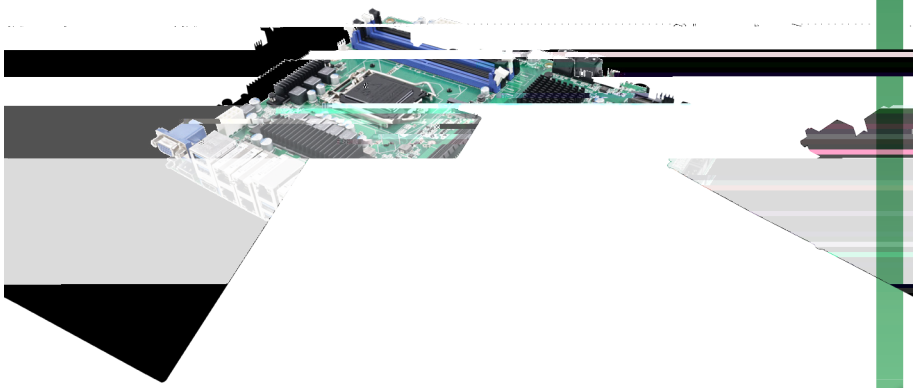
VLP30:573



Yhuvlrq#414

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Hυ Hυ G

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4.7 Security ····· 27
4.8 Boot ····· 28
4.9 Save & Exit ····· 29
8 #ZGW# #ooooooo

4 #

414#

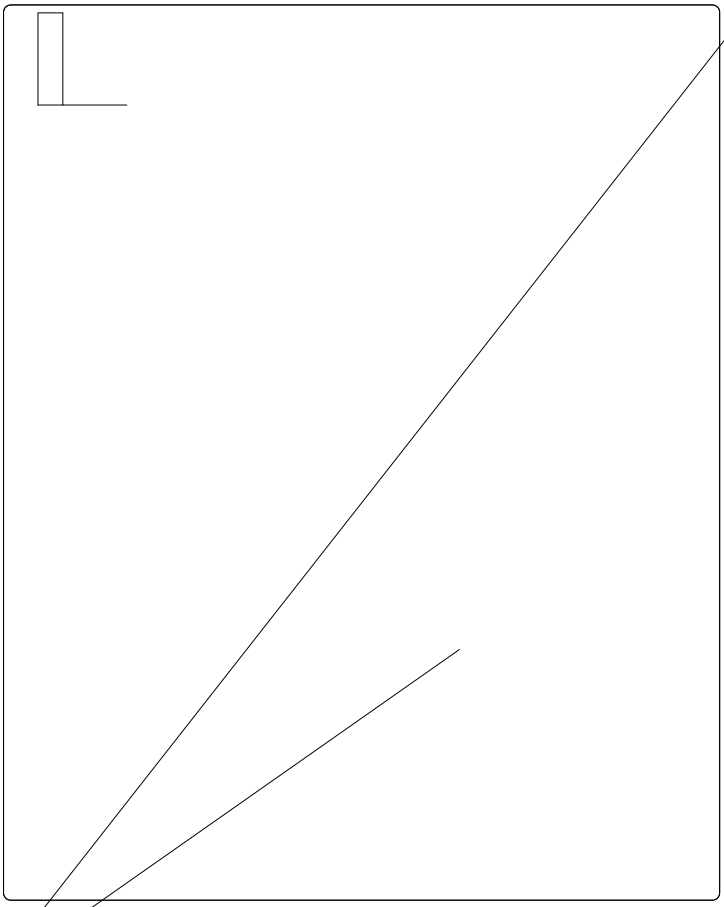
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J ### #[#4
J ### #[#4

