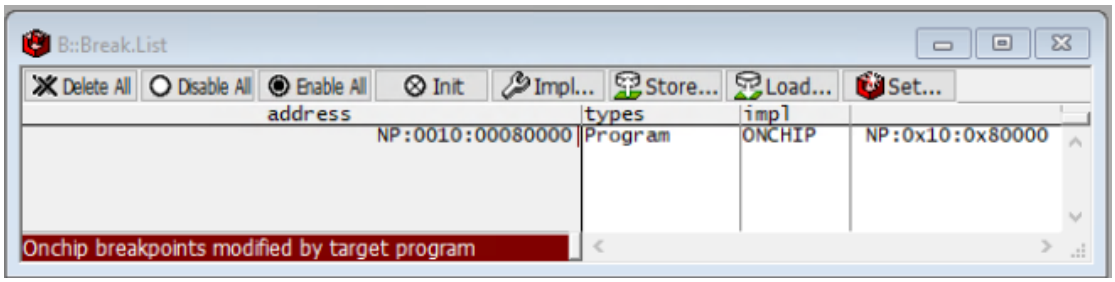
What does the error message “Onchip breakpoint modified by target program” mean?

2026-08-13 - Comments (0) - Intel® x86/x64

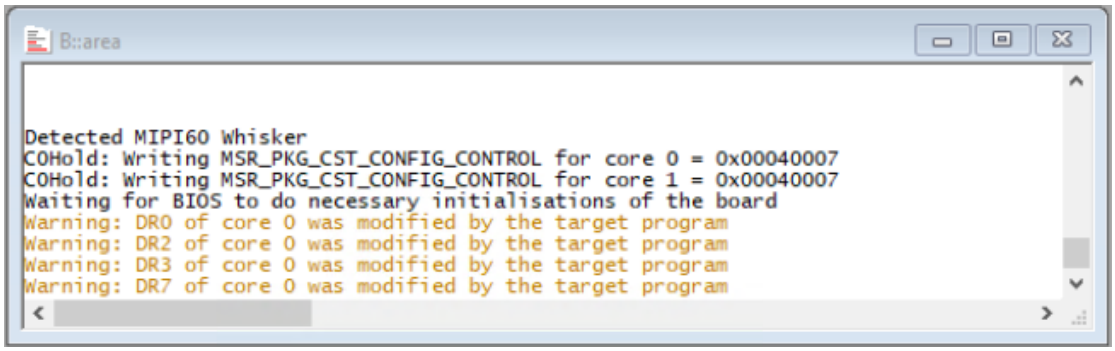
The debugger sets onchip breakpoints on Intel® x86/x64 processors using debug registers (DR0, DR1, DR2, DR3, DR7). However, these registers can also be accessed and modified by the target application. If this happens, it may lead to unexpected behavior, such as:

- The execution failing to stop at the intended breakpoint
- The program stopping at an unintended location

When the debugger detects that these registers have been modified by the target code, it displays the error message **“Onchip breakpoint modified by target program”** in the `Break.List` window:



Additionally, warning messages in the `AREA` windows indicate which registers have been altered:



Solution:

To prevent this issue, modify the target application to ensure that these registers are not altered. The command `TrOnchip.Set GeneralDetect ON` can be used here to stop the target execution each time these registers are modified by the target code.

If modifying the target application is not an option, consider using software breakpoints as an alternative to onchip breakpoints.