AVN-20200319 - TE0807-02 system monitor reference voltage

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Company	Trenz Electronic GmbH
Number	AVN-20200319
Title	TE0807 system monitor reference voltage
Subject	System monitor reference voltage
Issue Date	2020-03-19

Products Affected

This note affects all Trenz Electronic TE0807 SoMs of revision 02 and before:

Affected Product	
TE0807-01-*	
TE0807-02-*	

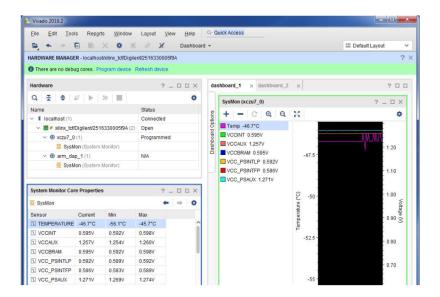
Notes

#1 System monitor ref. voltage input VREFP connected to 1.8V

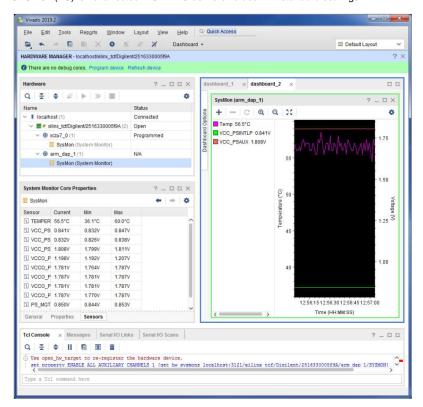
Description: VREFP connected to 1.8V is out of recommended conditions. The PL XADC delivers values with non-standard scale factor.

Impact: It may cause an incorrect operation of SYSMONE4 and wrong internal sensor readings (VCCINT, VCCAUX, VCCBRAM, VCC_PSINTLP, VCC_PSINTFP, VCC_PSAUX and others). This will not cause damages on the module!

All PL XADC sensor values should be multiplied by 1.5 to get proper scaling in Volts.



SYSMON(PS) is not affected. PS XADC delivers values with standard scalings:



Workaround: Either use scale factor 1.5 when using PL XADC or simple only use readings from PS XADC.

The scaling issue has no impact on any other functionality of the TE0807 SoM.

Method of Identification

The module revision number is printed on the top side of the PCB:



Production Shipment Schedule

We are issuing a new revision o TE0807 and will make the necessary changes to future modules.

Contact Information

If you have any questions related to this design note, please contact Trenz Electronics Technical Support at

- forum.trenz-electronic.de
- wiki.trenz-electronic.de
- support%trenz-electronic.de (subject = AVN-20200319)
- phone
 - o national calls: 05223 65301-0
 - o international calls: 0049 5223 65301-0

Disclaimer

Any projected dates in this design note are based on the most current product information at the time this design note is being issued, but they may change due to unforeseen circumstances. For the latest schedule and any other information, please contact your local Trenz Electronic sales office, technical support or local distributor.