

Thermal Calibration Guide for G5 computers

During booting Apple Service Diagnostic (OF) will check the UUT to determine if calibration is required. If it is required then a thermal calibration window appears displaying what conditions triggered a re-calibration alert. Follow the instructions to either replace a CPU or take some other corrective action. When a re-calibration is required press the Calibrate button to proceed with the automated calibration process. If calibration fails the result will be given as "Calibration Failed" displayed in red text. Also displayed will be one of the following error strings:

ERROR STRING

REPAIR ACTION

TaFS out of range	Replace Processor.
Processor 0 ID EEPROM checksum error.	Replace Processor CPU0.
Processor 0 Target Voltage error.	Replace Processor.
Processor 1 ID EEPROM checksum error.	Replace Processor CPU1.
Processor 1 Target Voltage error.	Replace Processor.
Processor Current error.	Replace Processor.
Processor Target Frequency error.	Replace Processor.
Processor Temperature error.	Replace Processor.
Ambient Temperature sensor not detected error.	Check or replace temperature inlet sensor on housing.
Ambient Temperature error.	Check ambient temperature sensor (I2C) on Main Logic Board.
Sysclock PLL value error.	Replace Processor.
Processor 1 communications error.	Replace Processor CPU1.
Temperature never stabilized.	Rerun calibration up to 2 times; if calibration fails, replace processor. Calibration will take 10 to 20 minutes to finish.
MLB serial numbers don't match.	Rerun calibration 1 time; if calibration fails, replace processor. Calibration will take 10 to 20 minutes to finish.
CPUID eeprom upper checksum error.	Replace Processor.
CPUID eeprom lower checksum error.	Replace Processor.
CPU Slot Number is invalid.	Rerun calibration 1 time; if calibration fails, replace processor. Calibration will take 10 to 20 minutes to finish.
CPU Slot Number Mismatch Error.	Rerun calibration 1 time; if calibration fails, replace processor. Calibration will take 10 to 20 minutes to finish.
CPUID eeprom is blank.	Replace Processor.
CPU MLB serial number is blank.	Replace Main Logic Board.
CPU Intake Fan Speed Error.	Check inner door is securely in place; and rerun calibration up to 2 times. Calibration will take 10 to 20 minutes to finish.
Processor max temperature exceeded	Replace Processor.

For cases where calibration rerun is specified, and the rerun passes, calibration is considered good and should not be run again at that service event unless a processor or MLB is replaced for another reason.