, SPWM)
-Analog Output Mapping and Rescaling
-Analog Input Rescaling
-Waveform Acquisition

Target	Bitfile
FPGA0	eHSx64_Quad_Generic_Machine_IO_7868R.lvbitx

Target Credentials

Username
admin

Password