

M.I.T.

System

BIOS

Peripherals

Chipset

Power

Save & Exit

CPU Clock Control

Host Clock Value

100.00MHz

100.00MHz

100.00MHz

CPU Ratio Mode

All cores

CPU Clock Ratio

Auto

34.00

CPU Frequency

3.40GHz

3.40GHz

■ Advanced CPU Settings

Extreme Memory Profile(X.M.P.)

Disabled

System Memory Multiplier

36.00

21.33

Memory Frequency(MHz)

3600MHz

3600MHz

Esc

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Save & Exit

CPU Clock Ratio	Auto	34.00
CPU Frequency	3.40GHz	3.40GHz

Core Performance Boost	Auto
AMD Cool&Quiet function	Enabled
SVM Mode	Enabled
PPC Adjustment	PState 0
Global C-state Control	Enabled
Power Supply Idle Control	Low Current Idle
CCD Control	Auto
CPPC	Enabled
CPPC Preferred Cores	Enabled
Downcore Control	Auto
SMT Mode	Auto

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Save & Exit

CPU Vcore

Auto

Dynamic Vcore(DVID)

Auto

+0.000V

VCORE SOC

Auto

Dynamic VCORE SOC(DVID)

Auto

+0.000V

CPU VDD18

Auto

1.800V

CPU VDDP

Auto

PM_CLDO12

Auto

1.200V

PM_1V8

Auto

1.800V

PM_1VSOC

Auto

1.000V

DRAM Voltage (CH A/B)

1.400V

1.200V

DDRVP Voltage (CH A/B)

Auto

2.500V

DRAM Termination (CH A/B)

Auto

CPU Vcore Loadline Calibration

Auto

Vcore SOC Loadline Calibration

Auto

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Save & Exit

Reset Case Open Status Disabled

Case Open	YES
CPU Vcore	0.984 V
CPU VDDP	0.924 V
DRAM Channel A/B Voltage	1.428 V
+3.3V	3.363 V
+5V	5.070 V
+12V	12.240 V
VCORE SOC	1.224 V

Esc

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PCIEX16 Slot Configuration

Gen3

PCIe Slot Configuration

Gen3

PCIe ASPM Mode

Disabled

3DMark01 Enhancement

Enabled

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Boot Option Priorities

Boot Option #1 Windows Boot Manager (P2: CT500MX500SSD1)

Boot Option #2 UEFI: Intenso Rainbow Line 8.07, Partition 1

Bootup NumLock State On

Security Option System

Full Screen LOGO Show Disabled

Fast Boot Disabled

CSM Support Disabled

Administrator Password

User Password

■ Secure Boot

Alt

Help (F1)



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Save & Exit

System Mode

Setup

Secure Boot

Enabled

Not Active

Secure Boot Mode

Standard

- Restore Factory Keys
- Reset To Setup Mode
- Key Management

Esc

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Save & Exit

AMD CPU fTPM

Disabled

- | | |
|--------------------------------------|-------------|
| Initial Display Output | PCIe 1 Slot |
| LEDs in System Power On State | On |
| HD Audio Controller | Enabled |
| Onboard LAN Controller | Disabled |
| Above 4G Decoding | Enabled |
| Re-Size BAR Support | Auto |
| ■ Trusted Computing | |
| ■ AMI Graphic Output Protocol Policy | |
| ■ USB Configuration | |
| ■ Network Stack Configuration | |
| ■ NVMe Configuration | |
| ■ AMD Overclocking | |
| ■ AMD CBS | |

Alt

Help (F1)

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Configuration

Security Device Support

Disable

Disable Block Sid

Disabled

NO Security Device Found

Esc

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USB Configuration

Legacy USB Support Enabled

XHCI Hand-off Enabled

USB Mass Storage Driver Support Enabled

Port 60/64 Emulation Disabled

Mass Storage Devices:

