BIOS主页

Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.

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

BIOS Information
BIOS Vendor   American Megatrends
Core Version   5.14
Compliancy   UEFI 2.7; PI 1.6
Access Level   Administrator

Memory Information
Total Memory

                                   Total Memory: 8192 MB
                                   (DDR4)

System Language   [English]

System Date   [Sun 01/01/2017]
System Time   [00:03:03]

Choose the system de-
language

→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
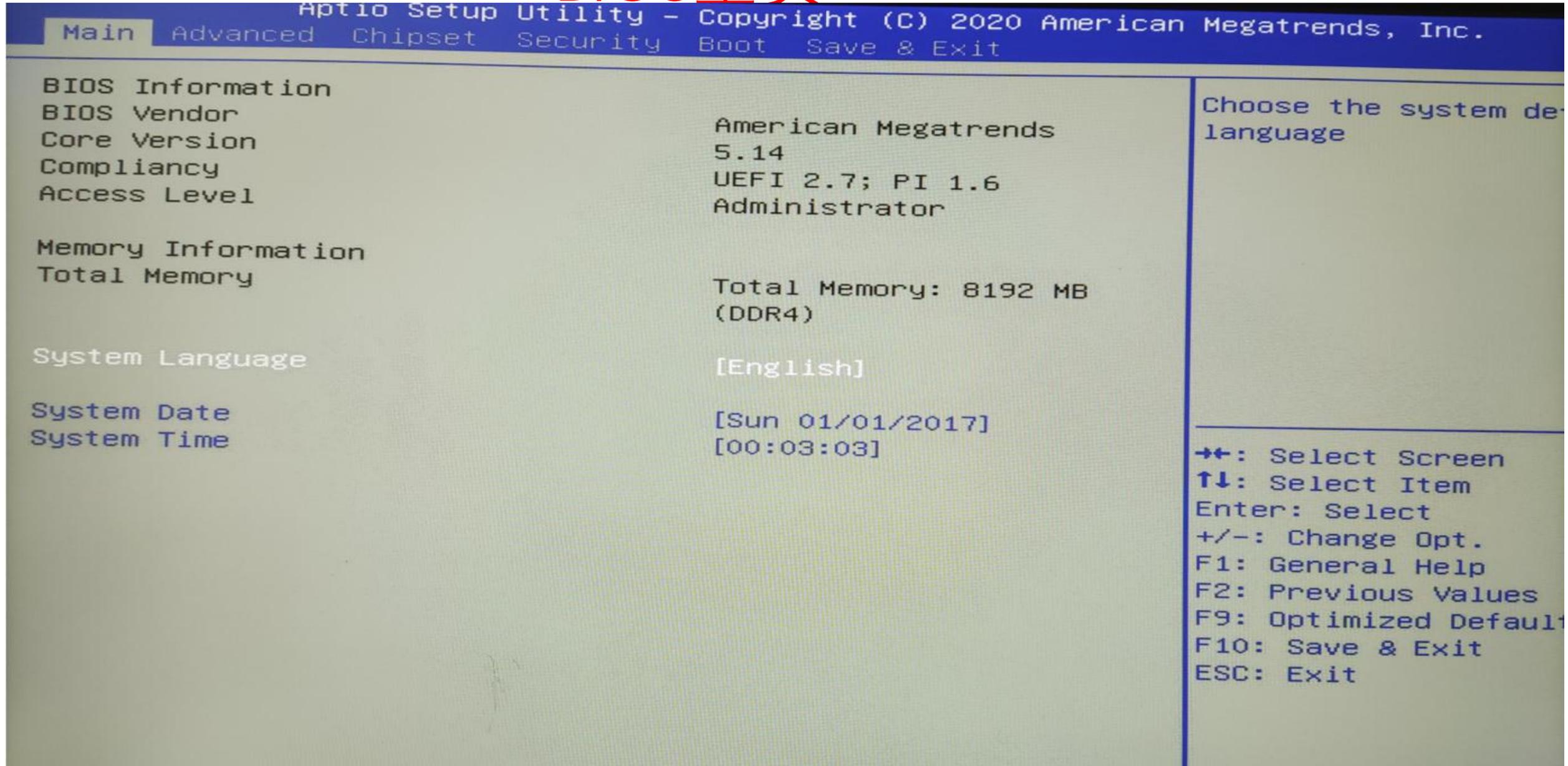F9: Optimized Default
F10: Save & Exit
ESC: Exit

