



February 25, 2011

PCN Number: 1101

PCN Change Level: Minor

Subject: Programming Software Enhancement for SX-A Product Families

Dear Customer,

Microsemi has implemented programming enhancements for all the products in the SX-A product families. Please refer to Table 1 for a list of affected devices.

Programming of Microsemi antifuse FPGAs using Silicon Sculptor II and Silicon Sculptor 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 v5.10.1, 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:

http://www.actel.com/download/program_debug/ss/files.aspx

Table 1 • Affected Devices

A54SX32A-CQ208B	A54SX16A-FGG256A	A54SX32A-FFG144
A54SX32A-1CQ208B	A54SX16A-FGG256I	A54SX32A-FFG256
A54SX32A-CQ256B	A54SX16A-FGG256M	A54SX32A-FFG484
A54SX32A-1CQ256B	A54SX16A-FPQ208	A54SX32A-FFGG144
A54SX72A-CQ208B	A54SX16A-FPQG208	A54SX32A-FFGG256
A54SX72A-1CQ208B	A54SX16A-FTQ100	A54SX32A-FFGG484
A54SX72A-CQ256B	A54SX16A-FTQ144	A54SX32A-FG144
A54SX72A-1CQ256B	A54SX16A-FTQG100	A54SX32A-FG144A
A54SX08A-1FG144	A54SX16A-FTQG144	A54SX32A-FG144I
A54SX08A-1FG144I	A54SX16A-PQ208	A54SX32A-FG144M
A54SX08A-1FGG144	A54SX16A-PQ208A	A54SX32A-FG256
A54SX08A-1FGG144I	A54SX16A-PQ208I	A54SX32A-FG256A
A54SX08A-1PQ208	A54SX16A-PQ208M	A54SX32A-FG256I



Table 1 • Affected Devices

A54SX08A-1PQG208I	A54SX16A-PQG208	A54SX32A-FG256M
A54SX08A-1PQG208	A54SX16A-PQG208A	A54SX32A-FG484
A54SX08A-1PQG208I	A54SX16A-PQG208I	A54SX32A-FG484I
A54SX08A-1TQ100	A54SX16A-PQG208M	A54SX32A-FG484M
A54SX08A-1TQ100I	A54SX16A-TQ100	A54SX32A-FGG144
A54SX08A-1TQ144	A54SX16A-TQ100A	A54SX32A-FGG144A
A54SX08A-1TQ144I	A54SX16A-TQ100I	A54SX32A-FGG144I
A54SX08A-1TQG100	A54SX16A-TQ100M	A54SX32A-FGG144M
A54SX08A-1TQG100I	A54SX16A-TQ144	A54SX32A-FGG256
A54SX08A-1TQG144	A54SX16A-TQ144A	A54SX32A-FGG256A
A54SX08A-1TQG144I	A54SX16A-TQ144I	A54SX32A-FGG256I
A54SX08A-2FG144	A54SX16A-TQ144M	A54SX32A-FGG256M
A54SX08A-2FG144I	A54SX16A-TQG100	A54SX32A-FGG484
A54SX08A-2FGG144	A54SX16A-TQG100A	A54SX32A-FGG484I
A54SX08A-2FGG144I	A54SX16A-TQG100I	A54SX32A-FGG484M
A54SX08A-2PQ208	A54SX16A-TQG100M	A54SX32A-FPQ208
A54SX08A-2PQ208I	A54SX16A-TQG144	A54SX32A-FPQG208
A54SX08A-2PQG208	A54SX16A-TQG144A	A54SX32A-FTQ100
A54SX08A-2PQG208I	A54SX16A-TQG144I	A54SX32A-FTQ144
A54SX08A-2TQ100	A54SX16A-TQG144M	A54SX32A-FTQ176
A54SX08A-2TQ100I	A54SX32A-1BG329	A54SX32A-FTQG100
A54SX08A-2TQ144	A54SX32A-1BG329I	A54SX32A-FTQG144
A54SX08A-2TQ144I	A54SX32A-1BG329M	A54SX32A-FTQG176
A54SX08A-2TQG100	A54SX32A-1BGG329	A54SX32A-PQ208
A54SX08A-2TQG100I	A54SX32A-1BGG329I	A54SX32A-PQ208A
A54SX08A-2TQG144	A54SX32A-1BGG329M	A54SX32A-PQ208I
A54SX08A-2TQG144I	A54SX32A-1CQ208	A54SX32A-PQ208M
A54SX08A-FFG144	A54SX32A-1CQ208B	A54SX32A-PQG208
A54SX08A-FFGG144	A54SX32A-1CQ208M	A54SX32A-PQG208A
A54SX08A-FG144	A54SX32A-1CQ256	A54SX32A-PQG208I



