Intel Hidden Bios Setting Guide (Scewin)

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Disclaimer: This guide aims to assist users in accessing hidden BIOS settings to enhance system performance and reduce latency. However, please be aware that altering BIOS settings carries inherent risks and may result in unintended consequences, including system instability or hardware damage. Proceed with caution and at your own risk. I am not liable or responsible for any issues that may arise from following the instructions in this guide.

Discord Server: https://discord.gg/ZhZ8eJZc42
How to Reset Bios by Removing CMOS Battery:
https://www.youtube.com/watch?v=S9hyEPTFR10

Don't Mass Apply All These Settings! Do Them in Groups or you Can Risk Bricking your OS and Having Issues.

Native ASPM - Disabled
Wake System from S5 - Disabled
ACPI Debug - Disabled
Low Power So Idle Capability - Disabled
PUIS Enable - Disabled
EC Notification - Disabled
EC CS Debug Light - Disabled
EC Low Power Mode - Disabled
Sensor Standby - Disabled

CS PL1 Limit - Disabled

Intel Ready Mode Technology - Disabled

Intel RMT State - Disabled

PCI Delay Optimization - Enabled

MSI enabled - Enabled

C6DRAM - Disabled

SW Guard Extensions (SGX) - Software Controlled

Intel Virtualization Tech - Disabled

PECI - Disabled

BIST - Disabled

AP threads Idle Manner - RUN Loop

Intel(R) Speed Shift Technology Interrupt Control - Disabled

Boot performance mode - Turbo Performance

EIST - Disabled

Race To Halt (RTH) - Disabled

Intel Speed Shift Technology - Disabled

Intel(R) Adaptive Boost Technology - Disabled

Intel C-State - Disabled

C1E Support - Disabled

C-State Auto Demotion - Disabled

C-State Un-demotion - Disabled

Package C-State Demotion - Disabled

Package C-State Un-demotion - Disabled

CState Pre-Wake - Disabled

Package C State Limit - Co

CPU C States Support - Disabled

Package C States support - Disabled

Interrupt Redirection Mode Selection - Round robin

Energy Efficient P-state - Disabled

Energy Efficient Turbo - Disabled

Bi-directional PROCHOT# - Disabled

Disable PROCHOT# Output - Enabled

PROCHOT Response - Disabled

PROCHOT Lock - Disabled

ACPI T-States - o

Power Loss Notification Feature - Disabled

P-state Capping - Disabled

ZPODD - Disabled

BCLK Aware Adaptive Voltage - Disabled

TVB Ratio Clipping - Disabled

Ring Down Bin - Disabled

Enable ASPM - Disabled

Enable LTR - Disabled

LTR - Disabled

Enable TBT ASPM - Disabled

JTAG C10 Power Gate - Disabled

ACPI Standby State - Suspend Disabled

Re-Size BAR Support - Enabled

ASPM - Disabled

LTR Mechanism Enable - Disabled

Clock Power Management - Disabled

USB 2.0 Controller Mode - HiSpeed

USB S5 Wakeup Support - Disabled

DMI Link ASPM Control - Disabled

Power Down Unused Lanes - Disabled

Tcc Activation Offset - 0

EPG DIMM Idd3N - 0

EPG DIMM Idd3P - 0

PEG o ASPM - Disabled

PEG 1 ASPM - Disabled

PEGo - ASPM - Disabled

PEG1 - ASPM - Disabled

PEG2 - ASPM - Disabled

RC6(Render Standby) - Disabled

DDR PowerDown and idle counter - PCODE

For LPDDR Only: DDR PowerDown and idle counter - PCODE

PowerDown Energy ChoDimmo - 0

PowerDown Energy ChoDimm1 - 0

PowerDown Energy ChiDimmo - 0

PowerDown Energy ChiDimm1 - 0

PCI Express Clock Gating - Disabled

PCI Express Power Gating - Disabled

L1 Substates - Disabled

LAN Wake From DeepSx - Disabled

Wake on LAN Enable - Disabled

Wake on WLAN and BT Enable - Disabled

DeepSx Wake on WLAN and BT Enable - Disabled

HPET - Enabled