VT设置

Aptio Setup Utility – Copyright (C) 2

Main   Advanced   Chipset   Security   Boot   Save & Ex

- AMD fTPM configuration
- ACPI Settings
- SATA Configuration
- IT8613 Super IO Configuration
- Hardware Monitor
- CPU Configuration   第一步
- USB Configuration
- CSM Configuration
- NVMe Configuration

- Network Stack Configuration
- AMD CBS
- AMD PBS
- Realtek PCIe GBE Family Controller (MAC:0A:E0:AF:AD:1

Advanced

CPU Configuration

Module Version: ComboAm4Cpu 03
AGESA Version : ComboAm4PI 1004

Cool and Quiet   [Enabled]
PPC Adjustment   [PState 0]
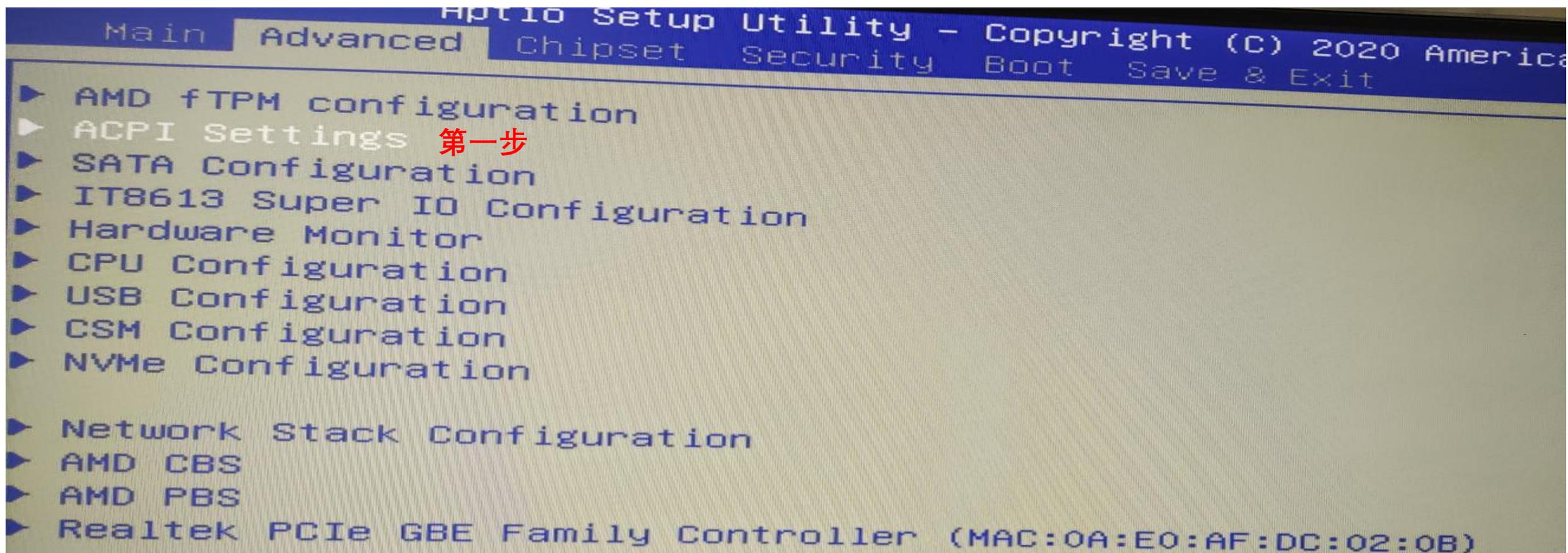NX Mode   [Enabled]
SVM Mode   第二步   [Enabled]
Node 0 Information

                                    ┌────── SVM Mode ──────┐
                                    │ Disabled   │
                        第三步   │ Enabled   │
                                    └──────────────────────┘

S3睡眠设置

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Main   Advanced   Chipset   Security   Boot   Save & Exit