Intenso Rainbow Line 8.07 Auto

Esc

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Save & Exit

Curve Optimizer

Disabled

Esc

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Manual CPU Overclocking

CPU Frequency 0

CPU Voltage 0

Core control Auto

SMT Control Auto

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Save & Exit

DDR and Infinity Fabric Frequency/Timings

■ DRAM Timing Configuration

■ DRAM Controller Configuration

■ CAD Bus Configuration

■ Data Bus Configuration

Power Down Enable

Disabled

Infinity Fabric Frequency and Dividers

1800MHz

Esc

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Save & Exit

DRAM Timing Configuration

Overclock

Auto

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DRAM Controller Configuration

Cmd2T 1T
Gear Down Mode Enabled

Esc

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Save & Exit

CAD Bus Configuration

CAD Bus Timing User Controls Auto

CAD Bus Drive Strength User Controls Auto

Esc

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Save & Exit

Data Bus Configuration

Data Bus Configuration User Controls Auto

Esc

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AMD CBS

■ XFR Enhancement

■ Custom Core Pstates

NUMA nodes per socket

Auto

Memory interleaving

Auto

ACS Enable

Enable

PCIe ARI Support

Enable

PCIe Ten Bit Tag Support

Enable

■ CPU Common Options

■ DF Common Options

■ UMC Common Options

■ NBIO Common Options

Esc

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Save & Exit

XFR Enhancement

WARNING - DAMAGE CAUSED BY USE OF YOUR AMD PROCESSOR OUTSIDE OF SPECIFICATION OR IN EXCESS OF FACTORY SETTINGS ARE NOT COVERED UNDER YOUR AMD PRODUCT WARRANTY AND MAY NOT BE COVERED BY YOUR SYSTEM MANUFACTURER'S WARRANTY.

Operating your AMD processor outside of specification or in excess of factory settings, including but not limited to overclocking, may damage or shorten the life of your processor or other system components, create system instabilities (e.g., data loss and corrupted images) and in extreme cases may result in total system failure.

AMD does not provide support or service for issues or damages related to use of an AMD processor outside of processor specifications or in excess of factory settings.

Precision Boost Overdrive	Manual
PPT Limit	142
TDC Limit	95
EDC Limit	140
Precision Boost Overdrive Scalar	Auto
FCLK Frequency	1800MHz
SOC OVERCLOCK VID	0
UCLK DIV1 MODE	UCLK==MEMCLK
VDDP Voltage Control	Auto
VDDG Voltage Control	Auto
SoC/Uncore OC Mode	Disabled
LN2 Mode	Disabled

Esc

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Save & Exit

Custom Core Pstates

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Custom Pstate0

Auto

Esc

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Power

Save & Exit

CPU Common Options

■ Performance

■ Prefetcher settings

■ Core Watchdog

Core Performance Boost	Auto
Global C-state Control	Enabled
Power Supply Idle Control	Low Current Idle
SEV ASID Count	Auto
SEV-ES ASID Space Limit Control	Auto
Streaming Stores Control	Enabled
Local APIC Mode	Auto
ACPI_CST C1 Declaration	Enabled
MCA error thresh enable	Auto
PPIN Opt-in	Disabled
Fast Short REP MOVSB	Enabled
Enhanced REP MOVSB/STOSB	Enabled
IBS hardware workaround	Auto

Esc

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Custom Core Pstates

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Custom Pstate0

Auto

Esc

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Prefetcher settings

L1 Stream HW Prefetcher Enable

L2 Stream HW Prefetcher Enable

Esc

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Save & Exit

Core Watchdog

Core Watchdog Timer Enable

Auto

Esc

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Power

Save & Exit

DF Common Options

- Scrubber
- Memory Addressing
- ACPI
- Link

Disable DF to external downstream IP SyncFloodPropagat Sync flood disabled

Disable DF sync flood propagation Sync flood disabled

CC6 memory region encryption Disabled

Memory Clear Disabled

Esc

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Save & Exit

Scrubber

DRAM scrub time	Disabled
Poison scrubber control	Disabled
Redirect scrubber control	Disabled
Redirect scrubber limit	Auto

Esc

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Save & Exit

Memory Addressing

NUMA nodes per socket	Auto
Memory interleaving	Auto
Memory interleaving size	Auto
1TB remap	Do not remap
DRAM map inversion	Disabled

