

Product Discontinuation Notice

XCN09001 (v1.4.2) July 19, 2010

Product Discontinuation Notice

Overview

The purpose of this notification is to communicate that Xilinx is discontinuing certain XC1700, XC4000E, XC4000XLA, XC5200, Spartan®-3AN, Virtex®, Virtex®-E, Virtex®-II, CPLD and Aerospace & Defense "XQ" products.

Description

As part of Xilinx regular product pruning activities and due to an assembly supplier package line discontinuance, the following XC1700, XC4000E, XC4000XLA, XC5200, Virtex, Virtex-E, CPLD and Aerospace & Defense "XQ" products have been identified for obsolescence. In addition, some Spartan-3AN and Virtex-II SCD part numbers are being discontinued and replaced by the standard part numbers.

This notice should be used in conjunction with previous discontinuance notices which can be found at: http://www.xilinx.com/support/documentation/customer notices.htm.

Key Dates and Ordering Information

Final orders are accepted until April 27, 2010.

Final deliveries must occur on or before October 27, 2010.

RMA will be accepted until April 27, 2011.

Products Affected

Standard products affected include all SCDs associated with the part numbers listed in this notice.

- 1. XC1700 Series PROMs Products Affected
- 2. XC5200 Products Affected
- 3. Appendix 'A' Vendor HQ Parts Affected
- 4. Appendix 'B' SCD Parts Affected

Notes: SCD part numbers based on the base part numbers in Appendix "A" will also be affected and are listed in that Appendix. Appendix "B" includes SCD part numbers based on the devices in the body of this document along with some specific SCD part numbers that are being discontinued without discontinuance of their base parts. Please contact your local Xilinx sales representative if you have additional questions regarding the part discontinuances.



Table 1: XC1700 Series PROMs Products Affected

Part Number	Replacement Part	Part Number	Replacement P
C1701PC20C	No direct replacement	XC17256EVO8C1	No direct replacemen
XC1701PC20I	No direct replacement	XC17256EVO8I ¹	No direct replacemen
XC1701PD8C	No direct replacement	XC1736EPC20C1	No direct replacemen
XC1701PD8I	No direct replacement	XC1736EPC20I ¹	No direct replacemen
XC1701SO20C	No direct replacement	XC1736EPD8C ¹	No direct replacemen
XC1701SO20I	No direct replacement	XC1736EPD8I ¹	No direct replacemen
XC17128ELPC20C ¹	No direct replacement	XC1736EPDG8C ¹	No direct replacemen
XC17128ELPC20I ¹	No direct replacement	XC1736ESO8C ¹	No direct replacemen
XC17128ELPD8C ¹	No direct replacement	XC1736ESO8I ¹	No direct replacemen
XC17128ELPD8I ¹	No direct replacement	XC1736ESOG8C ¹	No direct replacement
XC17128ELVO8C ¹	No direct replacement	XC1736EVO8C ¹	No direct replacement
XC17128ELVO8I ¹	No direct replacement	XC1736EVO8I ¹	No direct replacement
XC17128EPC20C1	No direct replacement	XC1736EVOG8C ¹	No direct replacement
XC17128EPC20I ¹	No direct replacement	XC1765ELPC20C ¹	No direct replacement
XC17128EPCG20C ¹	No direct replacement	XC1765ELPC20I ¹	No direct replacement
XC17128EPD8C ¹	No direct replacement	XC1765ELPD8C ¹	No direct replacemen
XC17128EPD8I ¹	No direct replacement	XC1765ELPD8I ¹	No direct replacemen
XC17128EPDG8C ¹	No direct replacement	XC1765ELSO8C ¹	No direct replacemen
XC17128EVO8C ¹	No direct replacement	XC1765ELSO8I ¹	No direct replacemen
XC17128EVO8I ¹	No direct replacement	XC1765ELSOG8C ¹	No direct replacemen
XC17128EVOG8C ¹	No direct replacement	XC1765ELVO8C ¹	No direct replacemen
XC17256ELPC20C ¹	No direct replacement	XC1765ELVO8I ¹	No direct replacemen
XC17256ELPC20I ¹	No direct replacement	XC1765ELVOG8C ¹	No direct replacemen
XC17256ELPD8C ¹	No direct replacement	XC1765EPC20C ¹	No direct replacement
XC17256ELPD8I ¹	No direct replacement	XC1765EPC20I ¹	No direct replacement
XC17256ELVO8C ¹	No direct replacement	XC1765EPD8C ¹	No direct replacemen
XC17256ELVO8I ¹	No direct replacement	XC1765EPD8I ¹	No direct replacemen
XC17256EPC20C1	No direct replacement	XC1765EPDG8C ¹	No direct replacement
XC17256EPC20I ¹	No direct replacement	XC1765ESO8C ¹	No direct replacement
XC17256EPCG20C ¹	No direct replacement	XC1765ESO8I ¹	No direct replacemen
XC17256EPD8C ¹	No direct replacement	XC1765ESOG8C ¹	No direct replacemen
XC17256EPD8I ¹	No direct replacement	XC1765EVO8C ¹	No direct replacemen
XC17256EPDG8C ¹	No direct replacement	XC1765EVO8I ¹	No direct replacemen

