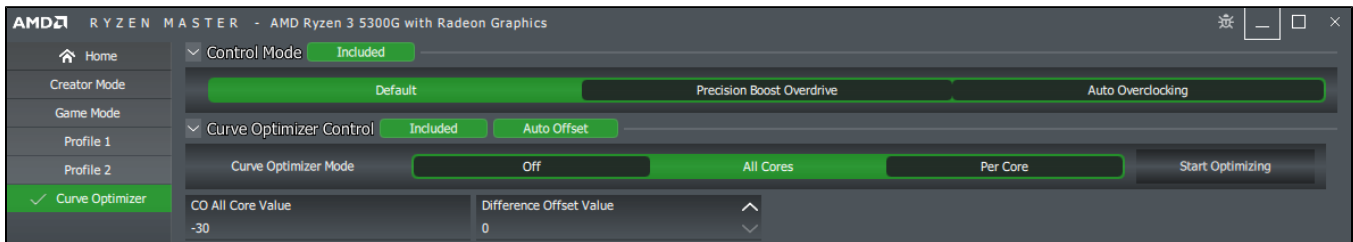# FAQ - Curve Optimizer Feature in Ryzen Master

What this feature is all about?

A new feature called as *Curve Optimizer* is introduced in the latest Ryzen Master release (Build # 2.9.0.2093). The primary functionality of this feature is to tune the AVFS curve of the entire CPU or specific cores of the CPU such that the tuning overrides the fixed curves that they are fused with, resulting in an increased CPU performance.

How to access Curve Optimizer feature in Ryzen Master?

A dedicated profile is provided for this feature named as "Curve Optimizer"

Is it supported on all AMD CPUs?

No, Curve Optimizer feature is supported on below CPUs only:

- Desktops utilizing AMD Ryzen™ 5000 processors
- AMD Ryzen™ Threadripper™ PRO 5000WX processors

Can we optimize for both CPU and GFX ?

Yes, both CPU and the internal graphics can be optimized. CPU can be optimized on *All cores* and *Per Core* basis.

Note: Automatic derivation of values is available for CPU only. For GFX, user has to manually set the values in the allowed range.

What is the difference between "Auto Offset" and "Manual Offset"?

Ryzen Master automatically derives optimized values if ***Auto Offset*** is selected. It is highly recommended that user sets appropriate value for below parameters:

- Test Duration (Stress Test section in the Settings page)
    - Setting higher value for the Test Duration significantly increases the derivation time but it may derive values which are relatively more stable. Conversely, if the Test Duration is set to lower values then derivation time is lesser but the values may not be stable.
- Stress Test Type
    - The Stress Test Type should be set to CPU Only or Both.
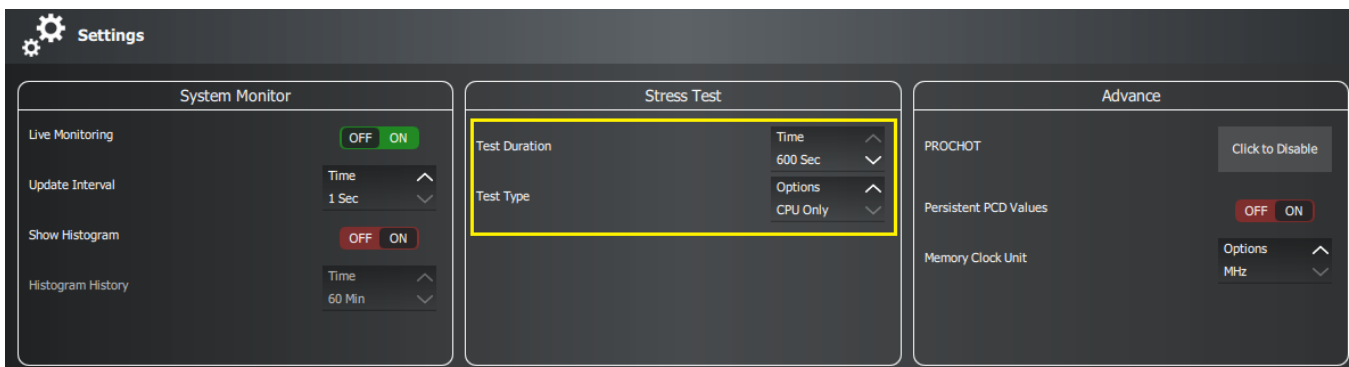
- Difference Offset Value
    - This parameter is available only after Ryzen Master derives the optimized values. User can apply the derived values as is by keeping this value set to 0 or apply lesser value by setting it to a value greater than 0. Refer to the tool tip for more details.

Note that Ryzen Master derived values act as a starting point for the user to further tune it manually.

In ***Manual Offset***, Ryzen Master does not derive any values and it is up to the user to set any desired values in the allowed range.

Is it safe to apply the Ryzen Master derived values, considering system stability?

Ryzen Master derived values are completely based on the stress test and the duration for which it is run during the derivation process. So applying the values as is may result in system stability issues and users are advised to further adjust the derived values using *Difference Offset Value,* after verifying stability with their own workloads.

How do we disable Curve Optimizer?

Setting *Curve Optimizer Mode* to Off and clicking on apply disables the curve optimizer feature. A system restart maybe required.

Can we check if the curve optimizer values are stable ?

Yes, user can set desired values in the *Manual Offset* mode and clicking on *Validate Offset* causes Ryzen Master to apply the values and trigger stress test. Users can further verify stability with their workloads of interest.