



August 31, 2010

CN Number: 1011

CN Change Level: Major

Subject: RTAX-S Datasheet Update

Dear Customer,

This letter is to advise you that the RTAX-S/SL datasheet has been updated to include the RTAX-DSP products. Timing information, DSP-specific packages, pinout information, and ordering codes for RTAX-DSP have been included.

In addition, minor changes have been made to the RTAX-S/SL data, including updates to the test flow and clarifications to the pin descriptions. Timing tables for logic, SRAM, and FIFOs have been updated, changing the core voltage associated with the worst case operating conditions, at which timing is specified, from 1.4 V to 1.425 V (note that the Libero[®] Integrated Design Environment (IDE) software can support timing analysis for core voltage at 1.4 V or 1.425 V). For more details, refer to the “Datasheet Information” section of the *RTAX-S/SL and RTAX-DSP Radiation-Tolerant FPGAs* datasheet, Revision 13.

Table 1 lists the affected devices.

Table 1. Affected Devices

RTAX1000S		
5962-0422001QUA	5962-0422008QXC	RTAX1000SL-1CGS624B
5962-0422001QXC	5962-0422008QYC	RTAX1000SL-1CGS624E
5962-0422001QYC	RTAX1000S-1CG624PROTO	RTAX1000SL-1CGS624EV
5962-0422002QUA	RTAX1000S-1CGS624B	RTAX1000SL-1CQ352B
5962-0422002QXC	RTAX1000S-1CGS624E	RTAX1000SL-1CQ352E
5962-0422002QYC	RTAX1000S-1CGS624EV	RTAX1000SL-1CQ352EV
5962-0422003QUA	RTAX1000S-1CQ352B	RTAX1000SL-1LG624B
5962-0422003QXC	RTAX1000S-1CQ352E	RTAX1000SL-1LG624E
5962-0422003QYC	RTAX1000S-1CQ352EV	RTAX1000SL-1LG624EV
5962-0422004QUA	RTAX1000S-1CQ352PROTO	RTAX1000SL-CGS624B
5962-0422004QXC	RTAX1000S-1LG624B	RTAX1000SL-CGS624E
5962-0422004QYC	RTAX1000S-1LG624E	RTAX1000SL-CGS624EV
5962-0422005QUA	RTAX1000S-1LG624EV	RTAX1000SL-CQ352B
5962-0422005QXC	RTAX1000S-1LG624PROTO	RTAX1000SL-CQ352E
5962-0422005QYC	RTAX1000S-CG624PROTO	RTAX1000SL-CQ352EV
5962-0422006QUA	RTAX1000S-CGS624B	RTAX1000S-LG624B



Table 1. Affected Devices

5962-0422006QXC	RTAX1000S-CGS624E	RTAX1000S-LG624E
5962-0422006QYC	RTAX1000S-CGS624EV	RTAX1000S-LG624EV
5962-0422007QUA	RTAX1000S-CQ352B	RTAX1000S-LG624PROTO
5962-0422007QXC	RTAX1000S-CQ352E	RTAX1000SL-LG624B
5962-0422007QYC	RTAX1000S-CQ352EV	RTAX1000SL-LG624E
5962-0422008QUA	RTAX1000S-CQ352PROTO	RTAX1000SL-LG624EV
RTAX2000S		
5962-0422101QMC	5962-0422108QTA	RTAX2000SL-1CG1152B
5962-0422101QNA	5962-0422108QUC	RTAX2000SL-1CG1152E
5962-0422101QTA	5962-0422108QXC	RTAX2000SL-1CG1152EV
5962-0422101QUC	5962-0422108QYC	RTAX2000SL-1CGS624B
5962-0422101QXC	RTAX2000S-1CG1152B	RTAX2000SL-1CGS624E
5962-0422101QYC	RTAX2000S-1CG1152E	RTAX2000SL-1CGS624EV
5962-0422102QMC	RTAX2000S-1CG1152EV	RTAX2000SL-1CQ256B
5962-0422102QNA	RTAX2000S-1CG1152PROTO	RTAX2000SL-1CQ256E
5962-0422102QTA	RTAX2000S-1CG624PROTO	RTAX2000SL-1CQ256EV
5962-0422102QUC	RTAX2000S-1CGS624B	RTAX2000SL-1CQ352B
5962-0422102QXC	RTAX2000S-1CGS624E	RTAX2000SL-1CQ352E
5962-0422102QYC	RTAX2000S-1CGS624EV	RTAX2000SL-1CQ352EV
5962-0422103QMC	RTAX2000S-1CQ256B	RTAX2000SL-1LG1152B
5962-0422103QNA	RTAX2000S-1CQ256E	RTAX2000SL-1LG1152E
5962-0422103QTA	RTAX2000S-1CQ256EV	RTAX2000SL-1LG1152EV
5962-0422103QUC	RTAX2000S-1CQ256PROTO	RTAX2000SL-1LG624B
5962-0422103QXC	RTAX2000S-1CQ352B	RTAX2000SL-1LG624E
5962-0422103QYC	RTAX2000S-1CQ352E	RTAX2000SL-1LG624EV
5962-0422104QMC	RTAX2000S-1CQ352EV	RTAX2000SL-CG1152B
5962-0422104QNA	RTAX2000S-1CQ352PROTO	RTAX2000SL-CG1152E
5962-0422104QTA	RTAX2000S-1LG1152B	RTAX2000SL-CG1152EV
5962-0422104QUC	RTAX2000S-1LG1152E	RTAX2000SL-CGS624B
5962-0422104QXC	RTAX2000S-1LG1152EV	RTAX2000SL-CGS624E
5962-0422104QYC	RTAX2000S-1LG1152PROTO	RTAX2000SL-CGS624EV