Part Number	Replacement Part
XC17256EVO8C ¹	No direct replacement
XC17256EVO8I ¹	No direct replacement
XC1736EPC20C ¹	No direct replacement
XC1736EPC20I ¹	No direct replacement
XC1736EPD8C ¹	No direct replacement
XC1736EPD8I ¹	No direct replacement
XC1736EPDG8C ¹	No direct replacement
XC1736ESO8C ¹	No direct replacement
XC1736ESO8I ¹	No direct replacement
XC1736ESOG8C ¹	No direct replacement
XC1736EVO8C ¹	No direct replacement
XC1736EVO8I ¹	No direct replacement
XC1736EVOG8C ¹	No direct replacement
XC1765ELPC20C ¹	No direct replacement
XC1765ELPC20I ¹	No direct replacement
XC1765ELPD8C ¹	No direct replacement
XC1765ELPD8I ¹	No direct replacement
XC1765ELSO8C ¹	No direct replacement
XC1765ELSO8I ¹	No direct replacement
XC1765ELSOG8C ¹	No direct replacement
XC1765ELVO8C ¹	No direct replacement
XC1765ELVO8I ¹	No direct replacement
XC1765ELVOG8C ¹	No direct replacement
XC1765EPC20C ¹	No direct replacement
XC1765EPC20I ¹	No direct replacement
XC1765EPD8C ¹	No direct replacement
XC1765EPD8I ¹	No direct replacement
XC1765EPDG8C ¹	No direct replacement
XC1765ESO8C ¹	No direct replacement
XC1765ESO8I ¹	No direct replacement
XC1765ESOG8C ¹	No direct replacement
XC1765EVO8C ¹	No direct replacement
XC1765EVO8I ¹	No direct replacement

Note ¹ - Please refer to XCN09002 for the extension of Final Order and Delivery Dates.



Table 2: XC5200 Products Affected

Part Number	Replacement Part
XC5202-3PC84C	No direct replacement
XC5202-3PQ100C	No direct replacement
XC5202-3VQ100C	No direct replacement
XC5202-4PC84C	No direct replacement
XC5202-4PQ100C	No direct replacement
XC5202-4VQ100C	No direct replacement
XC5202-5PC84C	No direct replacement
XC5202-5PQ100C	No direct replacement
XC5202-5VQ100C	No direct replacement
XC5202-6PC84C	No direct replacement
XC5202-6PC84I	No direct replacement
XC5202-6PQ100C	No direct replacement
XC5202-6PQ100I	No direct replacement
XC5202-6PQG100C	No direct replacement
XC5202-6PQG100I	No direct replacement
XC5202-6VQ100C	No direct replacement
XC5202-6VQ100I	No direct replacement
XC5204-3PC84C	No direct replacement
XC5204-3PQ100C	No direct replacement
XC5204-3PQ160C	No direct replacement
XC5204-3TQ144C	No direct replacement
XC5204-3VQ100C	No direct replacement
XC5204-4PC84C	No direct replacement
XC5204-4PQ100C	No direct replacement
XC5204-4PQ160C	No direct replacement
XC5204-4TQ144C	No direct replacement
XC5204-4VQ100C	No direct replacement
XC5204-5PC84C	No direct replacement
XC5204-5PC84I	No direct replacement
XC5204-5PQ100C	No direct replacement
XC5204-5PQ100I	No direct replacement
XC5204-5PQ160C	No direct replacement
XC5204-5PQ160I	No direct replacement
XC5204-5PQG160C	No direct replacement
XC5204-5TQ144C	No direct replacement
XC5204-5TQ144I	No direct replacement
XC5204-5VQ100C	No direct replacement
XC5204-5VQ100I	No direct replacement
XC5204-6PC84C	No direct replacement
XC5204-6PC84I	No direct replacement
XC5204-6VQG100C	No direct replacement
XC5204-6PQ100C	No direct replacement
XC5204-6PQ100I	No direct replacement
XC5204-6PQ160C	No direct replacement
XC5204-6PQ160I	No direct replacement
XC5204-6PQG160C	No direct replacement
XC5204-6TQ144C	No direct replacement
XC5204-6TQ144I	No direct replacement
XC5204-6VQ100C	No direct replacement
XC5204-6VQ100I	No direct replacement
XC5206-3PQ160C	No direct replacement
XC5206-3PQ208C	No direct replacement
XC5206-3TQ144C	No direct replacement

