首页信息

Aptio Setup – AMI

Main Advanced Chipset Security Boot Save & Exit

BIOS Information
BIOS Vendor   American Megatrends
Core Version   5.17
Compliancy   UEFI 2.7; PI 1.6
Build Date and Time   06/19/2023 21:55:42
Access Level   Administrator

Memory Information
Total Memory   Total Memory: 16384 MB
                                 (DDR4)

System Language   [English]

System Date   [Fri 06/23/2023]
System Time   [11:05:29]

Choose the system default
language

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

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TPM

Main Advanced Chipset Security Boot Save & Exit

▶ Trusted Computing	Trusted Computing Settings
▶ AMD fTPM configuration	
▶ ACPI Settings	
▶ Demo Board	
▶ IT8613 Super IO Configuration	
▶ Hardware Monitor	
▶ UEFI Variables Protection	
▶ CPU Configuration	
▶ IDE Configuration	
▶ Debug Port Table Configuration	
▶ SIO Common Setting	
▶ PCI Subsystem Settings	
▶ USB Configuration	→←: Select Screen
▶ Network Stack Configuration	↑↓: Select Item
▶ CSM Configuration	Enter: Select
▶ NVMe Configuration	+/-: Change Opt.
▶ Offboard SATA Controller Configuration	F1: General Help
	F8: Previous Values
▶ AMD PBS	F9: Optimized Defaults
▶ AMD CBS	F10: Save & Exit
▶ Realtek PCIe GBE Family Controller (MAC:0A:E0:AF:CB:02:23)	ESC: Exit

Advanced

TPM 2.0 Device Found
Firmware Version: 3.84
Vendor: AMD

Security Device Support   [Enable]
Active PCR banks   SHA256
Available PCR banks   SHA256

SHA256 PCR Bank   [Enabled]

Pending operation   [None]
Platform Hierarchy   [Enabled]
Storage Hierarchy   [Enabled]
Endorsement Hierarchy   [Enabled]
Physical Presence Spec Version   [1.3]
TPM 2.0 InterfaceType   [CRB]
Device Select   [Auto]
Disable Block Sid   [Disabled]

Enables or Disables BIOS
support for security device.
O.S. will not show Security
Device. TCG EFI protocol and
INT1A interface will not be
available.

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

睡眠

Aptio Setup – AMI

Main | Advanced | Chipset | Security | Boot | Save & Exit

▶ Trusted Computing
▶ AMD fTPM configuration
▶ ACPI Settings
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▶ Offboard SATA Controller Configuration

▶ AMD PBS
▶ AMD CBS
▶ Realtek PCIe GBE Family Controller (MAC:0A:E0:AF:CB:02:23)

System ACPI Parameters.

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

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Advanced

ACPI Settings

Enable ACPI Auto Configuration   [Disabled]

Enable Hibernation   [Enabled]
ACPI Sleep State   [S3 (Suspend to RAM)]

Select the highest ACPI sleep
state the system will enter
when the SUSPEND button is
pressed.

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

温控

Main Advanced Chipset Security Boot Save & Exit

▶ Trusted Computing   Monitor hardware status
▶ AMD fTPM configuration
▶ ACPI Settings
▶ Demo Board
▶ IT8613 Super IO Configuration
▶ Hardware Monitor
▶ UEFI Variables Protection
▶ CPU Configuration
▶ IDE Configuration
▶ Debug Port Table Configuration
▶ SIO Common Setting
▶ PCI Subsystem Settings
▶ USB Configuration
▶ Network Stack Configuration   →←: Select Screen
▶ CSM Configuration   ↑↓: Select Item
▶ NVMe Configuration   Enter: Select
▶ Offboard SATA Controller Configuration   +/-: Change Opt.
                                                                   F1: General Help
▶ AMD PBS   F8: Previous Values
▶ AMD CBS   F9: Optimized Defaults
▶ Realtek PCIe GBE Family Controller (MAC:0A:E0:AF:CB:02:23)   F10: Save & Exit
                                                                   ESC: Exit