Table 1 • Affected Devices

A54SX08A-FG144A	A54SX32A-1CQ256B	A54SX32A-PQG208M
A54SX08A-FG144I	A54SX32A-1CQ256M	A54SX32A-TQ100
A54SX08A-FGG144	A54SX32A-1CQ84	A54SX32A-TQ100A
A54SX08A-FGG144A	A54SX32A-1CQ84B	A54SX32A-TQ100I
A54SX08A-FGG144I	A54SX32A-1CQ84M	A54SX32A-TQ100M
A54SX08A-FPQ208	A54SX32A-1FG144	A54SX32A-TQ144
A54SX08A-FPQG208	A54SX32A-1FG144I	A54SX32A-TQ144A
A54SX08A-FTQ100	A54SX32A-1FG144M	A54SX32A-TQ144I
A54SX08A-FTQ144	A54SX32A-1FG256	A54SX32A-TQ144M
A54SX08A-FTQG100	A54SX32A-1FG256I	A54SX32A-TQ176
A54SX08A-FTQG144	A54SX32A-1FG256M	A54SX32A-TQ176I
A54SX08A-PQ208	A54SX32A-1FG484	A54SX32A-TQ176M
A54SX08A-PQ208A	A54SX32A-1FG484I	A54SX32A-TQG100
A54SX08A-PQ208I	A54SX32A-1FG484M	A54SX32A-TQG100A
A54SX08A-PQG208	A54SX32A-1FGG144	A54SX32A-TQG100I
A54SX08A-PQG208A	A54SX32A-1FGG144I	A54SX32A-TQG100M
A54SX08A-PQG208I	A54SX32A-1FGG144M	A54SX32A-TQG144
A54SX08A-TQ100	A54SX32A-1FGG256	A54SX32A-TQG144A
A54SX08A-TQ100A	A54SX32A-1FGG256I	A54SX32A-TQG144I
A54SX08A-TQ100I	A54SX32A-1FGG256M	A54SX32A-TQG144M
A54SX08A-TQ144	A54SX32A-1FGG484	A54SX32A-TQG176
A54SX08A-TQ144A	A54SX32A-1FGG484I	A54SX32A-TQG176I
A54SX08A-TQ144I	A54SX32A-1FGG484M	A54SX32A-TQG176M
A54SX08A-TQG100	A54SX32A-1PQ208	A54SX72A-1CQ208
A54SX08A-TQG100A	A54SX32A-1PQ208I	A54SX72A-1CQ208B
A54SX08A-TQG100I	A54SX32A-1PQ208M	A54SX72A-1CQ208M
A54SX08A-TQG144	A54SX32A-1PQG208	A54SX72A-1CQ256
A54SX08A-TQG144A	A54SX32A-1PQG208I	A54SX72A-1CQ256B
A54SX08A-TQG144I	A54SX32A-1PQG208M	A54SX72A-1CQ256M
A54SX16A-1FG144	A54SX32A-1TQ100	A54SX72A-1FG256



Table 1 • Affected Devices

A54SX16A-1FG144I	A54SX32A-1TQ100I	A54SX72A-1FG256I
A54SX16A-1FG144M	A54SX32A-1TQ100M	A54SX72A-1FG256M
A54SX16A-1FG256	A54SX32A-1TQ144	A54SX72A-1FG484
A54SX16A-1FG256I	A54SX32A-1TQ144I	A54SX72A-1FG484I
A54SX16A-1FG256M	A54SX32A-1TQ144M	A54SX72A-1FG484M
A54SX16A-1FGG144	A54SX32A-1TQ176	A54SX72A-1FGG256
A54SX16A-1FGG144I	A54SX32A-1TQ176I	A54SX72A-1FGG256I
A54SX16A-1FGG144M	A54SX32A-1TQ176M	A54SX72A-1FGG256M
A54SX16A-1FGG256	A54SX32A-1TQG100	A54SX72A-1FGG484
A54SX16A-1FGG256I	A54SX32A-1TQG100I	A54SX72A-1FGG484I
A54SX16A-1FGG256M	A54SX32A-1TQG100M	A54SX72A-1FGG484M
A54SX16A-1PQ208	A54SX32A-1TQG144	A54SX72A-1PQ208
A54SX16A-1PQ208I	A54SX32A-1TQG144I	A54SX72A-1PQ208I
A54SX16A-1PQ208M	A54SX32A-1TQG144M	A54SX72A-1PQ208M
A54SX16A-1PQG208	A54SX32A-1TQG176	A54SX72A-1PQG208
A54SX16A-1PQG208I	A54SX32A-1TQG176I	A54SX72A-1PQG208I
A54SX16A-1PQG208M	A54SX32A-1TQG176M	A54SX72A-1PQG208M
A54SX16A-1TQ100	A54SX32A-2BG329	A54SX72A-2FG256
A54SX16A-1TQ100I	A54SX32A-2BG329I	A54SX72A-2FG256I
A54SX16A-1TQ100M	A54SX32A-2BGG329	A54SX72A-2FG484
A54SX16A-1TQ144	A54SX32A-2BGG329I	A54SX72A-2FG484I
A54SX16A-1TQ144I	A54SX32A-2FG144	A54SX72A-2FGG256
A54SX16A-1TQ144M	A54SX32A-2FG144I	A54SX72A-2FGG256I
A54SX16A-1TQG100	A54SX32A-2FG256	A54SX72A-2FGG484
A54SX16A-1TQG100I	A54SX32A-2FG256I	A54SX72A-2FGG484I
A54SX16A-1TQG100M	A54SX32A-2FG484	A54SX72A-2PQ208
A54SX16A-1TQG144	A54SX32A-2FG484I	A54SX72A-2PQ208I
A54SX16A-1TQG144I	A54SX32A-2FGG144	A54SX72A-2PQG208
A54SX16A-1TQG144M	A54SX32A-2FGG144I	A54SX72A-2PQG208I
A54SX16A-2FG144	A54SX32A-2FGG256	A54SX72A-CQ208