▶ AMD fTPM configuration
▶ ACPI Settings   第一步
▶ SATA Configuration
▶ IT8613 Super IO Configuration
▶ Hardware Monitor
▶ CPU Configuration
▶ USB Configuration
▶ CSM Configuration
▶ NVMe Configuration

▶ Network Stack Configuration
▶ AMD CBS
▶ AMD PBS
▶ Realtek PCIe GBE Family Controller (MAC:0A:E0:AF:DC:02:0B)

ACPI Settings

Enable ACPI Auto Configuration   [Disabled]

Enable Hibernation   [Enabled]
ACPI Sleep State   第二步   [Suspend Disabled]
Lock Legacy Resources   [Disabled]

第三步

```
┌──────── ACPI Sleep State ────────┐
│ Suspend Disabled                 │
│ S3 (Suspend to RAM)              │
└──────────────────────────────────┘
```

sata接口和硬盘模式

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AMD fTPM configuration
ACPI Settings
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Realtek PCIe GBE Family Controller (MAC:0A:E0:AF:DC:02:0B)

SATA Configuration
SATA Mode   [AHCI]
SATA Port1   Not Present
SATA Port2   Not Present
SATA Port3   硬盘接口   Not Present
SATA Port4   Not Present
M.2 SATA Port   Not Present

硬盘模式
┌──────── SATA Mode ────────┐
│ AHCI   │
│ RAID   │
│ Auto   │
└────────────────────────────┘

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Main Advanced Chipset Security Boot Save & Exit

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Pc Health Status

CPU Temperature	:	+65 °C
SYS Temperature	:	+37 °C
CPU FAN Speed	:	1834 RPM
SYSFAN	:	N/A
APU	:	+1.430 V
VDD	:	+1.199 V
VCC12	:	+12.078 V
VCC5	:	+5.104 V
VCC3V	:	+3.366 V
VBAT	:	+3.058 V

CPU Smart Fan	风扇自动模式	[Automatic Mode]
- Fan off temperature lim	风扇停转温度	0
- Fan start temperature	风扇起转温度	20
- Fan Full Speed temperat	风扇全速转动的温度	85
- Fan start PWM(%)	风扇起始转速	50
- PWM Slope Setting(%)	转速斜率设置	5

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Main   Advanced   Chipset   Security   Boot   Save & Exit

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AMD CBS
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Realtek PCIe GBE Family Controller (MAC:0A:E0:AF:DC:02:0

Advanced

Compatibility Support Module Configuration

CSM Support

[Enabled]

CSM16 Module Version

07.83

GateA20 Active
Option ROM Messages
INT19 Trap Response
HDD Connection Order

[Upon Request]
[Force BIOS]
[Immediate]
[Adjust]

Boot option filter   第二步

Option ROM execution   第三步

┌─── Boot option filter ───┐
│ UEFI and Legacy   │
│ Legacy only   │
│ UEFI only   │
└───────────────────────────┘

Network
Storage
Video
Other PCI devices

[UEFI]
[Legacy]
[UEFI]

内存频率

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Main   Advanced   Chipset   Security   Boot   Save & Exit

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▶ AMD PBS
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Advanced

AMD CBS

▶ CPU Common Options
▶ DF Common Options
▶ UMC Common Options   第二步
▶ NBIO Common Options
▶ FCH Common Options
▶ 300/400/500 Chipset Common Options

Advanced

UMC Common Options

► DDR4 Common Options　第三步
► DRAM Memory Mapping
► NVDIMM
► Memory MBIST

Advanced

DDR4 Common Options

▶ DRAM Timing Configuration　　　第四步
▶ DRAM Controller Configuration
▶ CAD Bus Configuration
▶ Data Bus Configuration
▶ Common RAS
▶ Security

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.