Advanced

Pc Health Status

System temperature1	:	+47 ℃
System temperature2	:	+38 ℃
CPU Fan Speed	:	1436 RPM
System Fan Speed	:	N/A
VIN0	:	+1.243 V
VDDIO MEM	:	+1.276 V
VCC12	:	+12.144 V
VCC5	:	+4.972 V
VBAT	:	+3.014 V

CPU Smart Fan	[Automatic Mode]
- Fan off temperature limit	40
- Fan start temperature limit	45
- Fan Full Speed temperature	70
- Fan start PWM(%)	50
- PWM Slope Setting(%)	30

CPU Smart Fan Setting

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

虚拟化

Aptio Setup – AMI

Main **Advanced** Chipset Security Boot Save & Exit

```
▶ Trusted Computing                                    CPU Configuration Parameters
▶ AMD fTPM configuration
▶ ACPI Settings
▶ Demo Board
▶ IT8613 Super IO Configuration
▶ Hardware Monitor
▶ UEFI Variables Protection
▶ CPU Configuration
▶ IDE Configuration
▶ Debug Port Table Configuration
▶ SIO Common Setting
▶ PCI Subsystem Settings
▶ USB Configuration
▶ Network Stack Configuration                          →←: Select Screen
▶ CSM Configuration                                    ↑↓: Select Item
▶ NVMe Configuration                                   Enter: Select
▶ Offboard SATA Controller Configuration               +/-: Change Opt.
                                                       F1: General Help
▶ AMD PBS                                              F8: Previous Values
▶ AMD CBS                                              F9: Optimized Defaults
▶ Realtek PCIe GBE Family Controller (MAC:0A:E0:AF:CB:02:23)  F10: Save & Exit
                                                       ESC: Exit
```

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Advanced

CPU Configuration

Module Version: ComboAm4v2Cpu 11
AGESA Version : ComboAm4v2PI 1207

PSS Support   [Enabled]
PPC Adjustment   [PState 0]
NX Mode   [Enabled]
SVM Mode 虚拟化   [Enabled]
▶ Node 0 Information

Enable/disable the generation of ACPI _PPC, _PSS, and _PCT objects.

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

Main   **Advanced**   Chipset   Security   Boot   Save & Exit

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▶ USB Configuration
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▶ NVMe Configuration
▶ Offboard SATA Controller Configuration

▶ AMD PBS
▶ AMD CBS
▶ Realtek PCIe GBE Family Controller (MAC:0A:E0:AF:CB:02:23)

PCI, PCI-X and PCI Express
Settings.