Table 1 • Affected Devices

A54SX16A-2FG144I	A54SX32A-2FGG256I	A54SX72A-CQ208B
A54SX16A-2FG256	A54SX32A-2FGG484	A54SX72A-CQ208M
A54SX16A-2FG256I	A54SX32A-2FGG484I	A54SX72A-CQ256
A54SX16A-2FGG144	A54SX32A-2PQ208	A54SX72A-CQ256B
A54SX16A-2FGG144I	A54SX32A-2PQ208I	A54SX72A-CQ256M
A54SX16A-2FGG256	A54SX32A-2PQG208	A54SX72A-FFG256
A54SX16A-2FGG256I	A54SX32A-2PQG208I	A54SX72A-FFG484
A54SX16A-2PQ208	A54SX32A-2TQ100	A54SX72A-FFGG256
A54SX16A-2PQ208I	A54SX32A-2TQ100I	A54SX72A-FFGG484
A54SX16A-2PQG208	A54SX32A-2TQ144	A54SX72A-FG256
A54SX16A-2PQG208I	A54SX32A-2TQ144I	A54SX72A-FG256A
A54SX16A-2TQ100	A54SX32A-2TQ176	A54SX72A-FG256I
A54SX16A-2TQ100I	A54SX32A-2TQ176I	A54SX72A-FG256M
A54SX16A-2TQ144	A54SX32A-2TQG100	A54SX72A-FG484
A54SX16A-2TQ144I	A54SX32A-2TQG100I	A54SX72A-FG484A
A54SX16A-2TQG100	A54SX32A-2TQG144	A54SX72A-FG484I
A54SX16A-2TQG100I	A54SX32A-2TQG144I	A54SX72A-FG484M
A54SX16A-2TQG144	A54SX32A-2TQG176	A54SX72A-FGG256
A54SX16A-2TQG144I	A54SX32A-2TQG176I	A54SX72A-FGG256A
A54SX16A-FFG144	A54SX32A-BG329	A54SX72A-FGG256I
A54SX16A-FFG256	A54SX32A-BG329I	A54SX72A-FGG256M
A54SX16A-FFGG144	A54SX32A-BG329M	A54SX72A-FGG484
A54SX16A-FFGG256	A54SX32A-BGG329	A54SX72A-FGG484A
A54SX16A-FG144	A54SX32A-BGG329I	A54SX72A-FGG484I
A54SX16A-FG144A	A54SX32A-BGG329M	A54SX72A-FGG484M
A54SX16A-FG144I	A54SX32A-CQ208	A54SX72A-FPQ208
A54SX16A-FG144M	A54SX32A-CQ208B	A54SX72A-FPQG208
A54SX16A-FG256	A54SX32A-CQ208M	A54SX72A-PQ208
A54SX16A-FG256A	A54SX32A-CQ256	A54SX72A-PQ208A
A54SX16A-FG256I	A54SX32A-CQ256B	A54SX72A-PQ208I



Table 1 • Affected Devices

A54SX16A-FG256M	A54SX32A-CQ256M	A54SX72A-PQ208M
A54SX16A-FGG144	A54SX32A-CQ84	A54SX72A-PQG208
A54SX16A-FGG144A	A54SX32A-CQ84B	A54SX72A-PQG208A
A54SX16A-FGG144I	A54SX32A-CQ84M	A54SX72A-PQG208I
A54SX16A-FGG144M	A54SX32A-FBG329	A54SX72A-PQG208M
A54SX16A-FGG256	A54SX32A-FBGG329	5962-0151801QYC
5962-0151802QYC	5962-0151802QXC	5962-0054302QYC
5962-0151801QXC	5962-0054301QYC	5962-0054301QXC
5962-0054302QXC		

If you have any questions, please contact Microsemi SoC Products Group Technical Support at soc_tech@microsemi.com.

Regards,

Microsemi Corporation