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 when not supported or selectable by controller

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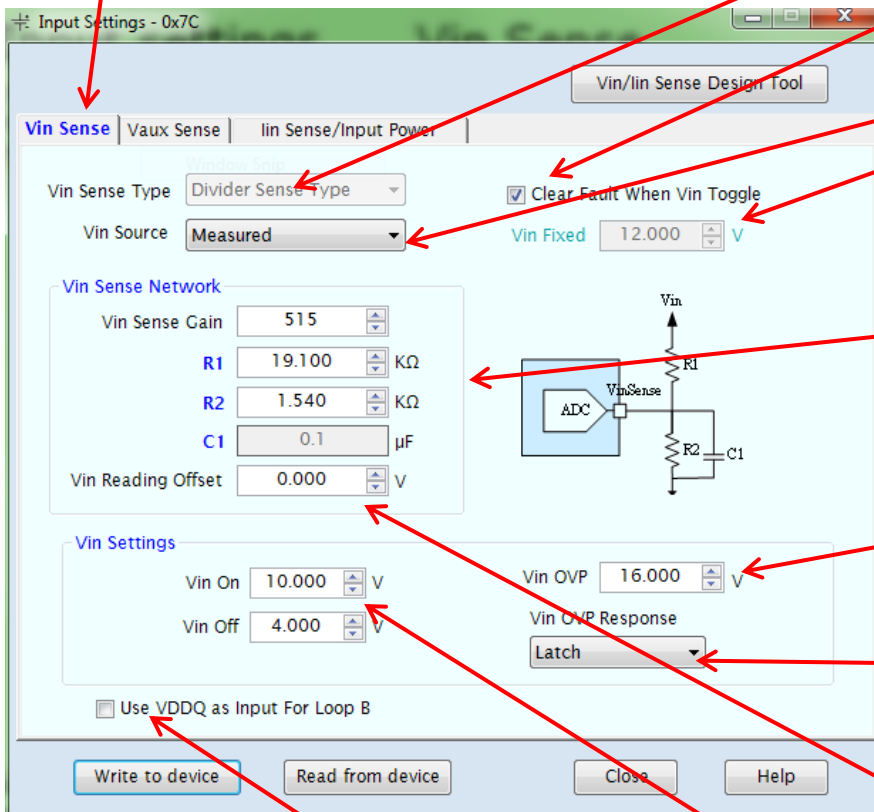If Latch then enable pin or Vin need to be toggled to restart. Hiccup will automatic retry once fault is gone.

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

Use VDDQ as Input for Loop B:
When marked the internal FeedForward factor for loop B is fixed to 50% to optimise performance.
Function Not available for all operation modes.

Vin Settings:
Vin On determine at what voltage will switching start
Vin off determine when to turn off switching

Input settings...   Vaux sense

Vaux enabled for: multiple selections available. If Vaux not used set to Disabled
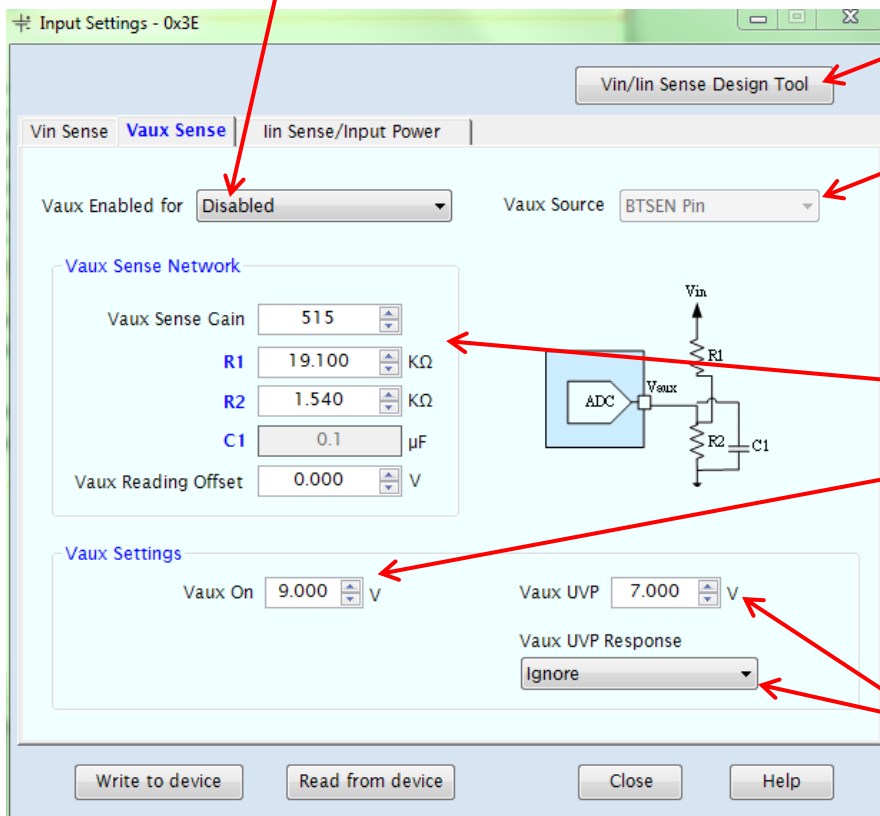
Opens a new window for the **Input Sense Design Tool** that help calculate settings

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 515 but depend on board layout
 Resistors: Enter the resistors from the divider typical 19.1kohm and 1.54kohm
 Capacitor: capacitor value default set to 0.1uF
 Vaux Reading offset: allow correction of any offset in value beeing 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

СКАЧАНО С WWW.SW.BAND – ПРИСОЕДИНЯЙСЯ!

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.

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

Input Current Estimate Settings:
Used to calculate the input power and depends on real efficiency, Iout, Vin, 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 triggered

Input settings... Iin Sense/Input Power

Current Sense Amplifier:
Allow adjusting gain for the sensed signal when Source is selected to be a current sense amplifier

In any of the input modes an Iin offset can be adjusted

PI Measurement Method:
Allow adjustment to gain and offset values when PI sense is selected as Source

How often an calibration cycle should be done.
This can compensate temperature drift and more.

Input settings… Input Sense Design Tool

Input Sense Circuit diagram:
Will show the needed external components for the different sense schemes

Input Sense Type:
Select which type of input current sensing to be used

Depending on selected configuration enter design target numbers and a calculation of recommended values for the external components will be shown

СКАЧАНО С WWW.SW.BAND – ПРИСОЕДИНЯЙСЯ!