▶ I Decline
▶ I Accept   第五步

I Accept

Overclock 第六步 [Enabled]
Memory Clock Speed [Auto]
Tcl [Auto]
Trcdrd [Auto]
Trcdwr [Auto]
Trp [Auto]
Tras [Auto]
Trc Ctrl [Auto]
TrrdS [Auto]

┌──────── Overclock ────────┐
│ Auto   │
│ Enabled   │
└───────────────────────────┘

TrrdL
Tfaw Ctrl
TwtrS
TwtrL [A
Twr Ctrl [Auto]
Trcpage Ctrl [Auto]
TrdrdScL Ctrl [Auto]
TwrwrScL Ctrl [Auto]
Trfc Ctrl [Auto]
Trfc2 Ctrl [Auto]
Trfc4 Ctrl [Auto]
Fail_CNT 5
ProcODT [Auto]
Tcwl [Auto]

Advanced

Set t

I Accept

Overclock
Memory Clock Speed **第七步**
Tcl
Trcdrd
Trcdwr
Trp
Tras
Trc Ctrl
TrrdS
TrrdL
Tfaw Ctrl
TwtrS
TwtrL
Twr Ctrl
Trcpage Ctrl
TrdrdScL Ctrl
TwrwrScL Ctrl
Trfc Ctrl
Trfc2 Ctrl
Trfc4 Ctrl
Fail_CNT
ProcODT
Tcwl

注意事项：A320的BIOS 为16进制
内存频率设置的时候要*2 去设置
内存频率需要达到3200 只需要在
频率的位置设置为1600即可

Memory Clock Speed

Auto
667MHz
800MHz
933MHz
1067MHz
1200MHz
1333MHz
1367MHz
1400MHz
1433MHz
1467MHz
1500MHz
1533MHz
1567MHz
1600MHz
1633MHz
1667MHz
1700MHz
1733MHz

→←: S
↑↓: S

Enter
+/−:
F1:
F2:
F9:
F10:
ESC:

[Auto]

Accept

Overclock
Memory Clock Speed
Tcl
Trcdrd
Trcdwr
Trp
Tras
Trc Ctrl
TrrdS
TrrdL
Tfaw Ctrl
TwtrS
TwtrL
Twr Ctrl
Trcpage Ctrl
TrdrdScL Ctrl
TwrwrScL Ctrl
Trfc Ctrl
Trfc2 Ctrl
Trfc4 Ctrl
Tcwl
Trtp
Tcke

而16进制的就是16才是10 而不是10
进制的10就是10 16就是16 如果不能
完全清楚的 可以直接从8开始往后数
比如18 那么在右侧的设置位置就是12

Tcl	
Auto	
8 Clk	8
9 Clk	9
OAh Clk	10
OBh Clk	11
OCh Clk	12
ODh Clk	13
OEh Clk	14
OFh Clk	15
10h Clk	16
11h Clk	17
12h Clk	18
13h Clk	19
14h Clk	20
15h Clk	21
16h Clk	22
17h Clk	23
18h Clk	24
19h Clk	25

Specif

←→: Se
↑↓: Se
Enter:
+/-: C
F1: Ge
F8: Pr
F9: Op
F10: S
ESC: E

[E
[1
[1
[1
[1
[1
[2
[A
[A
[A
[A
[A
[A
[A
[A
[A
[A
[A
[A
[A
[Aut
[Auto]

Accept

Overclock   [Enabled]
Memory Clock Speed   [1600MHz]
Tcl   [12h Clk]
Trcdrd   [16h Clk]
Trcdwr   [16h Clk]
Trp   [16h Clk]
Tras   [2Eh Clk]
Trc Ctrl   [Auto]
TrrdS   [Auto]
TrrdL   [Auto]
Tfaw Ctrl   [Auto]
TwtrS   [Auto]
TwtrL   [Auto]
Twr Ctrl   [Auto]
Trcpage Ctrl   [Auto]
TrdrdScL Ctrl   [Auto]
TwrwrScL Ctrl   [Auto]
Trfc Ctrl   [Auto]
Trfc2 Ctrl   [Auto]
Trfc4 Ctrl   [Auto]

例如：18-22-22-42
3200MHZ 就是右侧的设置参
数

网络唤醒

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▶ SATA Configuration
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▶ Hardware Monitor
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Advanced

Network Stack 第二步 [Disabled]

```
┌───────────── Network Stack ─────────────┐
│  Disabled                                │
第三步  │  Enabled                                 │
└──────────────────────────────────────────┘
```

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Main   Advanced   Chipset   Security   Boot   Save & Exit

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Advanced

AMD CBS

▶ CPU Common Options
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▶ UMC Common Options
▶ NBIO Common Options
▶ FCH Common Options   第二步
▶ 300/400/500 Chipset Common Options