415#

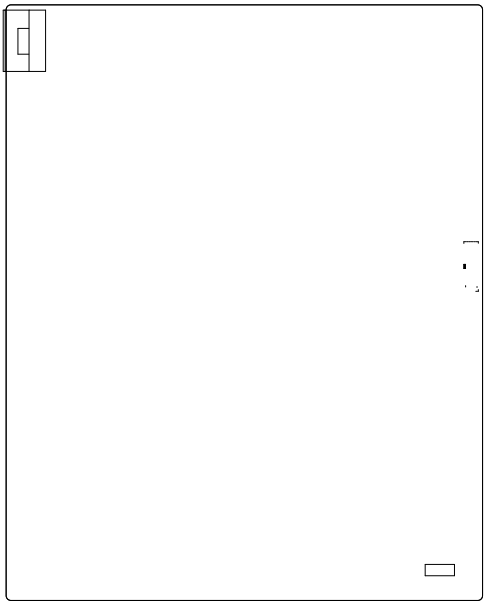
	- Intel LGA1151 6/8/9 i3/i5/i7/i9 CPU, TDP 95W
	- Intel® Z390
	-2× 288PIN DDR4 DIMM 32GB 64GB Ÿ 4 ÿ
	- Intel CPU (CPU)
	- DP+HDMI+VGA,
	- 4 SATA3.1 SATA RAID 0/1/5/10 - 2 M.2 2280 SATA/NvME
	- IO MIC-In, Speaker-Out, Line-In Ÿ ÿ F_Audio
	- 6 Intel : LAN1: i219LM, LAN2~6: Intel i210AT Ÿ 2 ÿ
XVE	- 4 USB3.0 Type A RJ45 2 USB3.0 - 4 USB2.0 USB Dongle - 2 USB3.0 Ÿ ÿ - 2 USB2.0 Ÿ ÿ
	- 6 (COM1&2 RS232/422/485,COM3-6 RS232)
L2R	- 8 I/O +5V
WSP	- SLB9670(SLB9672) TPM2.0( )
	- ATX ATX/AT FPANEL1 FPANEL2
#	- 2 PCIe3.0 x16 (x8) - 5 PCI (32bit)
	- I/O
	- 0 ‘ 60 0%‘ 90%, 85~105kPa
	- -40 ‘ 85 0%‘ 90%, 85~105kPa
Zdwfk#Grj#	- 255 /
ELRV	- AMI UEFI BIOS
#	- Win7/Win10/WES7/Linux
SFE +O#[#Z[K,	- 305mm X 244mm



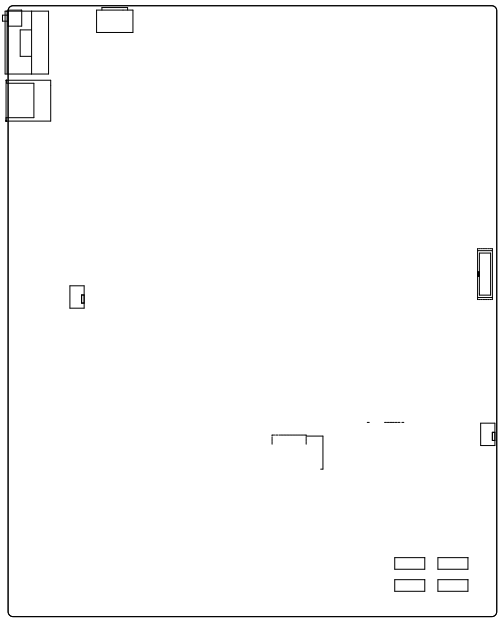
419#LR#



- VGA: VGA
- Restore: /
- DP: DP
- USB3.0: USB3.0
- HDMI: HDMI
- LAN: RJ45
- AUDIO:

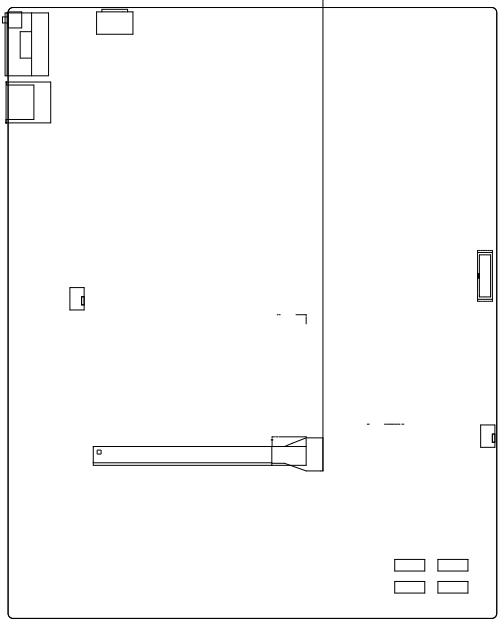


51516#GLP P#



2× 288PIN DDR4 DIMM
32GB 64GB Ÿ
4 ÿ

51517#SFL2SFLH#



2 PCIe3.0 x16 Ÿ x8 ÿ
5 PCI (32bit)

6 #)