Table 1. Affected Devices

5962-0422105QMC	RTAX2000S-1LG624B	RTAX2000SL-CQ256B
5962-0422105QNA	RTAX2000S-1LG624E	RTAX2000SL-CQ256E
5962-0422105QTA	RTAX2000S-1LG624EV	RTAX2000SL-CQ256EV
5962-0422105QUC	RTAX2000S-1LG624PROTO	RTAX2000SL-CQ352B
5962-0422105QXC	RTAX2000S-CG1152B	RTAX2000SL-CQ352E
5962-0422105QYC	RTAX2000S-CG1152E	RTAX2000SL-CQ352EV
5962-0422106QMC	RTAX2000S-CG1152EV	RTAX2000S-LG1152B
5962-0422106QNA	RTAX2000S-CG1152PROTO	RTAX2000S-LG1152E
5962-0422106QTA	RTAX2000S-CG624PROTO	RTAX2000S-LG1152EV
5962-0422106QUC	RTAX2000S-CGS624B	RTAX2000S-LG1152PROTO
5962-0422106QXC	RTAX2000S-CGS624E	RTAX2000S-LG624B
5962-0422106QYC	RTAX2000S-CGS624EV	RTAX2000S-LG624E
5962-0422107QMC	RTAX2000S-CQ256B	RTAX2000S-LG624EV
5962-0422107QNA	RTAX2000S-CQ256E	RTAX2000S-LG624PROTO
5962-0422107QTA	RTAX2000S-CQ256EV	RTAX2000SL-LG1152B
5962-0422107QUC	RTAX2000S-CQ256PROTO	RTAX2000SL-LG1152E
5962-0422107QXC	RTAX2000S-CQ352B	RTAX2000SL-LG1152EV
5962-0422107QYC	RTAX2000S-CQ352E	RTAX2000SL-LG624B
5962-0422108QMC	RTAX2000S-CQ352EV	RTAX2000SL-LG624E
5962-0422108QNA	RTAX2000S-CQ352PROTO	RTAX2000SL-LG624EV
RTAX250S		
5962-0421901QUA	5962-0421908QYC	RTAX250S-CQ352PROTO
5962-0421901QXC	5962-0421908QZC	RTAX250SL-1CG624B
5962-0421901QYC	RTAX250S-1CG624B	RTAX250SL-1CG624E
5962-0421901QZC	RTAX250S-1CG624E	RTAX250SL-1CG624EV
5962-0421902QUA	RTAX250S-1CG624EV	RTAX250SL-1CQ208B
5962-0421902QXC	RTAX250S-1CG624PROTO	RTAX250SL-1CQ208E
5962-0421902QYC	RTAX250S-1CQ208B	RTAX250SL-1CQ208EV
5962-0421902QZC	RTAX250S-1CQ208E	RTAX250SL-1CQ352B
5962-0421903QUA	RTAX250S-1CQ208EV	RTAX250SL-1CQ352E
5962-0421903QXC	RTAX250S-1CQ208PROTO	RTAX250SL-1CQ352EV