→←: Select Screen
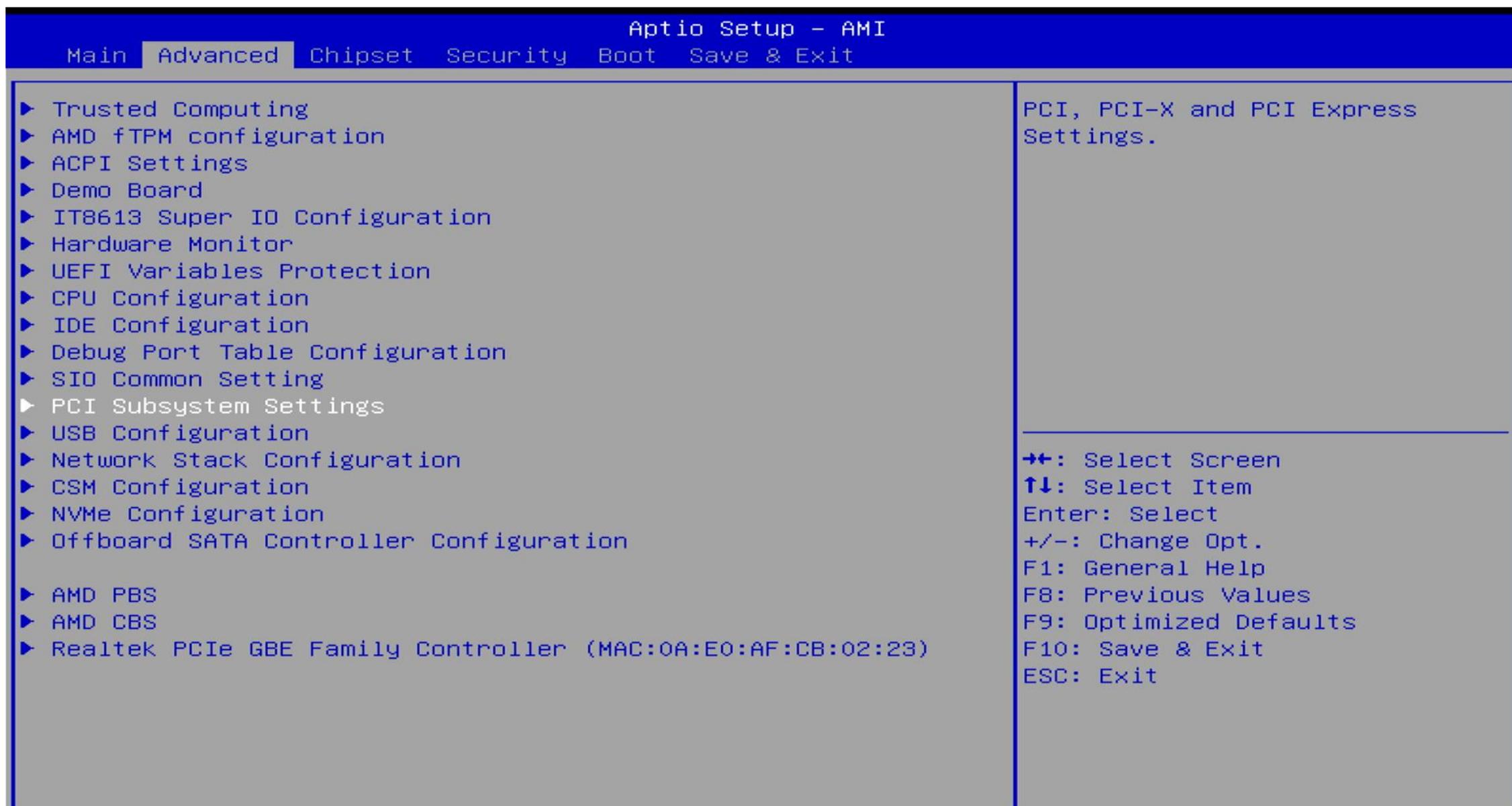↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