Advanced

FCH Common Options

▶ SATA Configuration Options
▶ USB Configuration Options
▶ SD (Secure Digital) Options
▶ Ac Power Loss Options   第三步
▶ I2C Configuration Options
▶ Uart Configuration Options
▶ ESPI Configuration Options
▶ XGBE Configuration Options
▶ eMMC Options

Advanced

Ac Power Loss Options

Ac Loss Control   第四步   [Always Off]

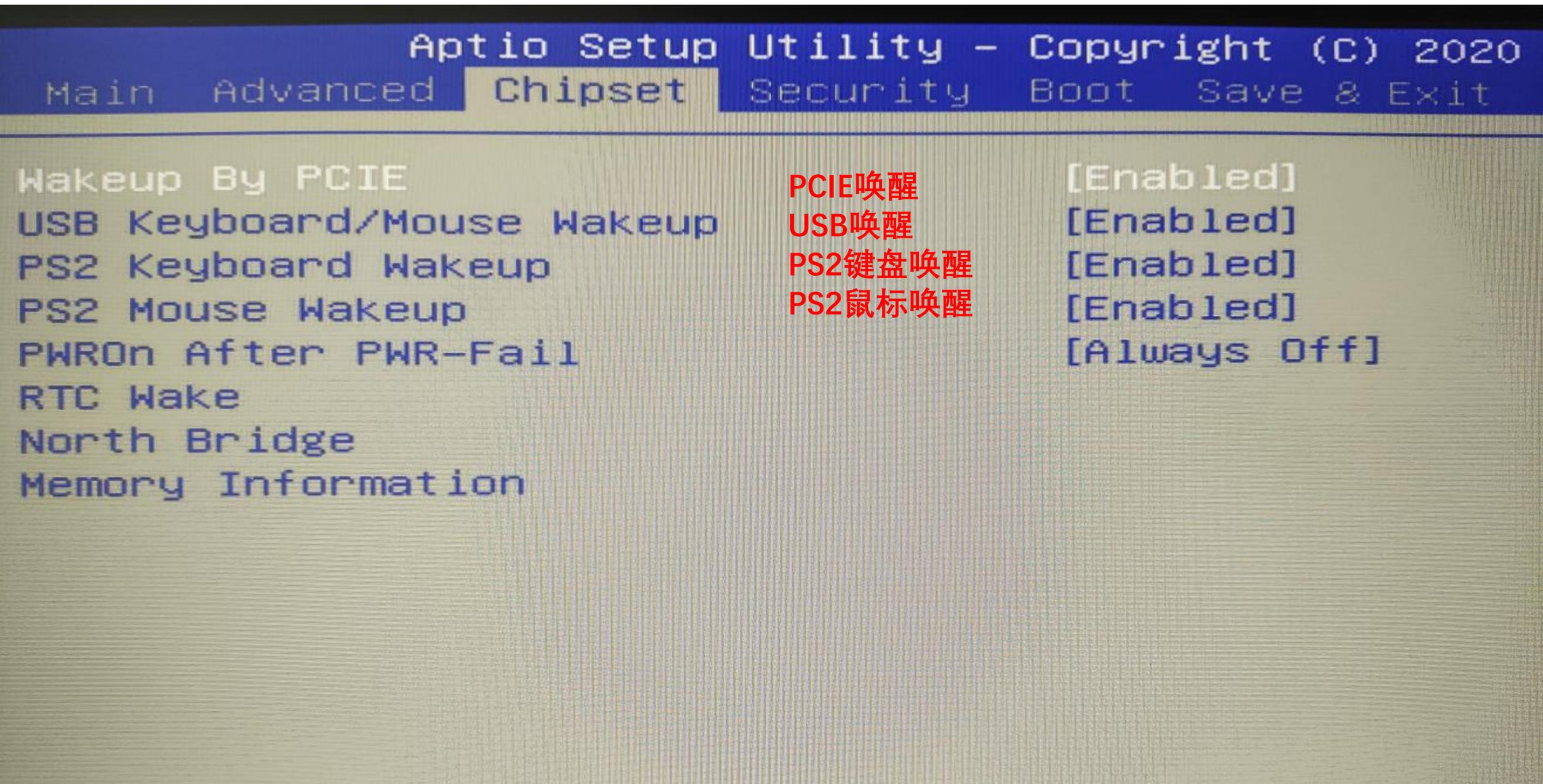Selec

第五步

```
┌─────── Ac Loss Control ───────┐
│ Always Off                    │
│ Always On                     │
│ Reserved                      │
│ Previous                      │
└───────────────────────────────┘
```

