

Thermal Instability in Timing Operations

Supplemental Materials

SPARK X

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Overview

Timing operations handled by the internal oscillator are extremely temperature sensitive. This is necessary to the operation of systems collocated on the die. An external clock source is recommended for timing operations on the scale of hundredths of an hour or more. Additionally, exposure to extreme temperatures can cause interruption of the program counter and potential memory corruption.

If you intend on using the internal oscillator for non-critical timing or counting operations, it is recommended to operate the device as near to 22°C as possible.

Timing Deviation