Part Number	Replacement Part
XC5206-4PQ160C	No direct replacement
XC5206-4PQ208C	No direct replacement
XC5206-4TQ144C	No direct replacement
XC5206-5PQ160C	No direct replacement
XC5206-5PQ160I	No direct replacement
XC5206-5PQ208C	No direct replacement
XC5206-5PQ208I	No direct replacement
XC5206-5TQ144C	No direct replacement
XC5206-5TQ144I	No direct replacement
XC5206-6PQ160C	No direct replacement
XC5206-6TQ144I	No direct replacement
XC5206-6PQ160I XC5206-6PQ208C	No direct replacement
	No direct replacement
XC5206-6PQ208I	No direct replacement
XC5206-6PQG160C	No direct replacement
XC5206-6PQG208C	No direct replacement
XC5206-6TQ144C	No direct replacement
XC5210-3PC84C	No direct replacement
XC5210-3PQ160C	No direct replacement
XC5210-3PQ208C	No direct replacement
XC5210-3PQ240C	No direct replacement
XC5210-3TQ144C	No direct replacement
XC5210-4PC84C	No direct replacement
XC5210-4PQ160C	No direct replacement
XC5210-4PQ208C	No direct replacement
XC5210-4PQ240C	No direct replacement
XC5210-4TQ144C	No direct replacement
XC5210-5PC84C	No direct replacement
XC5210-5PC84I	No direct replacement
XC5210-5PQ160C	No direct replacement
XC5210-5PQ160I	No direct replacement
XC5210-5PQ208C	No direct replacement
XC5210-5PQ208I	No direct replacement
XC5210-5PQ240C	No direct replacement
XC5210-5PQ240I	No direct replacement
XC5210-5PQG208C	No direct replacement
XC5210-5TQ144C	No direct replacement
XC5210-5TQ144I	No direct replacement
XC5210-6PC84C	No direct replacement
XC5210-6PC84I	No direct replacement
XC5210-6PQ160C	No direct replacement
XC5210-6PQ160I	No direct replacement
XC5210-6PQ208C	No direct replacement
XC5210-6PQ208I	No direct replacement
XC5210-6PQ240C	No direct replacement
XC5210-6PQ240I	No direct replacement
XC5210-6PQG160C	No direct replacement
XC5210-6PQG208C	No direct replacement
XC5210-6PQG240C	No direct replacement
XC5210-6TQ144C	No direct replacement
XC5210-6TQ144I	No direct replacement
XC5215-3HQ208C	No direct replacement
XC5215-3PQ160C	No direct replacement



Table 2 (Continued): XC5200 Products Affected

Part Number	Replacement Part
XC5215-4BG225C	No direct replacement
XC5215-4HQ208C	No direct replacement
XC5215-4PQ160C	No direct replacement
XC5215-5HQ208C	No direct replacement
XC5215-5PQ160C	No direct replacement
XC5215-5PQG160C	No direct replacement
XC5215-6BG225C	No direct replacement

Part Number	Replacement Part
XC5215-6BG225I	No direct replacement
XC5215-6HQ208C	No direct replacement
XC5215-6HQ208I	No direct replacement
XC5215-6HQG208C	No direct replacement
XC5215-6PQ160C	No direct replacement
XC5215-6PQ160I	No direct replacement



Appendix 'A' - Vendor HQ Parts Affected

Table 3: Virtex Products Affected

Part Number	Replacement Part
XCV400-4HQ240C	No replacement
XCV400-4HQ240I	No replacement
XCV400-5HQ240C	No replacement
XCV400-5HQ240I	No replacement
XCV400-6HQ240C	No replacement
XCV600-4HQ240C	No replacement
XCV600-4HQ240I	No replacement
XCV600-5HQ240C	No replacement
XCV600-5HQ240I	No replacement
XCV600-6HQ240C	No replacement

