

PV Smoothing Use Cases (updated)

Current/Voltage Measurement

BASIC COURSE:

The Measurement Timer expires and wakes-up the Measurement Driver. The Measurement Driver reads values from the Battery Current Sensor, Battery Voltage Sensor, PV Current Sensor, and PV Voltage Sensor. The Measurement Driver stores the recorded values in a System Measurement.

ALTERNATE COURSES:

N/A

Smoothing Decision

BASIC COURSE:

The Smoothing Timer expires and wakes-up the Smoothing Component. The Smoothing Component querrys the most recent System Measurement. The Smoothing Component evaluates the System Measurement data and sets the next PWM Configuration.

ALTERNATE COURSES:

System Start-Up: When the system is starting up, the Smoothing Component will use default values to set the PWM Configuration and will not read the System Measurement.

PWM Output Update

BASIC COURSE:

The PWM Timer expires and wakes-up the PWM Driver. The PWM Driver takes the PWM Configuration and loads it into the PWM Module.

ALTERNATE COURSES:

N/A

PV Smoothing Use Case Diagram