614#

2 Ÿ ÿ G

Ÿ ÿ G

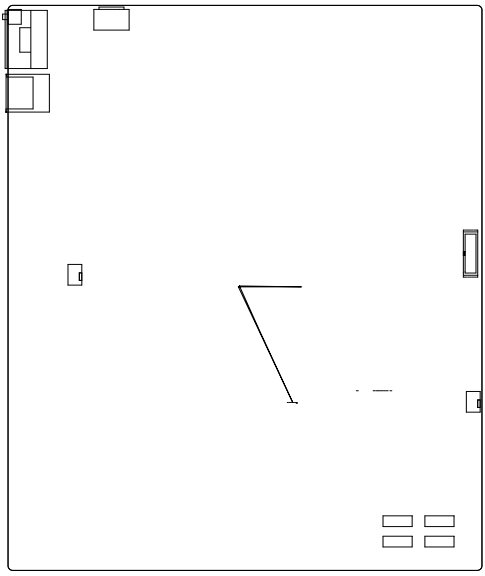
3 1ʻ 2 2ʻ 3 Ÿ ÿ G



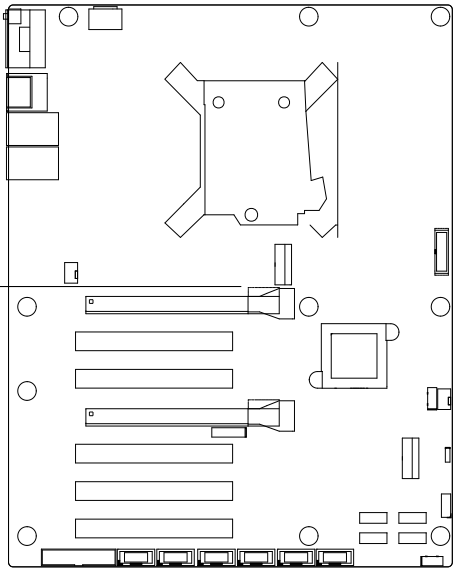
1

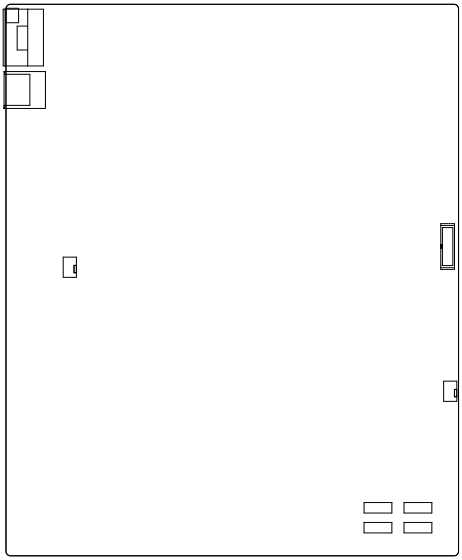
1. "1" 1 G
2. G

615#

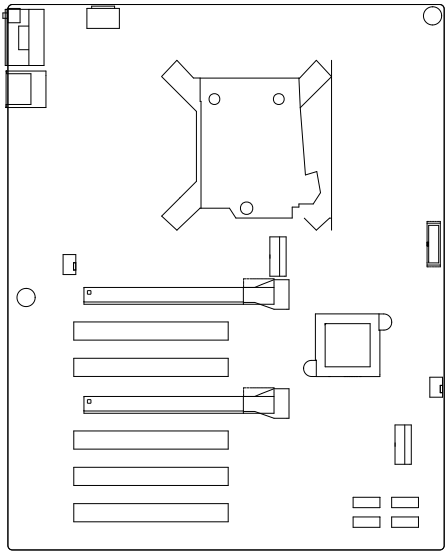


61 : #IIF42526272829





6144#IbDXGLR4



6146#IbSDQH05

7 #ELRV#

714#ELRV#

AMI BIOS G BIOS Basic Input Output System(ÿ G
ROM Ÿ Read-Only Memory) G BIOS

a. POST(Power On Self Test) G
b. G
c. Hυ G
d. SETUP G
BIOS CMOS RAM
G BIOS G CMOS
BIOS G