Part Number	Replacement Part
XCV800-4HQ240C	No replacement
XCV800-4HQ240I	No replacement
XCV800-5HQ240C	No replacement
XCV800-5HQ240I	No replacement
XCV800-6HQ240C	No replacement
XCV400-4HQ240C0729	No replacement
XCV400-5HQ240C0729	No replacement
XCV600-4HQ240C0729	No replacement
XCV600-6HQ240C0729	No replacement
XCV800-4HQ240C0729	No replacement

Table 4: Virtex-E Products Affected

Part Number	Replacement Part
XCV600E-6HQ240C	No replacement
XCV600E-6HQ240I	No replacement
XCV600E-7HQ240C	No replacement
XCV600E-7HQ240I	No replacement
XCV600E-8HQ240C	No replacement
XCV1000E-6HQ240C	No replacement
XCV1000E-6HQ240I	No replacement
XCV1000E-7HQ240C	No replacement

Part Number	Replacement Part
XCV1000E-7HQ240I	No replacement
XCV1000E-8HQ240C	No replacement
XCV1000E-6HQ240C0773	No replacement
XCV1000E-6HQ240I0773	No replacement
XCV1000E-6HQ240I0909	No replacement
XCV1000E-6HQ240I0939	No replacement
XCV1000E-8HQ240C0773	No replacement

Table 5: XC4000E Products Affected

Part Number	Replacement Part
XC4013E-1HQ208C	No direct replacement
XC4013E-1HQ240C	No direct replacement
XC4013E-2HQ208C	No direct replacement
XC4013E-2HQ208I	No direct replacement
XC4013E-2HQ240C	No direct replacement
XC4013E-2HQ240I	No direct replacement
XC4013E-3HQ208C	No direct replacement
XC4013E-3HQ208I	No direct replacement
XC4013E-3HQ240C	No direct replacement
XC4013E-3HQ240I	No direct replacement
XC4013E-4HQ208C	No direct replacement

Part Number	Replacement Part
XC4013E-4HQ208I	No direct replacement
XC4013E-4HQ240C	No direct replacement
XC4013E-4HQ240I	No direct replacement
XC4020E-1HQ240C	No direct replacement
XC4020E-2HQ240C	No direct replacement
XC4020E-2HQ240I	No direct replacement
XC4020E-3HQ240C	No direct replacement
XC4020E-3HQ240I	No direct replacement
XC4020E-4HQ240C	No direct replacement
XC4020E-4HQ240I	No direct replacement



Table 6: XC4000XLA Products Affected

Part Number	Replacement Part
XC4028XLA-07HQ240C	No direct replacement
XC4028XLA-08HQ240C	No direct replacement
XC4028XLA-08HQ240I	No direct replacement
XC4028XLA-09HQ240C	No direct replacement
XC4028XLA-09HQ240I	No direct replacement
XC4036XLA-07HQ208C	No direct replacement
XC4036XLA-07HQ240C	No direct replacement
XC4036XLA-08HQ208C	No direct replacement
XC4036XLA-08HQ208I	No direct replacement
XC4036XLA-08HQ240C	No direct replacement
XC4036XLA-08HQ240I	No direct replacement
XC4036XLA-09HQ208C	No direct replacement
XC4036XLA-09HQ208I	No direct replacement
XC4036XLA-09HQ240C	No direct replacement
XC4036XLA-09HQ240I	No direct replacement
XC4052XLA-07HQ160C	No direct replacement
XC4052XLA-07HQ208C	No direct replacement
XC4052XLA-07HQ240C	No direct replacement

Part Number	Replacement Part
XC4052XLA-08HQ160C	No direct replacement
XC4052XLA-08HQ160I	No direct replacement
XC4052XLA-08HQ208C	No direct replacement
XC4052XLA-08HQ208I	No direct replacement
XC4052XLA-08HQ240C	No direct replacement
XC4052XLA-08HQ240I	No direct replacement
XC4052XLA-09HQ160C	No direct replacement
XC4052XLA-09HQ160I	No direct replacement
XC4052XLA-09HQ208C	No direct replacement
XC4052XLA-09HQ208I	No direct replacement
XC4052XLA-09HQ240C	No direct replacement
XC4052XLA-09HQ240I	No direct replacement
XC4085XLA-07HQ240C	No direct replacement
XC4085XLA-08HQ240C	No direct replacement
XC4085XLA-08HQ240I	No direct replacement
XC4085XLA-09HQ240C	No direct replacement
XC4085XLA-09HQ240I	No direct replacement