→←: Se
↑↓: Se
Enter:
+/-: C
F1: Ge
F2: Pr
F9: Op
F10: S
ESC: E

唤醒相关设置

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Main   Advanced   Chipset   Security   Boot   Save & Exit

Wakeup By PCIE   PCIE唤醒   [Enabled]
USB Keyboard/Mouse Wakeup   USB唤醒   [Enabled]
PS2 Keyboard Wakeup   PS2键盘唤醒   [Enabled]
PS2 Mouse Wakeup   PS2鼠标唤醒   [Enabled]
PWROn After PWR-Fail   [Always Off]
RTC Wake
North Bridge
Memory Information

定时开机

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Main   Advanced   Chipset   Security   Boot   Save & Exit

Wakeup By PCIE   [Enabled]
USB Keyboard/Mouse Wakeup   [Enabled]
PS2 Keyboard Wakeup   [Enabled]
PS2 Mouse Wakeup   [Enabled]
PWROn After PWR-Fail   [Always Off]
► RTC Wake   第一步
► North Bridge
► Memory Information

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Chipset

Power On By RTC 第二步 [Dynamic Time]
Wake up minute increase 1

第三步：选择对应的模式
1.关闭
2.固定的时间
3.动态的时间

Power On By RTC
Disabled
Fixed Time
Dynamic Time

Power On By RTC   [Fixed Time]
Wake up day   0   天
Wake up hour   0   时
Wake up minute   0   分
Wake up second   0   秒

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Main   Advanced   Chipset   Security   Boot   Save & Exit

Password Description

The User's password and Password check can only
be set after set the Administrator's password,
If Password check set to setup, this only asked
for when entering Setup, If set to Always, this
will always asked when Power on. In Setup Users
whether have Administrator rights or not depend
on the User entered the type of password.
The password length must be
in the following range:
Minimum length   3
Maximum length   20

Administrator Password
User Password
STIBP Status   [Disabled]

► Secure Boot   第一步

Sec

→←:
↑↓:
Ent
+/−
F1:
F2:
F9:
F10
ESC

Security

System Mode   Setup

Secure Boot   第三步：开启安全启动   [Disabled]
                                                   Not Active

                   第二步：设置自己需要的安全启动模
Secure Boot Mode   式   [Custom]
► Restore Factory Keys
► Reset To Setup Mode

► Key Management

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

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▶ Realtek PCIe GBE Family Controller (MAC:OA:EO:AF:AD:15:27)

Advanced

▶ AMD Firmware Version
Primary Video Adaptor   [Ext Graphics (PEG)]
MITT/WITT Selection   [Both disable]
LAN Power Enable   [Enabled]
PCIe/GFX Lanes Configuration   [x16]
Unused GPP Clocks Off   [Enabled]
Clock Power Management(CLKREQ#)   [Disabled]
Clear MCA at warm rst   [Disabled]
Win7 USB Wake Support   [Disabled]
Adjust APU VDDP   [Disabled]
Adjust V1.8
AddCmd MemVref   Adjust
External Clock Gen — SATA DISPO

┌──────── Above 4GB MMIO Enable ────────┐
│ Disabled   │
│ Enabled   第三步   │
└───────────────────────────────────────┘

SATA Redriver Tuning
Above 4GB MMIO Enable   第二步
NVMe RAID mode   [Disabled]

网卡启动

Main Advanced Chipset Security Boot Save & Exit

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Advanced

Compatibility Support Module Configuration

CSM Support   [Enabled]

CSM16 Module Version   07.83

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

┌──────── Network ────────┐
Boot option filter   │ Do not launch   │
                                    │ UEFI   │
Option ROM execution   第三步   │ Legacy   │
                                    └──────────────────────┘

Network   第二步   [Do
Storage   [UEFI]
Video   [Legacy]
Other PCI devices   [UEFI]