715#ELRV#

BIOS Setup G BIOS
G
SETUP
a. SETUP
b. G

BIOS BIOS G
G

71514## #ELRV#

<DEL> BIOS G

Suhvv#?GhohwhA#wr#hqwhu#VHWXS

Suhvv ?I44A#wr#hqwhu#Err w#Phqx

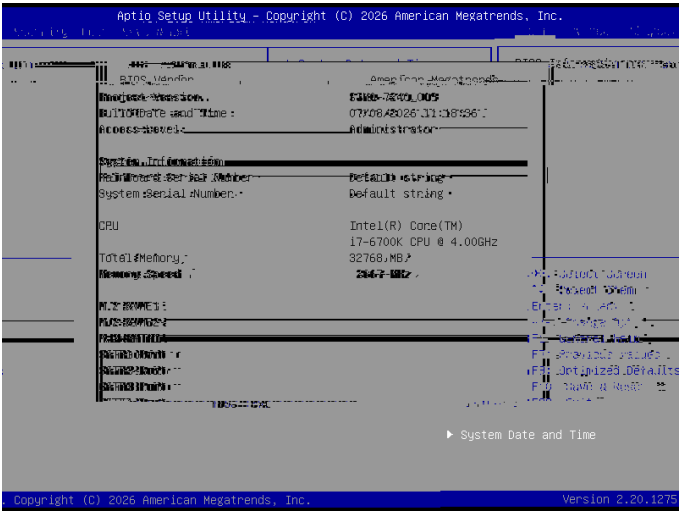
71515##

<Enter> <F1> <Esc>
G G

← / →	
↑ / ↓	
+/ -	/
<Enter>	
<ESC>	CMOS SETUP
<F1>	
<F7>	
<F9>	
<F10>	CMOS

716#ElRV#

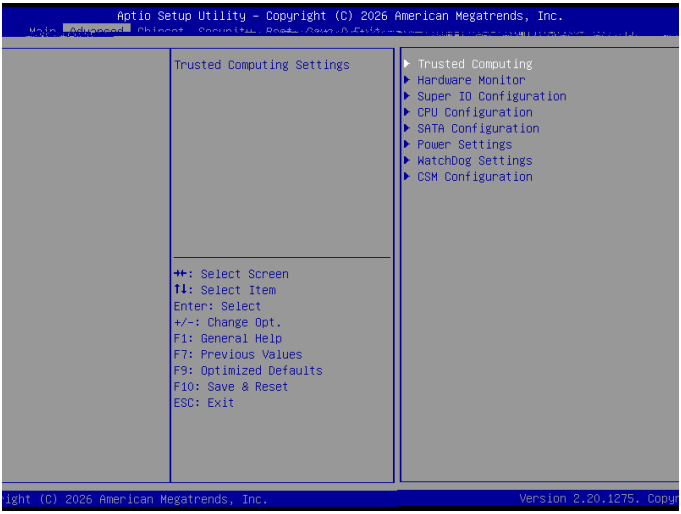
717#Pdlq



• MV|vwhp#Gdwh#dqg#Wlph#+ ,

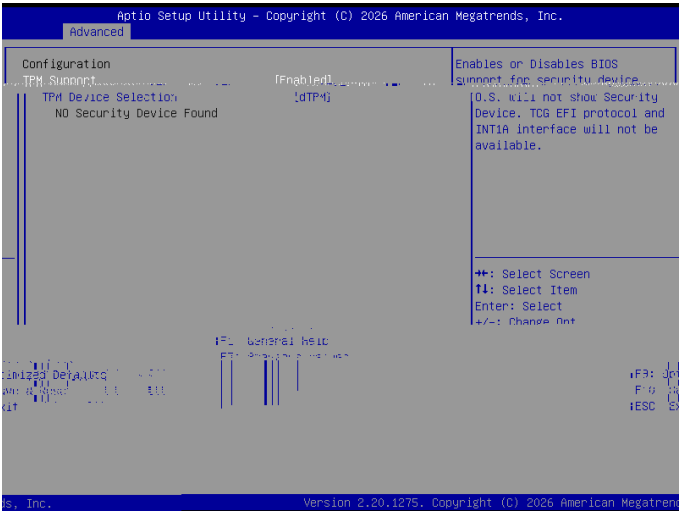
, d / / dG

718#Dgydqfhg



Trusted Computing		

#Wuxvwhg#Frqsxwlqj## ?HqwhuA Щ



WSP#Vxss ruw

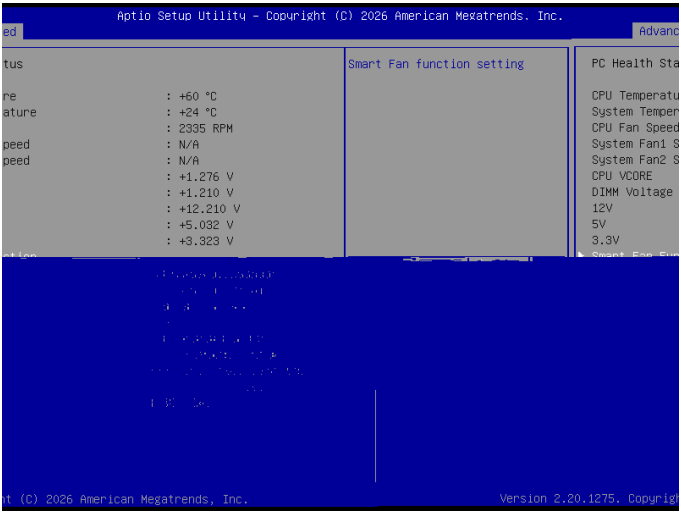
TPM G Enabled,Disabled.

WSP#Ghylfh#Vhohfwlrq

TPM G Auto, PTT, dTPM.