Table 7: CPLD Products Affected

Part Number	Replacement Part
XC95216-10HQ208C	No direct replacement
XC95216-10HQ208I	No direct replacement
XC95216-15HQ208C	No direct replacement
XC95216-15HQ208I	No direct replacement
XC95216-20HQ208C	No direct replacement
XC95216-20HQ208I	No direct replacement

Part Number	Replacement Part
XC95288-10HQ208C	No direct replacement
XC95288-15HQ208C	No direct replacement
XC95288-15HQ208I	No direct replacement
XC95288-20HQ208C	No direct replacement
XC95288-20HQ208I	No direct replacement

Table 8: Aerospace& Defense 'XQ' Products Affected

Part Number	Replacement Part
XQ4028EX-4HQ240N	No direct replacement
XQ4036XL-3HQ240N	No direct replacement
XQ4062XL-3HQ240N0520	No direct replacement

Part Number	Replacement Part
XQV600-4HQ240N	No direct replacement
5962-9850901NTB	No direct replacement



Appendix 'B' - SCD Parts Affected

Table 9: XC1700 Series PROMS Products Affected

Part Number	Replacement Part
1 dit Hailibei	rtopiacoment i art
XC1701PC20C0280	No direct replacement
XC1701PC20I0100	No direct replacement
XC1701PD8C0280	No direct replacement
XC17128EPC20C01001	No direct replacement
XC17128EPC20C02801	No direct replacement
XC17128EPC20I0100 ¹	No direct replacement
XC17128EPD8C0280 ¹	No direct replacement
XC17256ELPC20I0100 ¹	No direct replacement
XC17256ELVO8C01001	No direct replacement
XC17256ELVO8C02801	No direct replacement
XC17256ELVO8C05301	No direct replacement
XC17256EPC20C05201	No direct replacement
XC17256EPC20I0100 ¹	No direct replacement
XC17256EPD8C0280 ¹	No direct replacement
XC17256EPD8C0520 ¹	No direct replacement

Part Number	Replacement Part
XC17256EVO8I01001	No direct replacement
XC1736EPC20C0100 ¹	No direct replacement
XC1736EPC20C0280 ¹	No direct replacement
XC1736EPC20C0520 ¹	No direct replacement
XC1736EPC20I0100 ¹	No direct replacement
XC1736EPD8C0280 ¹	No direct replacement
XC1736EPD8C0520 ¹	No direct replacement
XC1736ESO8C01001	No direct replacement
XC1736ESO8I01001	No direct replacement
XC1765EPC20C0100 ¹	No direct replacement
XC1765EPC20I0100 ¹	No direct replacement
XC1765EPD8C0280 ¹	No direct replacement
XC1765EPD8C0520 ¹	No direct replacement
XC1765EVO8I01001	No direct replacement

Note ¹ - Please refer to XCN09002 for the extension of Final Order and Delivery Dates.

Table 10: XC5200 Products Affected

Part Number	Replacement Part
XC5202-6PC84C0100	No direct replacement
XC5202-6PC84I0100	No direct replacement
XC5202-6PQ100C0100	No direct replacement
XC5202-6PQ100C0584	No direct replacement
XC5202-6PQ100I0437	No direct replacement
XC5204-4PQ100C0262	No direct replacement
XC5204-5PQ160C0262	No direct replacement
XC5204-5PQ160C0280	No direct replacement
XC5204-6PC84I0090	No direct replacement
XC5204-6PQ160C0280	No direct replacement

Part Number	Replacement Part
XC5204-6PQ160C0439	No direct replacement
XC5204-6PQ160C0585	No direct replacement
XC5206-5PQ160C0280	No direct replacement
XC5206-5TQ144C0262	No direct replacement
XC5206-6PQ208C0439	No direct replacement
XC5210-4PQ208C0262	No direct replacement
XC5210-6PC84I0090	No direct replacement
XC5210-6PQ160C0262	No direct replacement
XC5210-6PQ208C0439	No direct replacement