Esc

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Save & Exit

ACPI

ACPI SRAT L3 Cache As NUMA Domain Enabled

ACPI SLIT Distance Control Auto

ACPI SLIT remote relative distance Auto

Esc

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Power

Save & Exit

Link

GMI encryption control	Disabled
xGMI encryption control	Disabled
CAKE CRC perf bounds Control	Auto
4-link xGMI max speed	Auto
3-link xGMI max speed	Auto
xGMI TXEQ Mode	Auto
PcsCG control	Auto

Esc

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Save & Exit

DRAM Timing Configuration

Overclock

Auto

Esc

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Save & Exit

DRAM Controller Configuration

■ DRAM Power Options

Cmd2T

1T

Gear Down Mode

Enabled

Esc

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Power

Save & Exit

DRAM Power Options

Power Down Enable Disabled

Disable Burst/Postponed Refresh Auto

DRAM Maximum Activate Count Auto

Esc

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Save & Exit

CAD Bus Configuration

CAD Bus Timing User Controls Auto

CAD Bus Drive Strength User Controls Auto

Esc

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Chipset

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Save & Exit

Data Bus Configuration

Data Bus Configuration User Controls

Auto

Esc

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Chipset

Power

Save & Exit

Common RAS

Data Poisoning

Disabled

DRAM Post Package Repair

Disable

RCD Parity

Disabled

DRAM Address Command Parity Retry

Disabled

Max Parity Error Replay

8

Write CRC Enable

Disabled

DRAM Write CRC Enable and Retry Limit

Disabled

Max Write CRC Error Replay

8

Disable Memory Error Injection

True

■ ECC Configuration

Esc

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Power

Save & Exit

ECC Configuration

DRAM ECC Symbol Size	Auto
DRAM ECC Enable	Disabled
DRAM UECC Retry	Disabled

Esc

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Save & Exit

Security

TSME Disabled

Data Scramble Disabled

Esc

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Power

Save & Exit

PMU Training

DFE Read Training	Auto
FFE Write Training	Auto
PMU Pattern Bits Control	Auto
MR6VrefDQ Control	Auto
CPU Vref Training Seed Control	Auto

Esc

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Chipset

Power

Save & Exit

DRAM Memory Mapping

Chipselect Interleaving	Auto
BankGroupSwap	Disabled
BankGroupSwapAlt	Auto
Address Hash Bank	Enabled
Address Hash CS	Enabled
Address Hash Rm	Enabled
SPD Read Optimization	Enabled

Esc

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Save & Exit

Memory MBIST

MBIST Enable

Disabled

MBIST Test Mode(VMR)

Data Eye Mode

MBIST Aggressors

Auto

MBIST Per Bit Slave Die Reporting

Auto

■ Data Eye

Esc

Back

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Power

Save & Exit

Data Eye

Pattern Select	PRBS
Pattern Length(VMR)	6
Aggressor Channel	Disabled
Aggressor Static Lane Control	Disabled
Aggressor Static Lane Select Upper 32 bits	0
Aggressor Static Lane Select Lower 32 Bits	0
Aggressor Static Lane Select ECC	0
Aggressor Static Lane Value	0
Target Static Lane Control	Disabled
Target Static Lane Select Upper 32 bit	0
Target Static Lane Select Lower 32 Bits	0
Target Static Lane Select ECC	0
Target Static Lane Value	0
Worst Case Margin Granularity	Per Chip Select
Read Voltage Sweep Step Size	1
Read Timing Sweep Step Size	1
Write Voltage Sweep Step Size	1
Write Timing Sweep Step Size	1

Esc

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Save & Exit

NBIO LCLK DPM

NBIO DPM Control

Auto

Esc

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Chipset

Power

Save & Exit

IOMMU

Enabled

PCIEX16 Bifurcation

Auto

SATA Mode

AHCI

NVMe RAID mode

Disabled

Chipset SATA Port Enable

Enabled

Chipset SATA Port Hot Plug

Enabled

Chipset SATA Port0

HL-DT-ST BD-RE BH16NS55 ATAPI

Chipset SATA Port1

ST2000DM001-1CH164 (2000.3GB)

Chipset SATA Port2

CT500MX500SSD1 (500.1GB)

Chipset SATA Port3

ST2000DM008-2FR102 (2000.3GB)

Chipset SATA Port4

[Not Installed]

Chipset SATA Port5

[Not Installed]

Alt

<<

Enable/Disable IOMMU Support

Alt

Help (F1)

Easy Mode

English

Smart Fan 5

Q-Flash

M.I.T.

