

Input settings... Vin Sense

This window have 3 tabs and the active tab is highlighted in bold blue text
Here **Vin Sense** is active

Vin Sense Type: In this how Vin can be sensed Grayed out as not supported by XDPF10281

Clear Fault When Vin Toggle: If checked the fault flag will clear itself when Vin is removed and then restored

Vin Source: Selection of method Vin is detected. Measured or fixed.

If Fixed then a voltage can be entered in the **Vin Fixed** box

Vin Sense Network:

When Vin is measured an external resistor divider is needed. Vin Sense gain is the gainfactor and will depend on resistor divider resistance.

R1 and R2 resistor values to be entered.

Typical 19.1 kohm and 1.54 kohm

Offset makes it possible to compensate for voltage drops on the PCB and can be determined during testing of a board.

Vin OVP: at what input voltage shall regulator stop switching to protect powerstages and load

Vin OVP response: How should regulator behave when OVP detected. Ignore, Hiccup or Latch.

If Latch then enable pin or Vin need to be toggled to restart. Hiccup will automatic retry once fault is gone.

Vin Settings:

Vin On determin at what voltage will switching start

Vin off determing when to turn off switching

Vin Reading Offset

Used to compensate for offset error in the VIN sense for a more accurate VIN telemetry

Input settings... Vaux sense

Vaux enabled for: multiple selections available. If Vaux not used set to Disabled

Vaux source: selects which pin is used to sense the Vaux voltage

Vaux Sense Network:

Vaux Sense Gain: Enter gain factor to get correct voltage reading typical 499 but depend on board layout

Resistors: Enter the resistors from the divider typical 19.1kohm and 1.54kohm

Capacitor: Enter capacitor value typical 0.1uF

Vaux Reading offset: allow correction of any offset in value being read.

Vaux Settings:

Vaux On: at what voltage will regulator turn on.
Assuming Vin also is above its threshold

Vaux UVP: what voltage is regarded as to low

Vaux response: What to do if UVP is detected
Ignore, Hiccup or Latch off

Input settings... Iin Sense/Input Power

Iin Source: dropdown menu allow selection of how input current is measured. Disabled, Calculated, Pisense,... Depending on selected parts only possible selections are shown.

Input Current Estimate Settings:

Used to calculate the input power and depends on real efficiency, I_{out} , V_{in} , dutycycle and losses.

Change values as needed to make reported Pin match an externally measured Pin.

Iinsense Gain

Iin offset

At which input current should the warning happen

At which power level should protection trigger

What action to be performed when protection level have triggerd

Opens a new window for the **Input Sense Design Tool** that help calculate settings