Table 11: Virtex-II Products Affected

Part Number	Replacement Part
XC2V80-4CSG144C0997	XC2V80-4CSG144C
XC2V250-4CSG144C0997	XC2V250-4CSG144C

Part Number	Replacement Part
XC2V6000-5BF957C0703	XC2V6000-5BF957C

Table 12: Spartan-3AN Products Affected

Part Number	Replacement Part	
XC3S1400AN-4FG676C4100	XC3S1400AN-4FG676C	
XC3S1400AN-4FG676I4100	XC3S1400AN-4FG676I	
XC3S400AN-4FG400C4100	XC3S400AN-4FG400C	

Part Number	Replacement Part
XC3S400AN-4FG400I4100	XC3S400AN-4FG400I
XC3S700AN-4FG484C4100	XC3S700AN-4FG484C
XC3S700AN-4FG484I4100	XC3S700AN-4FG484I



Response

Customers are requested to place last-time-buy orders in a timely manner prior to the key dates listed above to avoid product availability issues. If you anticipate that your last time buy requirements will exceed the current rate, please provide your Xilinx Sales Representative with a forecast of the requirements. All orders will be supported on a first-come, first-served basis with the non-cancellable and non-returnable (NCNR) condition. For additional information or questions, contact your local Xilinx Sales representative.

Important Notice: Xilinx Customer Notifications (XCNs, XDNs, and Quality Alerts) can be delivered via e-mail alerts sent by the Support website (http://www.xilinx.com/support). Register today and personalize your "Documentation and Design Advisory Alerts" area to include Customer Notifications. Xilinx Support provides many benefits, including the ability to receive alerts for new and updated information about specific products, as well as alerts for other publications such as data sheets, errata, application notes, etc. For information on how to sign up, refer to Xilinx Answer Record 18683.

Revision History

The following table shows the revision history for this document.

Date	Version	Revision
04/27/09	1.0	Initial release.
06/01/09	1.1	Removed XC2S400E-6FT256C0944, XC2S50-5TQ144I0725, and XC2S600E-6FGG676C4022. Table 12 became Table 11, Table 13 became Table 12. Minor text edits in the Description section.
06/15/09	1.2	Added 5962-9850901NTB to Table 8 Aerospace & Defense "XQ" part list.
11/23/09	1.3	Removed XQ4062XL-3HQ240N and XQ4013E-3HQ240N from <u>Table 8</u> . These two parts have already been PDN'd on XCN07003 and XCN07010.
12/01/09	1.3.1	Minor typo correction on <u>Table 8</u> to correct from 5692-9850901NTB to 5962-9850901NTB.
04/02/10	1.4	Removed XCV600E-6HQ240C0773, XCV600E-6HQ240I0773 and XCV600E-8HQ240C0773 from Table 4. These parts have already been PDN'd on XCN08011.
04/26/10	1.4.1	Minor updates to add footnote to <u>Table 1</u> and <u>Table 9</u> .
07/19/10	1.4.2	Revised to reflect the extension of XCN09002 (i.e. duplicate) on <u>Table 1</u> .

Notice of Disclaimer

THE XILINX HARDWARE FPGA AND CPLD DEVICES REFERRED TO HEREIN ("PRODUCTS") ARE SUBJECT TO THE TERMS AND CONDITIONS OF THE XILINX LIMITED WARRANTY WHICH CAN BE VIEWED AT http://www.xilinx.com/warranty.htm. THIS LIMITED WARRANTY DOES NOT EXTEND TO ANY USE OF PRODUCTS IN AN APPLICATION OR ENVIRONMENT THAT IS NOT WITHIN THE SPECIFICATIONS STATED ON THE XILINX DATA SHEET. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. PRODUCTS ARE NOT DESIGNED OR INTENDED TO BE FAIL-SAFE, OR FOR USE IN ANY APPLICATION REQUIRING FAIL-SAFE PERFORMANCE, SUCH AS LIFESUPPORT OR SAFETY DEVICES OR SYSTEMS, OR ANY OTHER APPLICATION THAT INVOKES THE POTENTIAL RISKS OF DEATH, PERSONAL INJURY OR PROPERTY OR ENVIRONMENTAL DAMAGE ("CRITICAL APPLICATIONS"). USE OF PRODUCTS IN CRITICAL APPLICATIONS IS AT THE SOLE RISK OF CUSTOMER, SUBJECT TO APPLICABLE LAWS AND REGULATIONS. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.