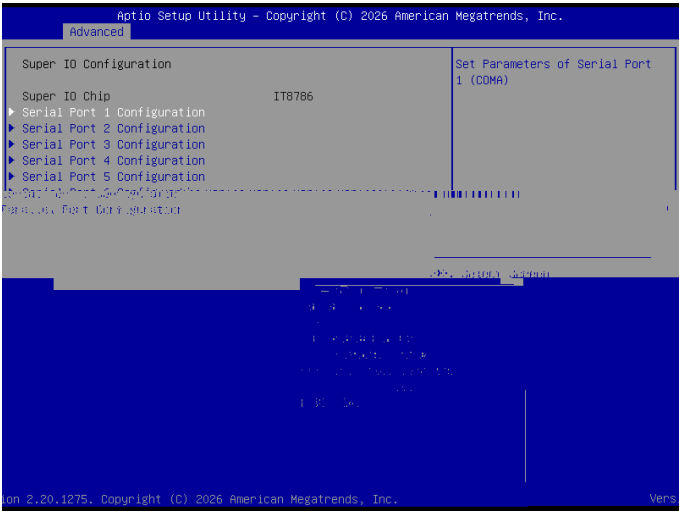
- <Esc> ⊄Advanced⊄

►#Kdug zduh#P rqlwru# ?HqwhuA Щ



• <Esc> ⊿Advanced⊿

►#Vxsh#LR#Frq jxudwlrq# ?HqwhuA Щ

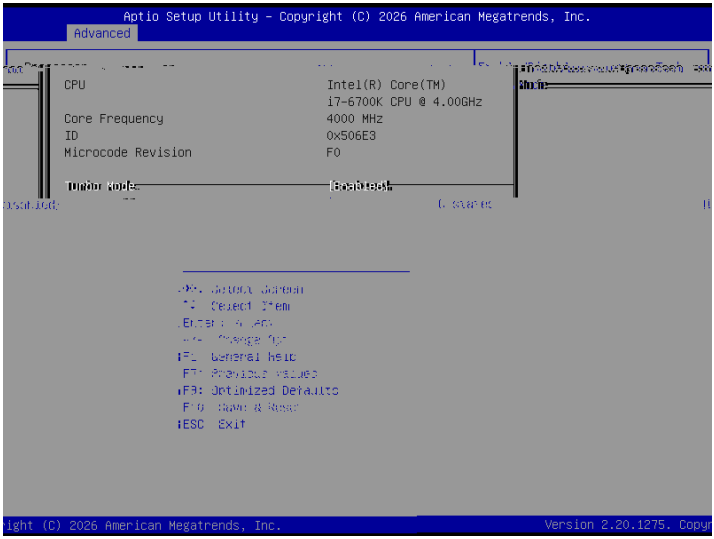


• Vxsh#LR#Frq jxudwlrq

G

• # <Esc> ⊿Advanced⊿ G

▸##FSX#Frq jxudwlrq### ?HqwhuA Щ



•

Wxuer#Prgh

/ turbo G

Disable,Enable.

F#vwdwhv

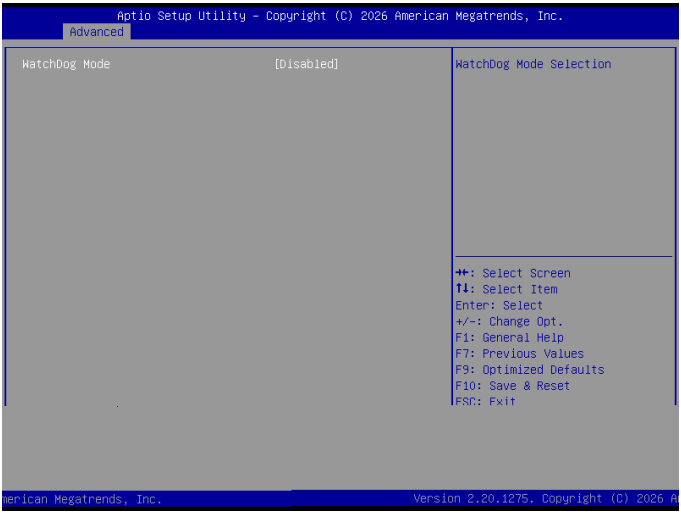
C G

H Disable,Enable. K P D