Legacy IO Low Latency - Enabled

PCH Cross Throttling - Disabled

Pcie Pll SSC - 0.0%

Enable 8254 Clock Gate - Disabled

USB2 PHY Sus Well Power Gating - Disabled

Aggressive LPM Support - Disabled

Disable Gen2 Pll Shutdown and L1 Controller Power gating – Enabled

- PCI Express Root Port 1 ASPM Disabled
- PCI Express Root Port 2 ASPM Disabled
- PCI Express Root Port 3 ASPM Disabled
- PCI Express Root Port 4 ASPM Disabled
- PCI Express Root Port 5 ASPM Disabled
- PCI Express Root Port 6 ASPM Disabled
- PCI Express Root Port 7 ASPM Disabled
- PCI Express Root Port 8 ASPM Disabled
- PCI Express Root Port 9 ASPM Disabled
- PCI Express Root Port 10 ASPM Disabled
- PCI Express Root Port 11 ASPM Disabled
- PCI Express Root Port 12 ASPM Disabled
- PCI Express Root Port 13 ASPM Disabled
- PCI Express Root Port 14 ASPM Disabled
- PCI Express Root Port 15 ASPM Disabled
- PCI Express Root Port 16 ASPM Disabled
- PCI Express Root Port 17 ASPM Disabled
- PCI Express Root Port 18 ASPM Disabled
- PCI Express Root Port 19 ASPM Disabled
- PCI Express Root Port 20 ASPM Disabled
- PCI Express Root Port 21 ASPM Disabled
- PCI Express Root Port 22 ASPM Disabled
- PCI Express Root Port 23 ASPM Disabled
- PCI Express Root Port 24 ASPM Disabled
- Modern StandBy Disabled
- **USB Standby Power at S4/S5** Disabled

PEGo - ASPM - Disabled

PEG1 - ASPM - Disabled

PEG2 - ASPM - Disabled

Intel Adaptive Boost Technology - Disabled

Power Down Mode - Disabled

Intel Virtualization Tech - Disabled

Intel VT-D Tech - Disabled

PCIE Spread Spectrum - Disabled

Thermal Throttling Level - Manual

To Level - o

Tı Level - o

T2 Level - o

Enable Hibernation - 0

Extreme Memory Profile(XMP) - Enabled (If you haven't ram oc'ed)

Execute Disable Bit - Disabled

NEEDS TESTING (Recommended to do but test one by one):

Round Trip Latency - Enabled

Turn Around Timing Training - Enabled

CPU Wakeup Timer - Disabled

OBFF - Disabled

PCI Latency Timer - Test All Values

PCI-X Latency Timer - Test All Values

CPU Cooler Tuning - Water Cooler (Even if you don't have an AIO)

PERR# Generation - Disabled

SERR# **Generation** - Disabled

SR-IOV Support - Disabled

URR - Disabled

FER - Disabled

NFER - Disabled

CER - Disabled

CTO - Disabled

PME SCI - Disabled

Advanced Error Reporting - Disabled

Maximum Payload - (The Max Value)

Maximum Read Request - (The Max Value)

PEGo Max Payload size - (The Max Value)

PEG1 Max Payload size - (The Max Value)

PEG2 Max Payload size - (The Max Value)

PEG3 Max Payload size - (The Max Value)

Intel Tip: Intel Turbo Boost technology is really trash, if you have an intel K or KF cpu, you are allowed to set clock speeds. If you don't want to overclock, it's best to set your cpu at your max turbo boost speed statically. So instead of your cpu frequency being within a range, it's at a static number.

To do this, you set your cpu ratio in bios to the max turbo boost frequency. (EX: The max turbo boost frequency for a 10600k is 4.8ghz, so cpu ratio in bios will be set to 48. You also want to set a static voltage, there are many ways of doing this, but a quick way is to download hwinfo and stress your cpu. Look for the max vcore voltage and just set the cpu voltage in bios to that number or 0.05v-0.15v less. You also want to disable turbo boost and other settings that promote dynamic ranges:

Intel(R) Turbo Boost Max Technology 3.0 - Disabled
Intel Turbo Boost - Disabled
Voltage Optimization - Disabled
TVB Voltage Optimizations - Disabled
Game Boost - Disabled