



March 3, 2011

PCN Number: 1103

PCN Change Level: Minor

Subject: Programming Software Enhancement for eX Product Family

Dear Customer,

Microsemi has implemented programming enhancements for all the products in the eX product family. Please refer to Table 1 for a list of affected devices.

Programming of Microsemi antifuse FPGAs using Silicon Sculptor II and 3 consists of two main processes: programming the antifuses and running end of programming (EOP) tests. The EOP tests, which are embedded in the Silicon Sculptor programming software, consist of a number of checks that confirm the integrity of the device. In Silicon Sculptor programming software v5.12, Microsemi has implemented enhancements to the EOP tests to help validate the integrity of a programmed device more effectively.

Microsemi recommends that customers upgrade to the latest version of the Silicon Sculptor software to take advantage of these enhancements. The Silicon Sculptor software can be downloaded from the Microsemi SoC Products Group website:

[http://www.actel.com/download/program\\_debug/ss/files.aspx](http://www.actel.com/download/program_debug/ss/files.aspx)

Table 1 lists the affected devices.

**Table 1: Affected Devices**

eX		
eX128-CS128	eX128-PTQ64	eX256-FCS128
eX128-CS128A	eX128-PTQ64I	eX256-FCS180
eX128-CS128I	eX128-PTQG100	eX256-FCSG128
eX128-CS49	eX128-PTQG100I	eX256-FCSG180
eX128-CS49A	eX128-PTQG64	eX256-FTQ100
eX128-CS49I	eX128-PTQG64I	eX256-FTQG100
eX128-CSG128	eX128-TQ100	eX256-PCS128
eX128-CSG128A	eX128-TQ100A	eX256-PCS128I
eX128-CSG128I	eX128-TQ100I	eX256-PCS180
eX128-CSG49	eX128-TQ64	eX256-PCS180I
eX128-CSG49A	eX128-TQ64A	eX256-PCSG128



**Table 1: Affected Devices**

eX128-CSG49I	eX128-TQ64I	eX256-PCSG128I
eX128-FCS128	eX128-TQG100	eX256-PCSG180
eX128-FCS49	eX128-TQG100A	eX256-PCSG180I
eX128-FCSG128	eX128-TQG100I	eX256-PTQ100
eX128-FCSG49	eX128-TQG64	eX256-PTQ100I
eX128-FTQ100	eX128-TQG64A	eX256-PTQG100
eX128-FTQ64	eX128-TQG64I	eX256-PTQG100I
eX128-FTQG100	eX256-CS128	eX256-TQ100
eX128-FTQG64	eX256-CS128A	eX256-TQ100A
eX128-PCS128	eX256-CS128I	eX256-TQ100I
eX128-PCS128I	eX256-CS180	eX256-TQG100
eX128-PCS49	eX256-CS180A	eX256-TQG100A
eX128-PCS49I	eX256-CS180I	eX256-TQG100I
eX128-PCSG128	eX256-CSG128	eX64-CS128
eX128-PCSG128I	eX256-CSG128A	eX64-CS128A
eX128-PCSG49	eX256-CSG128I	eX64-CS128I
eX128-PCSG49I	eX256-CSG180	eX64-CS49
eX128-PTQ100	eX256-CSG180A	eX64-CS49A
eX128-PTQ100I	eX256-CSG180I	eX64-CS49I
eX64-CSG128	eX64-PCS128	eX64-PTQG64
eX64-CSG128A	eX64-PCS128I	eX64-PTQG64I
eX64-CSG128I	eX64-PCS49	eX64-TQ100
eX64-CSG49	eX64-PCS49I	eX64-TQ100A
eX64-CSG49A	eX64-PCSG128	eX64-TQ100I
eX64-CSG49I	eX64-PCSG128I	eX64-TQ64
eX64-FCS128	eX64-PCSG49	eX64-TQ64A
eX64-FCS49	eX64-PCSG49I	eX64-TQ64I
eX64-FCSG128	eX64-PTQ100	eX64-TQG100
eX64-FCSG49	eX64-PTQ100I	eX64-TQG100A



**Table 1: Affected Devices**

eX64-FTQ100	eX64-PTQ64	eX64-TQG100I
eX64-FTQ64	eX64-PTQ64I	eX64-TQG64
eX64-FTQG100	eX64-PTQG100	eX64-TQG64A
eX64-FTQG64	eX64-PTQG100I	eX64-TQG64I

If you have any questions, please contact Microsemi's SoC Products Group Technical Support at [soc\\_tech@microsemi.com](mailto:soc_tech@microsemi.com).

Regards,

Microsemi Corporation