Application Report
SPRABE5–June 2010

AM/DM37x Power Estimation Spreadsheet

ARM MPU Applications

ABSTRACT

This article has been contributed to the TI Developer Wiki. To see the most recently updated version or to contribute, visit this topic at:

http://processors.wiki.ti.com/index.php/AM/DM37x_Power_Estimation_Spreadsheet

This article discusses the power consumption of the Texas Instruments AM/DM37x high-performance applications and multimedia processor. Power consumption on the AM/DM37x device is highly application-dependent, therefore, a spreadsheet is provided to model power consumption for a user's application and to present some measured scenarios. Version 1.x of the spreadsheet supports configurability of device core modules such as the ARM® Cortex™-A8, DSP and most peripherals. The data in the accompanying spreadsheet represents measurements and estimates for strong units, which are indicative of the expected maximums of power consumption for production units. Thus, the spreadsheet values can be used for board thermal analysis and power supply design as a maximum long-term average. The spreadsheet does not represent power savings possible with AM/DM37x SmartReflex™ features such dynamic power switching (DPS) or adaptive voltage scaling (AVS).

The data presented in the Version 1.x power estimation spreadsheet are based on measurements performed on DM3730 revision 1.0 silicon, as well as estimates.

The spreadsheet discussed in this application report can be downloaded from http://www.ti.com/lit/zip/SPRABE5.

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