Table 1. Affected Devices

5962-0421903QYC	RTAX250S-1CQ352B	RTAX250SL-1LG624B
5962-0421903QZC	RTAX250S-1CQ352E	RTAX250SL-1LG624E
5962-0421904QUA	RTAX250S-1CQ352EV	RTAX250SL-1LG624EV
5962-0421904QXC	RTAX250S-1CQ352PROTO	RTAX250SL-CG624B
5962-0421904QYC	RTAX250S-1LG624B	RTAX250SL-CG624E
5962-0421904QZC	RTAX250S-1LG624E	RTAX250SL-CG624EV
5962-0421905QUA	RTAX250S-1LG624EV	RTAX250SL-CQ208B
5962-0421905QXC	RTAX250S-1LG624PROTO	RTAX250SL-CQ208E
5962-0421905QYC	RTAX250S-CG624B	RTAX250SL-CQ208EV
5962-0421905QZC	RTAX250S-CG624E	RTAX250SL-CQ352B
5962-0421906QUA	RTAX250S-CG624EV	RTAX250SL-CQ352E
5962-0421906QXC	RTAX250S-CG624PROTO	RTAX250SL-CQ352EV
5962-0421906QYC	RTAX250S-CQ208B	RTAX250S-LG624B
5962-0421906QZC	RTAX250S-CQ208E	RTAX250S-LG624E
5962-0421907QUA	RTAX250S-CQ208EV	RTAX250S-LG624EV
5962-0421907QXC	RTAX250S-CQ208PROTO	RTAX250S-LG624PROTO
5962-0421907QYC	RTAX250S-CQ352B	RTAX250SL-LG624B
5962-0421907QZC	RTAX250S-CQ352E	RTAX250SL-LG624E
5962-0421908QUA	RTAX250S-CQ352EV	RTAX250SL-LG624EV
5962-0421908QXC		
RTAX4000S		
RTAX4000S-1CG1272B	RTAX4000S-CG1272EV	RTAX4000SL-1LG1272EV
RTAX4000S-1CG1272E	RTAX4000S-CG1272PROTO	RTAX4000SL-CG1272B
RTAX4000S-1CG1272EV	RTAX4000S-CQ352B	RTAX4000SL-CG1272E
RTAX4000S-1CG1272PROTO	RTAX4000S-CQ352E	RTAX4000SL-CG1272EV
RTAX4000S-1CQ352B	RTAX4000S-CQ352EV	RTAX4000SL-CQ352B
RTAX4000S-1CQ352E	RTAX4000S-CQ352PROTO	RTAX4000SL-CQ352E
RTAX4000S-1CQ352EV	RTAX4000SL-1CG1272B	RTAX4000SL-CQ352EV
RTAX4000S-1CQ352PROTO	RTAX4000SL-1CG1272E	RTAX4000S-LG1272B
RTAX4000S-1LG1272B	RTAX4000SL-1CG1272EV	RTAX4000S-LG1272E
RTAX4000S-1LG1272E	RTAX4000SL-1CQ352B	RTAX4000S-LG1272EV



Table 1. Affected Devices

RTAX4000S-1LG1272EV	RTAX4000SL-1CQ352E	RTAX4000S-LG1272PROTO
RTAX4000S-1LG1272PROTO	RTAX4000SL-1CQ352EV	RTAX4000SL-LG1272B
RTAX4000S-CG1272B	RTAX4000SL-1LG1272B	RTAX4000SL-LG1272E
RTAX4000S-CG1272E	RTAX4000SL-1LG1272E	RTAX4000SL-LG1272EV
RTAX2000D		
RTAX2000D-CGD1272B	RTAX2000D-CQ352B	RTAX2000D-LGD1272B
RTAX2000D-CGD1272E	RTAX2000D-CQ352E	RTAX2000D-LGD1272E
RTAX2000D-CGD1272EV	RTAX2000D-CQ352EV	RTAX2000D-LGD1272EV
RTAX2000D-CGD1272PROTO	RTAX2000D-CQ352PROTO	RTAX2000D-LGD1272PROTO
RTAX4000D		
RTAX4000D-CGD1272B	RTAX4000D-CQ352B	RTAX4000D-LGD1272B
RTAX4000D-CGD1272E	RTAX4000D-CQ352E	RTAX4000D-LGD1272E
RTAX4000D-CGD1272EV	RTAX4000D-CQ352EV	RTAX4000D-LGD1272EV
RTAX4000D-CGD1272PROTO	RTAX4000D-CQ352PROTO	RTAX4000D-LGD1272PROTO

Thank you for your consideration in this matter. If you have any additional questions, please do not hesitate to contact Actel's ITAR Technical support at <http://www.actel.com/mycases> or tech_itar@actel.com.

Yours Sincerely,

Actel Corporation