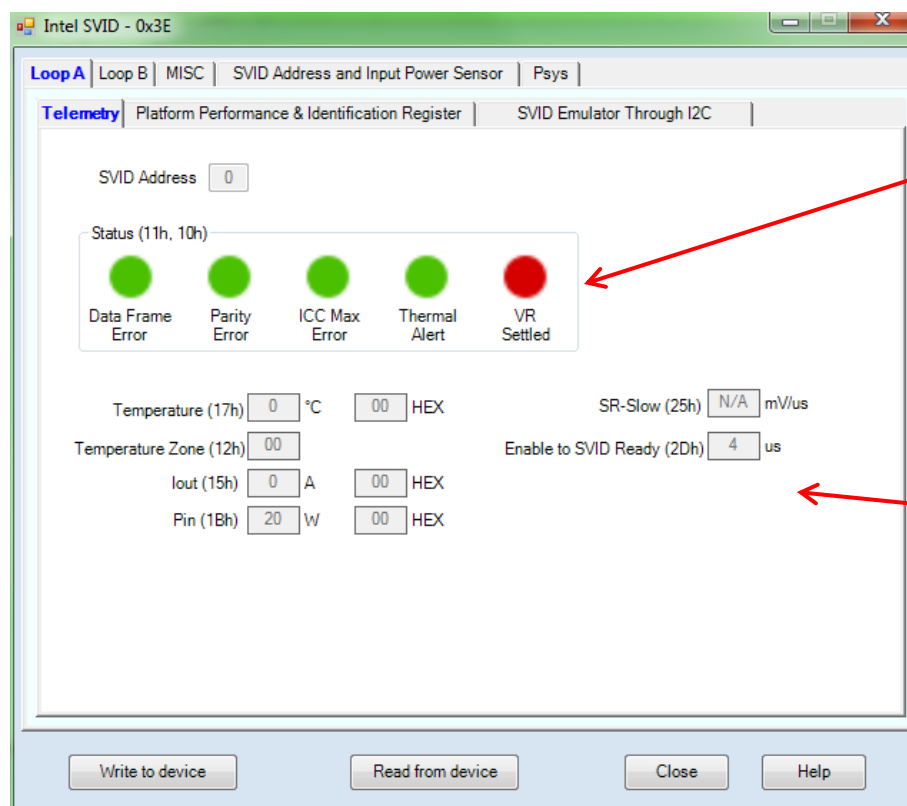


# SVID... Telemetry

The Intel SVID window is only available for devices that support SVID



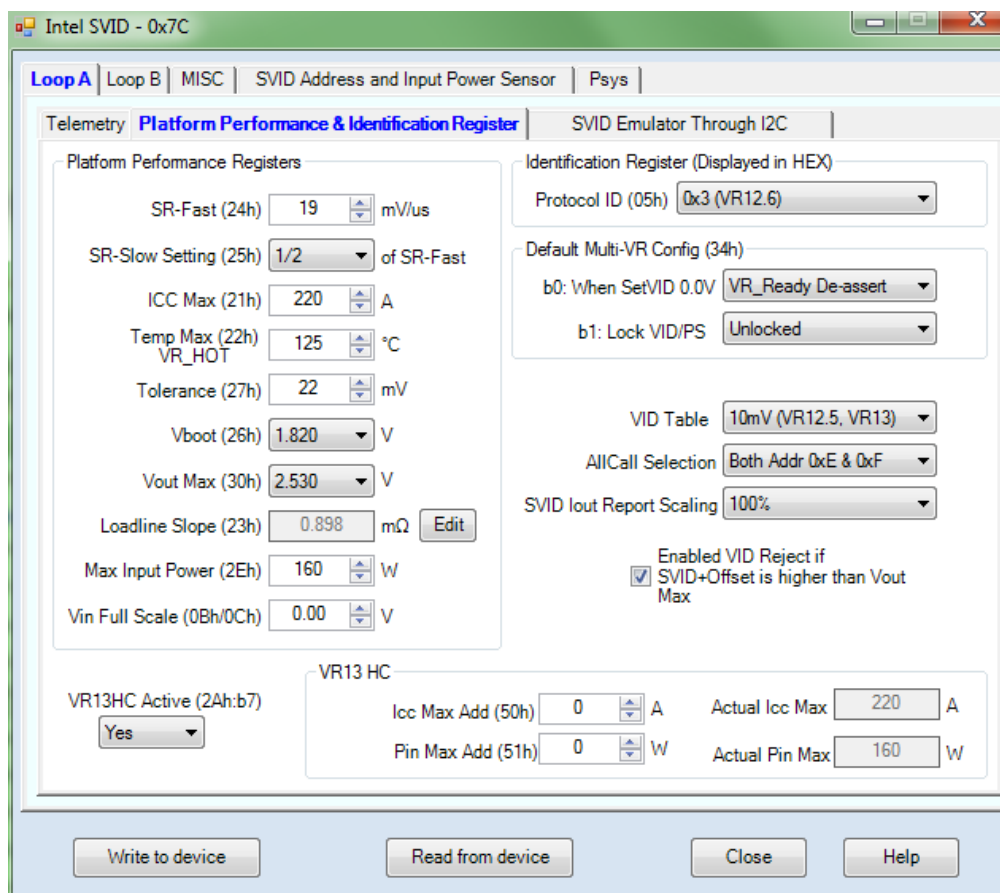
Readout of the status bits in SVID registers.