4G解码 SR-IOV Re-size Bar

```
                          Aptio Setup - AMI
    Main  Advanced  Chipset  Security  Boot  Save & Exit

 ▶ Trusted Computing                                  PCI, PCI-X and PCI Express
 ▶ AMD fTPM configuration                             Settings.
 ▶ ACPI Settings
 ▶ Demo Board
 ▶ IT8613 Super IO Configuration
 ▶ Hardware Monitor
 ▶ UEFI Variables Protection
 ▶ CPU Configuration
 ▶ IDE Configuration
 ▶ Debug Port Table Configuration
 ▶ SIO Common Setting
 ▶ PCI Subsystem Settings
 ▶ USB Configuration                          ─────────────────────────────
 ▶ Network Stack Configuration
 ▶ CSM Configuration                          →←: Select Screen
 ▶ NVMe Configuration                         ↑↓: Select Item
 ▶ Offboard SATA Controller Configuration     Enter: Select
                                              +/-: Change Opt.
 ▶ AMD PBS                                     F1: General Help
 ▶ AMD CBS                                     F8: Previous Values
 ▶ Realtek PCIe GBE Family Controller (MAC:0A:E0:AF:CB:02:23)  F9: Optimized Defaults
                                              F10: Save & Exit
                                              ESC: Exit


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```

Advanced

PCI Bus Driver Version	A5.01.20
PCI Devices Common Settings:	
PCI Latency Timer	[32 PCI Bus Clocks]
PCI-X Latency Timer	[64 PCI Bus Clocks]
VGA Palette Snoop	[Disabled]
PERR# Generation	[Disabled]
SERR# Generation	[Disabled]
Above 4G Decoding	[Enabled]
Re-Size BAR Support	[Disabled]
SR-IOV Support	
BME DMA Mitigation	

┌──── Above 4G Decoding ────┐
│ Disabled   │
│ Enabled   │
└───────────────────────────┘

▶ PCI Express Settings

打开4G解码选项才会出现 Re-Size BAR选项
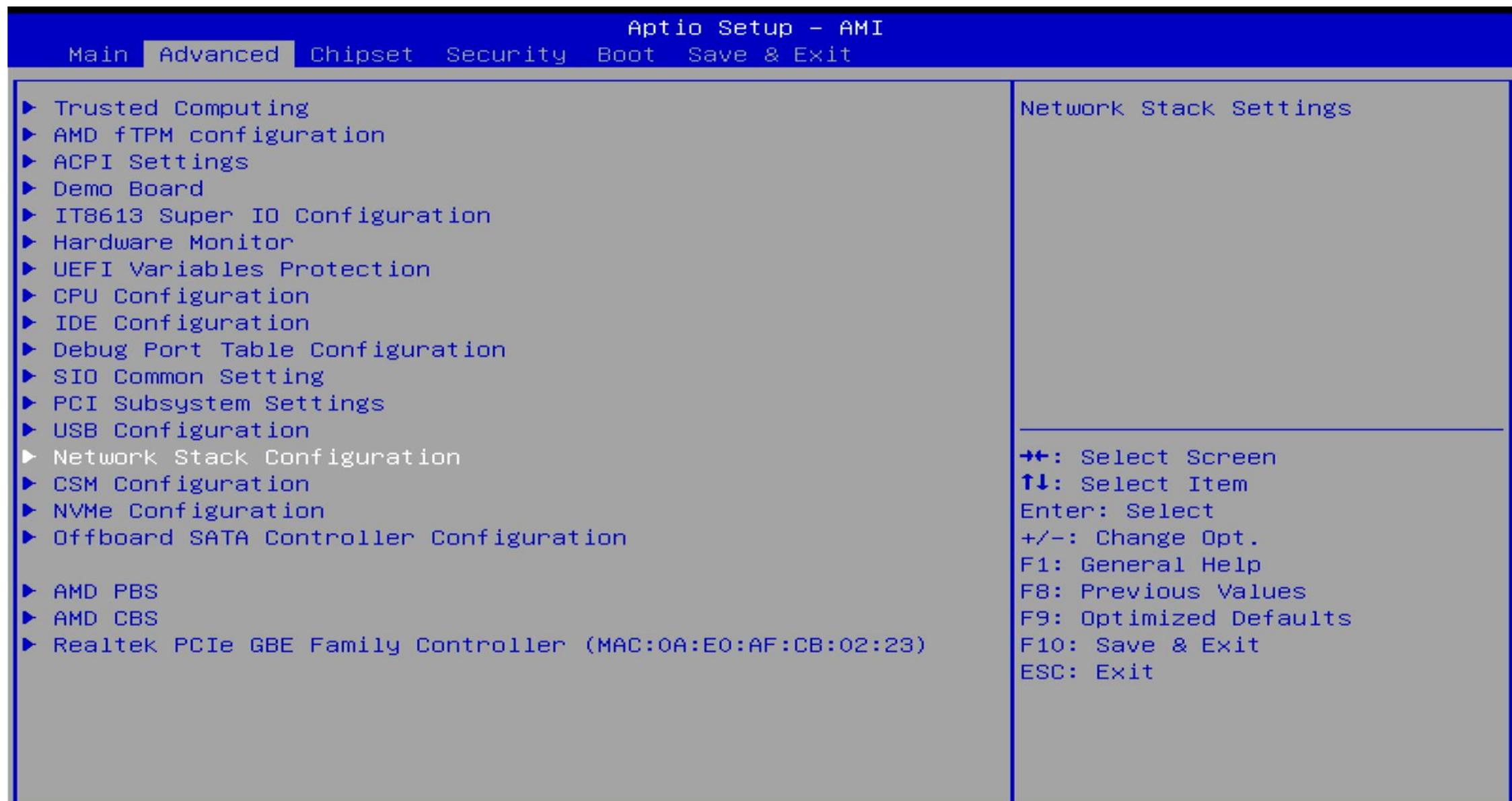
Enables or Disables 64bit
capable Devices to be Decoded
in Above 4G Address Space
(Only if System Supports 64
bit PCI Decoding).

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

UEFI网卡启动

