

# CN19030: PolarFire FPGA TVS Temperature Flags Notification

December 18, 2019

## Description of Change

The temperature flags of the PolarFire FPGA Temperature-Voltage Sensor (TVS) are found to be triggering at wrong values when set by the user in Libero SoC.

## Reason for Change

The TRIGGER\_TEMP\_LOW and TRIGGER\_TEMP\_HIGH flags are not correctly handled when the TVS module is generated by Libero SoC TVS configurator.

## Application Impact

In the current Libero releases, the TVS generated IP core incorrectly programs the appropriate registers related to the TRIGGER\_TEMP\_LOW and TRIGGER\_TEMP\_HIGH flags. The incorrect register programming manifests as the flags triggered at incorrect points.

## Action Required

- After Libero 12.4 software release, download the updated PF\_TVS core from the IP catalog and regenerate the design with the updated core. See the Libero SoC 12.4 release notes for latest version of IP core.
- Prior to Libero 12.4 software release, see the [ER0218: PolarFire FPGA Production Devices Errata](#) for appropriate work around instructions.

## Products Affected

The following table lists the affected products.

|                  |                   |                   |
|------------------|-------------------|-------------------|
| 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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|--------------------|--------------------|---------------------|
| MPF200T-FCG484I    | MPF200TL-FCG484I   | MPF200T-1FCG484I    |
| MPF200T-FCVG484I   | MPF200TL-FCVG484I  | MPF200T-1FCVG484I   |
| MPF200T-FCG784I    | MPF200TL-FCG784I   | MPF200T-1FCG784I    |
| MPF200T-FCSG325I   | MPF200TL-FCSG325I  | MPF200T-1FCSG325I   |
| MPF200T-FCSG536I   | MPF200TL-FCSG536I  | MPF200T-1FCSG536I   |
| MPF300T-FCG484I    | MPF300TL-FCG484I   | MPF300T-1FCG484I    |
| MPF300T-FCVG484I   | MPF300TL-FCVG484I  | MPF300T-1FCVG484I   |
| MPF300T-FCG784I    | MPF300TL-FCG784I   | MPF300T-1FCG784I    |
| MPF300T-FCSG536I   | MPF300TL-FCSG536I  | MPF300T-1FCSG536I   |
| MPF300T-FCG1152I   | MPF300TL-FCG1152I  | MPF300T-1FCG1152I   |
| MPF500T-FCG784I    | MPF500TL-FCG784I   | MPF500T-1FCG784I    |
| MPF500T-FCG1152I   | MPF500TL-FCG1152I  | MPF500T-1FCG1152I   |
| MPF100TLS-FCG484I  | MPF100TSL-FCG484I  | MPF100TLS-1FCG484I  |
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### 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>.

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