

# Design Tools

## System Settings



### 2. System Settings

Loop, I2C/PMBus Address, Vin, TSense, Fsw

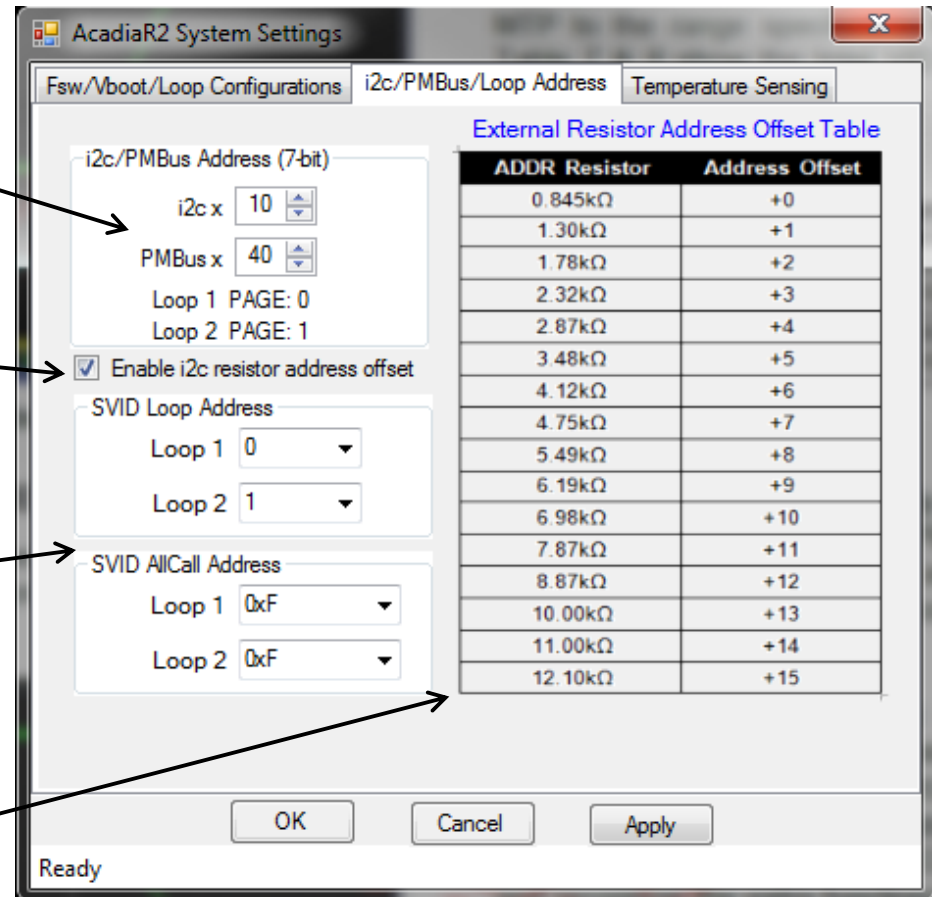
Used to configure number of phases in each loops, the switching frequency, the Vboot, and I2C/PMBus/loop address, and temperature sensing. Remember to press and **Apply** and **Ok** to program the settings.

Programmable addresses for I2C/PMBus communication

Address offset for I2C/PMBus communication

Programmable SVID Loop address and AllCall Address

Users can enable the option to use and external resistor in SM\_ADDR pin to generate i2C address offset



The dialog box is titled "AcadiaR2 System Settings" and has three tabs: "Fsw/Vboot/Loop Configurations", "i2c/PMBus/Loop Address", and "Temperature Sensing". The "i2c/PMBus/Loop Address" tab is selected.

Under "i2c/PMBus Address (7-bit)", there are spinners for "i2c x" (set to 10) and "PMBus x" (set to 40). Below these are labels for "Loop 1 PAGE: 0" and "Loop 2 PAGE: 1".

There is a checked checkbox labeled "Enable i2c resistor address offset".

Under "SVID Loop Address", there are dropdown menus for "Loop 1" (set to 0) and "Loop 2" (set to 1).

Under "SVID AllCall Address", there are dropdown menus for "Loop 1" (set to 0xF) and "Loop 2" (set to 0xF).

On the right side, there is a table titled "External Resistor Address Offset Table".

ADDR Resistor	Address Offset
0.845kΩ	+0
1.30kΩ	+1
1.78kΩ	+2
2.32kΩ	+3
2.87kΩ	+4
3.48kΩ	+5
4.12kΩ	+6
4.75kΩ	+7
5.49kΩ	+8
6.19kΩ	+9
6.98kΩ	+10
7.87kΩ	+11
8.87kΩ	+12
10.00kΩ	+13
11.00kΩ	+14
12.10kΩ	+15

At the bottom, there are "OK", "Cancel", and "Apply" buttons. The status bar at the bottom left says "Ready".

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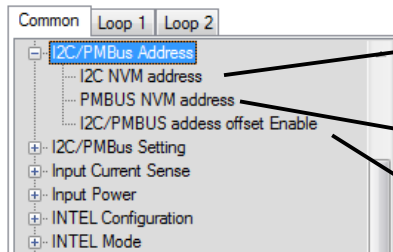
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**System Settings** configurations can also be programmed in **Register Map** using commands from the tree view. Remember to click **Write** to program the settings



**i2c\_device\_addr**  
x20 [14:8] 16 x10

x10

Read Write

**pmb\_device\_addr**  
x20 [6:0] 64 x40

x40

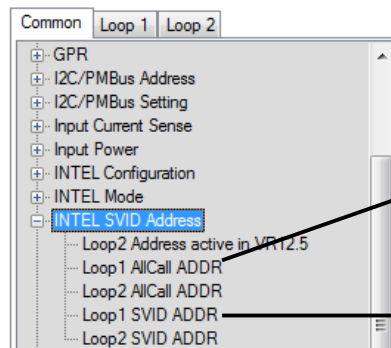
Read Write

**i2c\_use\_addr\_offset**  
x58 [12:12] 1 x01

Added

Read Write

In Common Section under **I2C/PMBus Address** I2C and PMBus device address can be programmed accordingly. An external i2c address offset resistor can also be enabled(1) or disabled(0).



**svid\_allcall\_addr\_1**  
x3A [11:10] 1 x01

AllCall Address: 0xF

Read Write

**svid\_local\_addr\_1**  
x3A [7:4] 0 x00

x0

Read Write

In Common Section under **INTEL SVID Address** SVID AllCall and Loop addresses can be programmed accordingly.