```
                         Aptio Setup – AMI
     Main   Advanced   Chipset   Security   Boot   Save & Exit

  ▶ Trusted Computing                              Network Stack Settings
  ▶ AMD fTPM configuration
  ▶ ACPI Settings
  ▶ Demo Board
  ▶ IT8613 Super IO Configuration
  ▶ Hardware Monitor
  ▶ UEFI Variables Protection
  ▶ CPU Configuration
  ▶ IDE Configuration
  ▶ Debug Port Table Configuration
  ▶ SIO Common Setting
  ▶ PCI Subsystem Settings
  ▶ USB Configuration
  ▶ Network Stack Configuration
  ▶ CSM Configuration                        ➜←: Select Screen
  ▶ NVMe Configuration                        ↑↓: Select Item
  ▶ Offboard SATA Controller Configuration    Enter: Select
                                              +/-: Change Opt.
  ▶ AMD PBS                                   F1: General Help
  ▶ AMD CBS                                   F8: Previous Values
  ▶ Realtek PCIe GBE Family Controller (MAC:0A:E0:AF:CB:02:23)   F9: Optimized Defaults
                                              F10: Save & Exit
                                              ESC: Exit


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```

Advanced

Network Stack	[Enabled]
IPv4 PXE Support	[Enabled]
IPv4 HTTP Support	[Disabled]
IPv6 PXE Support	[Disabled]
IPv6 HTTP Support	[Disabled]
PXE boot wait time	0
Media detect count	1

Enable/Disable IPv4 PXE boot support. If disabled, IPv4 PXE boot support will not be available.

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

传统网卡启动

Aptio Setup – AMI

Main   Advanced   Chipset   Security   Boot   Save & Exit

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▶ AMD fTPM configuration
▶ ACPI Settings
▶ Demo Board
▶ IT8613 Super IO Configuration
▶ Hardware Monitor
▶ UEFI Variables Protection
▶ CPU Configuration
▶ IDE Configuration
▶ Debug Port Table Configuration
▶ SIO Common Setting
▶ PCI Subsystem Settings
▶ USB Configuration
▶ Network Stack Configuration
▶ CSM Configuration
▶ NVMe Configuration
▶ Offboard SATA Controller Configuration

▶ AMD PBS
▶ AMD CBS
▶ Realtek PCIe GBE Family Controller (MAC:0A:E0:AF:CB:02:23)

CSM configuration:
Enable/Disable, Option ROM
execution settings, etc.