• # <Esc> Enabl l Advance K È

►##VDWD#Frq jxudwlrq

►#ZdwfkGrj#Vhwwlqjv# ?HqwhuA Щ



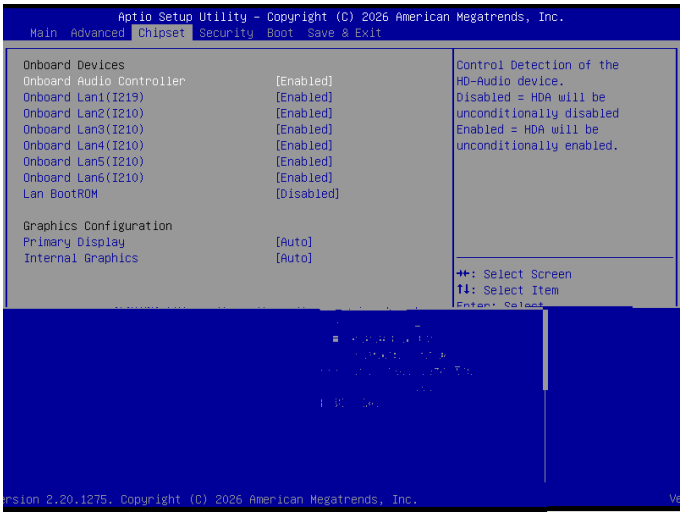
• #ZdwfkGrj#Prgh

G

Disabled,Enabled.

• # <Esc> ᑯ Advanced d

719#FkIsvhW



Rqer dug#Dxglr#Frqwurohu

G Enabled,Disabled.

Rqer dug#Odq4+L54<,

Lan1 G Enabled,Disabled.

Rqer dug#Odq526272829+L543,

Lan2/3/4/5/6 G Disabled,Enabled.

Odq#Er rwURP

BootROM G Disabled,Enabled.

