

Microsemi Corporation

December 18, 2019

Customer Notification No: CN19031

Subject: PolarFire FPGA Quad0/PCIE1

Description of Change

A PolarFire Quad0/PCIE1 use case in Libero SoC is not generated correctly, thus causing a device functional issue.

Reason for Change

x1 and x2 PCIe links using Quad0/PCIE1 prior to the 12.3 Libero SoC software release are generated incorrectly, thus requiring an update to correctly function.

Application Impact

Prior to the Libero SoC 12.3 release, a register field value corresponding to the Libero SoC PCI Express is incorrectly generated in a design using the QuadO PCIe1 using x1 or x2 topologies.

The issue manifests in hardware where the programmed PolarFire device will not enter into L0 PCIe link state. This condition will cause a PCIe system to not enumerate the device. This only impacts designs with x1 or x2 PCIe links using PCIE1. x4 PCIe links are not affected.

Action Required

- New designs created in Libero SoC v12.3 will not have any issue.
- If the design is created in Libero SoC v12.2 or an older release, open the design in Libero SoC v12.3. The Libero SoC Generate Design Initialization Data tool will be invalidated if the design is using PCIE1 in x1 and x2 modes. Rerun the Generate Design Initialization Data tool to correct the issue.

Products Affected

MPF100T-FCG484E	MPF100TL-FCG484E	MPF100T-1FCG484E
MPF100T-FCVG484E	MPF100TL-FCVG484E	MPF100T-1FCVG484E
MPF100T-FCSG325E	MPF100TL-FCSG325E	MPF100T-1FCSG325E
MPF200T-FCG484E	MPF200TL-FCG484E	MPF200T-1FCG484E
MPF200T-FCVG484E	MPF200TL-FCVG484E	MPF200T-1FCVG484E
MPF200T-FCG784E	MPF200TL-FCG784E	MPF200T-1FCG784E
MPF200T-FCSG325E	MPF200TL-FCSG325E	MPF200T-1FCSG325E
MPF200T-FCSG536E	MPF200TL-FCSG536E	MPF200T-1FCSG536E
MPF300T-FCG484E	MPF300TL-FCG484E	MPF300T-1FCG484E
MPF300T-FCVG484E	MPF300TL-FCVG484E	MPF300T-1FCVG484E
MPF300T-FCG784E	MPF300TL-FCG784E	MPF300T-1FCG784E
MPF300T-FCSG536E	MPF300TL-FCSG536E	MPF300T-1FCSG536E
MPF300T-FCG1152E	MPF300TL-FCG1152E	MPF300T-1FCG1152E



MPF500T-FCG784E	MPF500TL-FCG784E	MPF500T-1FCG784E
MPF500T-FCG1152E	MPF500TL-FCG1152E	MPF500T-1FCG1152E
MPF100T-FCG484I	MPF100TL-FCG484I	MPF100T-1FCG484I
MPF100T-FCVG484I	MPF100TL-FCVG484I	MPF100T-1FCVG484I
MPF100T-FCSG325I	MPF100TL-FCSG325I	MPF100T-1FCSG325I
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MPF300TLS-FCG784I	MPF300TS-FCG784I	MPF300TS-1FCG784I



MPF300TLS-FCSG536I	MPF300TS-FCSG536I	MPF300TS-1FCSG536I
MPF300TLS-FCG1152I	MPF300TS-FCG1152I	MPF300TS-1FCG1152I
MPF500TLS-FCG784I	MPF500TS-FCG784I	MPF500TS-1FCG784I
MPF500TLS-FCG1152I	MPF500TS-FCG1152I	MPF500TS-1FCG1152I

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*.

Regards,

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