

CN20007: RT ProASIC 3 Datasheet TID Radiation Performance Update

April 22, 2020

Description

The following statements have been removed from the Radiation Performance section of the RT ProASIC 3 Datasheet Revision 6.

- Up to 40 krads with 10% propagation delay increase, dose rate <1 krad/min
- Up to 55 krads with 15% propagation delay increase, dose rate <1 krad/min

Reason for Change

TID testing is performed on a wafer lot basis, typically up to 25 krads and no higher than 30 krads. For more information, see the *TID Reports*.

Application Impact

There are no changes to the Libero software or published radiation TID reports. Libero software limits the user to input from 0 to 25 krads, which accounts for 10% propagation delay. Recently published *TID Reports* show that RT ProASIC3 devices are tested up to 25 krads. Exposing RT ProASIC3 devices to higher radiation doses will increase propagation delay and decrease the device performance.

Required Action

Review the latest RT ProASIC 3 Datasheet Revision 6.

Products Affected

RT3PE3000L-1CG484B	RT3PE3000L-CG484E	RT3PE600L-1CQ256B
RT3PE3000L-1CG484E	RT3PE3000L-CG896B	RT3PE600L-1CQ256E
RT3PE3000L-1CG896B	RT3PE3000L-CG896E	RT3PE600L-1LG484B
RT3PE3000L-1CG896E	RT3PE3000L-CQ256B	RT3PE600L-1LG484E
RT3PE3000L-1CQ256B	RT3PE3000L-CQ256E	RT3PE600L-CG484B
RT3PE3000L-1CQ256E	RT3PE3000L-LG484B	RT3PE600L-CG484E
RT3PE3000L-1LG484B	RT3PE3000L-LG484E	RT3PE600L-CQ256B
RT3PE3000L-1LG484E	RT3PE3000L-LG896B	RT3PE600L-CQ256E
RT3PE3000L-1LG896B	RT3PE3000L-LG896E	RT3PE600L-LG484B
RT3PE3000L-1LG896E	RT3PE600L-1CG484B	RT3PE600L-LG484E
RT3PE3000L-CG484B	RT3PE600L-1CG484E	

Contact Information

If you have any questions about this subject, contact Microsemi Technical Support department by using the support portal at https://soc.microsemi.com/Portal/Default.aspx

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