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Save & Exit

SMU Common Options

cTDP Control Manual

cTDP 65

■ Fan Control

EfficiencyModeEn Auto

Package Power Limit Control Manual

Package Power Limit 142

APBDIS 0

DF Cstates Enabled

CPPC Enabled

CPPC Preferred Cores Enabled

■ NBIO LCLK DPM

Alt



0 = not APBDIS (mission mode)
1 = APBDIS

Esc

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Easy Mode

English

Smart Fan 5

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Save & Exit

NBIO Common Options

IOMMU	Enabled
DMA Protection	Auto
DMAR Support	Auto
■ XFR Enhancement	
ACS Enable	Enable
PCIe ARI Support	Enable
PCIe ARI Enumeration	Enable
PCIe Ten Bit Tag Support	Enable
HD Audio Enable	Enable

■ SMU Common Options

Enable AER Cap	Enable
Early Link Speed	Auto
Presence Detect Select mode	Auto
Preferred IO	Auto
CV test	Disabled
Loopback Mode	Disabled
SRIS	Disable

Alt



SMU Common Options

Esc

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Easy Mode

English

Smart Fan 5

Q-Flash

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Save & Exit

IOMMU

Enabled

PCIEX16 Bifurcation

Auto

SATA Mode

AHCI

NVMe RAID mode

Disabled

Chipset SATA Port Enable

Enabled

Chipset SATA Port Hot Plug

Enabled

Chipset SATA Port0

HL-DT-ST BD-RE BH16NS55 ATAPI

Chipset SATA Port1

ST2000DM001-1CH164 (2000.3GB)

Chipset SATA Port2

CT500MX500SSD1 (500.1GB)

Chipset SATA Port3

ST2000DM008-2FR102 (2000.3GB)

Chipset SATA Port4

[Not Installed]

Chipset SATA Port5

[Not Installed]

Alt

<<

Enable/Disable IOMMU Support

Alt

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Save & Exit

AC BACK

Always Off

Power On By Keyboard

Disabled

Power On Password

Power On By Mouse

Disabled

ErP

Disabled

Soft-Off by PWR-BTTN

Instant-Off

Power Loading

Auto

Resume by Alarm

Disabled

Wake up day

0

Wake up hour

0

Wake up minute

0

Wake up second

0

Wake on LAN

Disabled

High Precision Event Timer

Disabled

Alt



Determine the state of the system after the power returns after AC power loss.
Always Off = System stays off upon power return
Always On = System is turned on up power return
Memory = System returns to last know awake state upon power return

Alt

Help (F1)

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AMD does not provide support or service for issues or damages related to use of an AMD processor outside of processor specifications or in excess of factory settings.

Precision Boost Overdrive	Advanced
PBO Limits	Manual
PPT Limit [W]	142
TDC Limit [A]	95
EDC Limit [A]	140
Precision Boost Overdrive Scalar	Auto
■ Curve Optimizer	
CPU Boost Clock Override	Enabled (Positive)
Max CPU Boost Clock Override (+)	200
Platform Thermal Throttle Limit	Manual
Platform Thermal Throttle Limit	90
SoC/Uncore OC Mode	Disabled
SoC Voltage	0
VDDP Voltage Control	Auto
VDDG Voltage Control	Auto
NUMA nodes per socket	Auto
LN2 Mode	Disable
ECO Mode	Disable
■ Manual CPU Overclocking	
■ DDR and Infinity Fabric Frequency/Timings	

Alt



Options for adjusting memory frequencies and timings, as well as Infinity Fabric frequency and dividers.

Esc

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Easy Mode

English

Smart Fan 5

Q-Flash