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
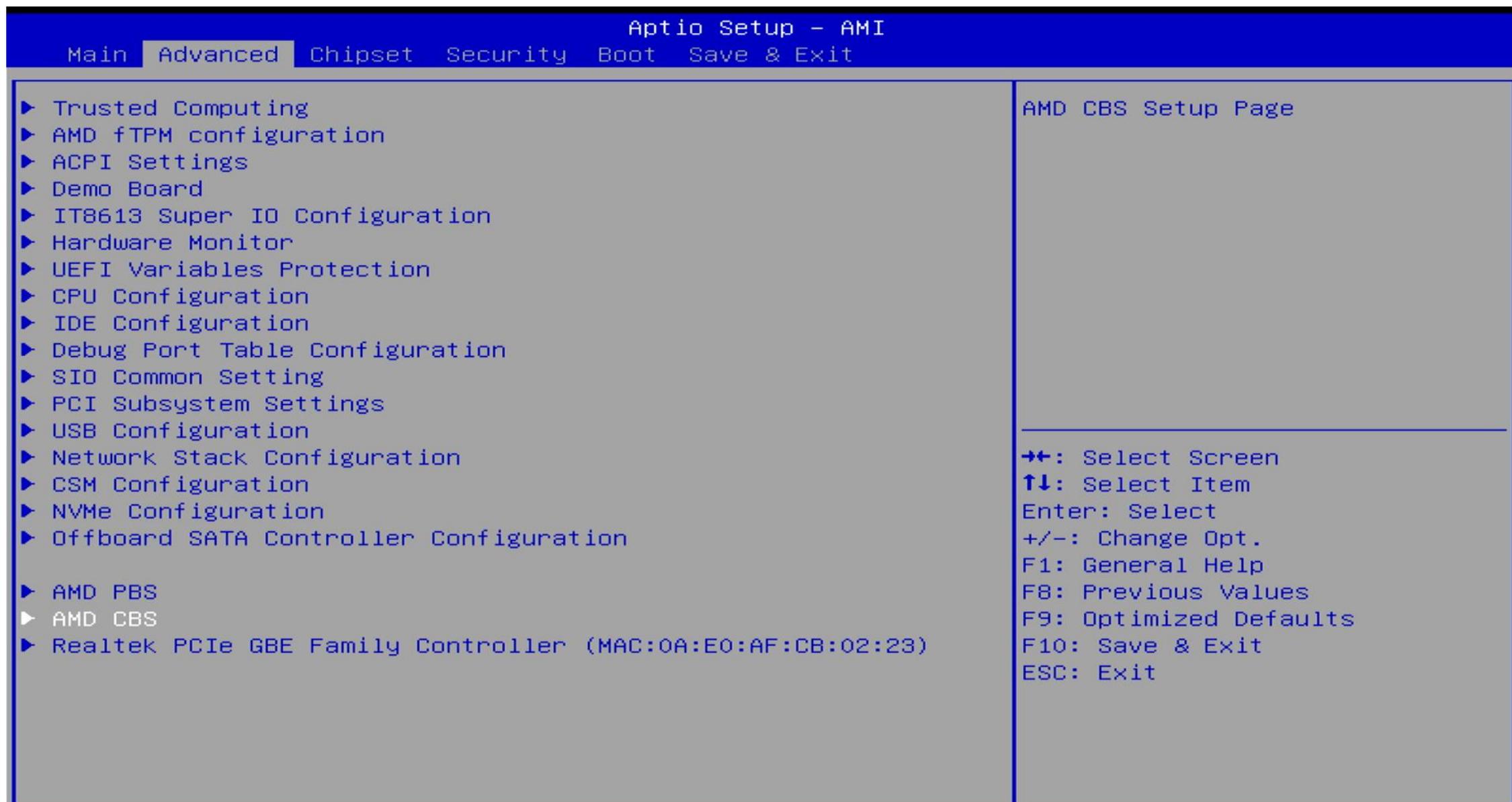F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

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Advanced

Compatibility Support Module Configuration

CSM Support   [Enabled]

CSM16 Module Version   07.84

GateA20 Active   [Upon Request]
Option ROM Messages   [Force BIOS]
INT19 Trap Response   [Immediate]
HDD Connection Order   [Adjust]

Boot option filter   [UEFI and Legacy]

Option ROM execution

Network 传统网卡启动   [Do not launch]
Storage   [Legacy]
Video   [Legacy]
Other PCI devices   [UEFI]

Enable/Disable CSM Support.

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

内存频率

Aptio Setup – AMI

Main **Advanced** Chipset Security Boot Save & Exit

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▶ PCI Subsystem Settings
▶ USB Configuration
▶ Network Stack Configuration
▶ CSM Configuration
▶ NVMe Configuration
▶ Offboard SATA Controller Configuration

▶ AMD PBS
▶ AMD CBS
▶ Realtek PCIe GBE Family Controller (MAC:0A:E0:AF:CB:02:23)

AMD CBS Setup Page

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

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Advanced

AMD CBS

▶ CPU Common Options
▶ DF Common Options
▶ UMC Common Options
▶ NBIO Common Options
▶ FCH Common Options
▶ Soc Miscellaneous Control
▶ Chipset Common Options

UMC Common Options

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

Advanced

UMC Common Options

▶ DDR4 Common Options
▶ DRAM Memory Mapping
▶ Phy Configuration
▶ NVDIMM
▶ Memory MBIST

DDR4 Common Options

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

Advanced

DDR4 Common Options

▶ DRAM Timing Configuration
▶ DRAM Controller Configuration
▶ CAD Bus Configuration
▶ Data Bus Configuration
▶ Common RAS
▶ Security

DRAM Timing Configuration

→←: Select Screen
↑↓: Select Item
Enter: Select
+/−: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

Advanced

DRAM Timing Configuration

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.

