

Product Alert Notification (PAN)

Subject: Product Alert – ISL75051* / 5962-11212 RH Linear Regulator

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Intersil regrets to inform you that Intersil has been made aware of a design issue, the ISL75051* / 5962-11212 products have a possibility of starting up into test and trim mode (TTM) that is used during Intersil's manufacturing electrical screening operations. It has been found that the latch that stores the TTM state is not being reliably reset during power-up (the application of supply voltage) so that it is possible for the part to power-up into TTM.

When starting up in TTM:

- The enable (EN) function is not operational, as that pin is used for clock and data entry to control the TTM state.
- The output may or may not be active depending on the specific TTM state the part enters.
- The over-current protection (OCP) is inactive.
- The trim of the reference voltage may be disturbed by as much as +6% in TTM.

There are several factors that influence whether a part will power-up into TTM:

- The amount of time (beyond 20ms), that the supply (VIN) spends in the 0.3V to 0.8V range, the more of a chance there is of the part powering-up into TTM.
- When VIN is ramped slowly, elevated temperatures lead to a higher chance of starting up in TTM.
- Total ionizing dose (TID) radiation can increase the potential for this failure mode. A failure rate of about 7% has been seen for parts exposed to 100krad(Si) at high dose rate (50-300rad(Si)/s) and 50krad(Si) at low dose rate (0.01rad(Si)/s). Intersil has continuing actions to further assess the radiation effects at lower TID levels.

Intersil's efforts to develop a test screen does not completely eliminate the possibility that a device may go into TMM during the power-on sequence. However, some devices are more likely than others to enter TTM. If an individual devices has correctly started up over multiple power cycles, it is more likely to power up correctly in the future.

If the device is not power cycled, then there is no chance of the device getting into TTM assuming it is already in its normal operating mode.

Please note, Intersil has completed a review of all products and their design methodology, this potential failure mode is isolated to the ISL75051* / 5962-11212 only. No other product is affected, including the ISL75052.

Products affected:

Intersil Marketing Part Number	DLA SMD Part Number	Intersil Marketing Part Number	DLA SMD Part Number
ISL75051SEHFE/PROTO	NA	ISL75051SRHF/PROTO	NA
ISL75051SEHVF	5962R1121202VXC	ISL75051SRHQF	5962R1121201QXC
ISL75051SEHVFE	5962R1121202VYC	ISL75051SRHVF	5962R1121201VXC
ISL75051SEHVX	5962R1121202V9A	ISL75051SRHVX	5962R1121201V9A
ISL75051SEHVXS2745	NA	ISL75051SRHVXS2745	NA
ISL75051SEHVXS2746	NA	ISL75051SRHVXS2746	NA
ISL75051SEHVXS2747	NA	ISL75051SRHVXS2747	NA
ISL75051SEHX/SAMPLE	NA	ISL75051SRHX/SAMPLE	NA

If you have any questions or concerns pertaining to this notice, please contact our central applications group at <http://www.intersil.com/en/support.html>

For additional information regarding this notice, please contact your regional change coordinator (below)			
Americas: PCN-US@INTERSIL.COM	Europe: PCN-EU@INTERSIL.COM	Japan: PCN-JP@INTERSIL.COM	Asia Pac: PCN-APAC@INTERSIL.COM