Readout of parameters in SVID registers.

# SVID... Platform Performance

Allow settings of all the registers that SVID use.

Depending on settings some parameters may not be visible if not used i.e. VR13HC settings only visible when VR13HC is activated.



The screenshot shows the 'Intel SVID - 0x7C' configuration window. The 'Platform Performance & Identification Register' tab is active. The 'Platform Performance Registers' section includes settings for SR-Fast (24h), SR-Slow Setting (25h), ICC Max (21h), Temp Max (22h) VR\_HOT, Tolerance (27h), Vboot (26h), Vout Max (30h), Loadline Slope (23h), Max Input Power (2Eh), and Vin Full Scale (0Bh/0Ch). The 'Identification Register (Displayed in HEX)' section includes Protocol ID (05h) and Default Multi-VR Config (34h) with b0: When SetVID 0.0V and b1: Lock VID/PS. The 'VID Table' is set to 10mV (VR12.5, VR13). The 'AllCall Selection' is set to Both Addr 0xE & 0xF. The 'SVID Iout Report Scaling' is set to 100%. The 'Enabled VID Reject if SVID+Offset is higher than Vout Max' checkbox is checked. The 'VR13HC' section shows VR13HC Active (2Ah:b7) set to Yes, and ICC Max Add (50h) and Pin Max Add (51h) both set to 0. The 'Actual ICC Max' is 220 A and the 'Actual Pin Max' is 160 W. At the bottom are buttons for 'Write to device', 'Read from device', 'Close', and 'Help'.

# SVID... Emulator through I2C

Allow a number of SVID settings to be emulated and sent via I2C to voltage regulator.

Loop B have less number of settings as it is already set in loop A

The screenshot shows the 'Intel SVID - 0x7C' application window. The 'SVID Emulator Through I2C' tab is active. A red arrow points to the 'Enabled Write Function' checkbox, which is checked. The interface includes various input fields for SVID parameters like I2C VID, Vout Max, Power State, and VID Offset, as well as dropdown menus for Work Point and Default Multi-VR Config.

Mark the box to enable this I2C SVID emulator function

# SVID... Address and Input Power Sensor

Selection of SVID address

SVID address can also be selected using external resistors. Table shows the different combinations of resistor and address

The screenshot shows the 'Intel SVID - 0x3E' application window. The 'SVID Address and Input Power Sensor' tab is active. On the left, under 'SVID Address', there are three dropdown menus: 'Loop A Address Base' set to '0x0', 'Loop B Address Base' set to 'Disabled SVID', and 'SVID Address Setting' set to 'based address'. On the right, under 'Input Power Sensor SVID Address', there is a dropdown menu set to 'Use Input Power Rail with SVID Addr 0xD'. Below this is the 'Input Power Sensor Rail' section, which includes a 'Platform Performance & Identification Register' with fields for 'Max Input Power (2Eh)' (160 W), 'Max Input Power Add (51h)' (0 W), 'Actual Input Power' (160 W), 'Protocol ID (05h)' (0x0 (N/A)), and 'AllCall Selection' (Both Addr 0xE & 0xF). At the bottom right is the 'SVID Emulator Through I2C' section, which includes fields for 'Power State (32h)' (PS0), 'Pin Alert (2Fh)' (0 W), 'Pin Alert Add (52h)' (0 W), and 'Actual Pin Alert' (0 W). There is an 'Enable' checkbox checked and a 'Refresh' button. At the bottom of the window are buttons for 'Write to device', 'Read from device', 'Close', and 'Help'. Red arrows point from the text boxes to the 'SVID Address Setting' dropdown, the 'Input Power Sensor SVID Address' dropdown, and the 'SVID Emulator Through I2C' section.

Selection of Input power sensor.

Depending on selections some of the menus may be grayed out as they are not selectable

Allow emulation of SVID via I2C commands

**Power state** and input power alert **Pin Alert** can be set from GUI when the enable box is marked

# SVID... Psys

Intel SVID - 0x3E

Loop A | Loop B | MISC | SVID Address and Input Power Sensor | **Psys**

Psys Source: Vin x lin

Input Power Signal Measurement

Gain: 0.0000 Offset: 0.00

SVID Registers

Psys Warning 1 Counter (4Eh)	<span>100</span>	<span>1.000</span> $\mu$ s
Psys Warning 2 Counter (4Dh)	<span>100</span>	<span>1.000</span> $\mu$ s
<i>Psys Critical Threshold (4Ah)</i>	<span>0</span>	<span>0</span> W
<i>Psys Warning 1 Threshold (4Ch)</i>	<span>0</span>	<span>0</span> W
<i>Psys Warning 2 Threshold (4Bh)</i>	<span>0</span>	<span>0</span> W
<i>Psys_Critical Assertion De-bounce Time (4F)</i>	<span>0</span>	<span>0</span> $\mu$ s
<i>Psys_Critical De-assertion De-bounce Time (49)</i>	<span>0</span>	<span>0</span> $\mu$ s

☒ Enable write function Refresh

Write to device Read from device Close Help

Select which source for Psys calculations

# SVID... MISC

This window have SVID settings that are not grouped into other functions.

