CORECLK.MAC

A Command Language Macro Application Note

OVERVIEW

SourcePoint's powerful command language is extremely useful for automating tasks. It uses an interpreted scripting language that is very similar to the common C programming language. CORECLK.MAC is an example of a SourcePoint™ command language macro. Its purpose is to determine and display the core clock frequency of the target processor.

THEORY OF OPERATION

This macro makes use of the processor's Time Stamp Counter (TSC) which is accessible using ASSET InterTech Arium probes and trace port analyzers. The TSC is first read and stored into a variable. A pause of five seconds is performed using a SLEEP command followed by a second read of the TSC. Since the TSC is incremented at the core clock rate, the core clock frequency can be calculated by dividing the difference of the two TSC readings by 5,000,000.

The macro is loaded from within SourcePoint by clicking on: File|Macro|Load Macro

It is then invoked from the command window by entering the following at the command prompt:

coreclk<cr>