▶ Decline
▶ Accept

Accept

→←: Select Screen
↑↓: Select Item
Enter: Select
+/−: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

Advanced

Accept		
		Specifies the Active to Precharge Delay Time.
Overclock	[Enabled]	
Memory Clock Speed 这里选想达到的频率的一半	[1600MHz]	
Tcl	[16 Clk]	
Trcdrd	[18 Clk]	
Trcdwr 内存时序可用CPU-Z查看	[18 Clk]	
Trp	[18 Clk]	
Tras	[36 Clk]	
Trc Ctrl	[Auto]	
TrrdS	[Auto]	
TrrdL	[Auto]	
Tfaw Ctrl	[Auto]	
TwtrS	[Auto]	→←: Select Screen
TwtrL	[Auto]	↑↓: Select Item
Twr Ctrl	[Auto]	Enter: Select
Trcpage Ctrl	[Auto]	+/-: Change Opt.
TrdrdScL Ctrl	[Auto]	F1: General Help
TwrwrScL Ctrl	[Auto]	F8: Previous Values
Trfc Ctrl	[Auto]	F9: Optimized Defaults
Trfc2 Ctrl	[Auto]	F10: Save & Exit
Trfc4 Ctrl	[Auto]	ESC: Exit
Tcwl	[Auto]	
Trtp	[Auto]	
Tcke	[Auto]	

Main   Advanced   Chipset   Security   Boot   Save & Exit

Wakeup By PCIE 网络唤醒   [Enabled]   Enable/Disable Wake from
IGFX Multi Monitor核显与独显分屏   [Disabled]   PCIE-PME
Onboard LAN Controller板载网卡开关   [Enabled]
PWROn After PWR-Fail 来电启动   [Always Off]
▶ RTC Wake 定时开机
▶ South Bridge
▶ GFX Configuration
▶ North Bridge

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

Main   Advanced   Chipset   Security   Boot   Save & Exit

Password Description

If ONLY the Administrator's password is set,
then this only limits access to Setup and is
only asked for when entering Setup.
If ONLY the User's password is set, then this
is a power on password and must be entered to
boot or enter Setup. In Setup the User will
have Administrator rights.
The password length must be
in the following range:
Minimum length   3
Maximum length   20

Administrator Password
User Password
STIBP Status   [Disabled]

► Secure Boot   安全启动

Set Administrator Password

→←: Select Screen
↑↓: Select Item
Enter: Select
+/−: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit

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Main   Advanced   Chipset   Security   Boot   Save & Exit

Boot Configuration   Enables or disables Quiet Boot
Setup Prompt Timeout   1   option
Bootup NumLock State   [On]
Quiet Boot   [Enabled]

Boot Option Priorities
Boot Option #1   [Windows Boot Manager
                                        (SKHynix_HFS512GDE9X084
                                        N)]

Boot Option #2   [SKHynix_HFS512GDE9X084
                                        N]

Fast Boot   [Enabled]
 SATA Support   [Last Boot SATA
                                        Devices Only]
 NVMe Support   [Enabled]   ←→: Select Screen
 VGA Support   [EFI Driver]   ↑↓: Select Item
 USB Support   [Full Initial]   Enter: Select
 PS2 Devices Support   [Enabled]   +/-: Change Opt.
 Network Stack Driver Support   [Disabled]   F1: General Help
Redirection Support   [Disabled]   F8: Previous Values
                                                               F9: Optimized Defaults
                                                               F10: Save & Exit
                                                               ESC: Exit
Hard Drive BBS Priorities

Main   Advanced   Chipset   Security   Boot   Save & Exit

Save Options
Save Changes and Exit
Discard Changes and Exit

Save Changes and Reset
Discard Changes and Reset

Save Changes
Discard Changes

Default Options
Restore Defaults
Save as User Defaults
Restore User Defaults

Boot Override
SKHynix_HFS512GDE9X084N
Windows Boot Manager (SKHynix_HFS512GDE9X084N)

→←: Select Screen
↑↓: Select Item
Enter: Select
+/−: Change Opt.
F1: General Help
F8: Previous Values
F9: Optimized Defaults
F10: Save & Exit
ESC: Exit