Sul p du|#Glvsod|

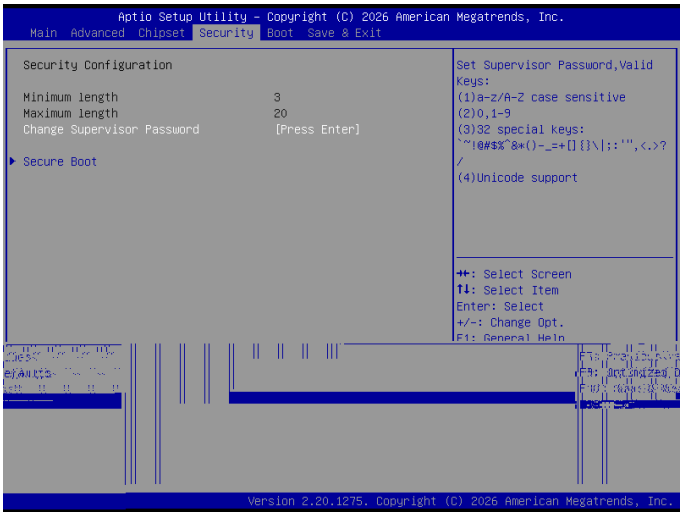
G Auto,IGFX,PEG,PCI.

Lqwhuqdo#Judsklfv

IGFX G Auto,Disabled,Enabled.

- # <Esc> ᑯ Chipset d

71:#Vhfxulw|



Fkdqjh#Vxshuylvru#Sdvvzrug

1. change Supervisor Password <Enter> G
2. d Create New Password d 3~20
<Enter> d Confrm Password d G
d Invalid Password! d G
d Administrator Password d d Enter Current Password d
d Create New Password d <Enter> G

Vhfxuh#Errw

G

- # <Esc> d Security d

71;#Errw



Vhwxs#Surp sw#Wlphrxw

G

Errwxs#Qxp0rfn#Vwdwh

Numlock G On NumLock

G Of Numlock G

On,Of.

XVE#Pdvv#Vwrudjh#Vxssruw

USB G

Enabled,Disabled.

Ixoo#Vfuhhq#0rjr

Logo G

Enabled,Disabled.

Errw#prgh#vhohfw

G

DUAL.

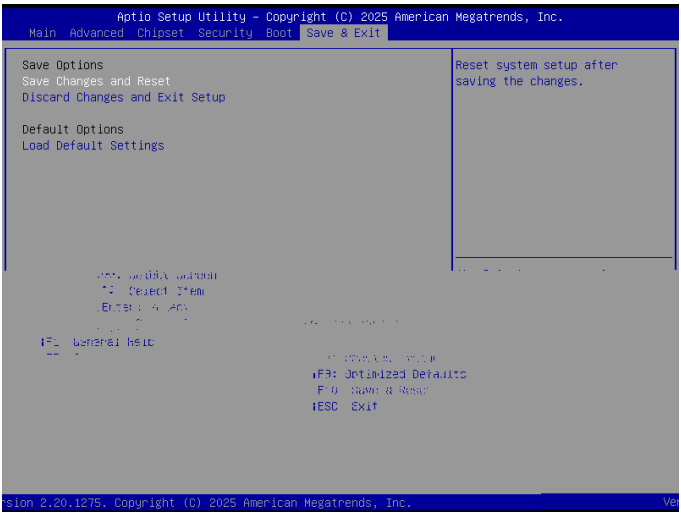
Errw#Rswlrq#&4043

G

Network,NVME,Hard Disk,USB Device, CD/DVD.

• # <Esc> d Boot d

71<#Vdyh#)#H{lw



- **Vdyh#Fkdqjhv#dqg#Uhvhw**
  G
- **Glvfdug#Fkdqjhv#dqg#H{lw#Vhwxs**
  G#
- **Ordg#Ghidxow#Vhwwlqjv**
  G

• # <Esc> d Save&Exit d

8 #ZGW#

8.4 #ZGW#

```
#define SuperIo_Index_Port 0x2E
#define SuperIo_Data_Port 0x2F

UINT8 Data8
//a. Enter Super IO Configuration Mode
IoWrite8(SuperIo_Index_Port, 0x87);
IoWrite8(SuperIo_Index_Port, 0x01);
IoWrite8(SuperIo_Index_Port, 0x55);
IoWrite8(SuperIo_Index_Port, 0x55);
//b. Select Logic Device, LDN 7
IoWrite8(SuperIo_Index_Port, 0x07);
IoWrite8(SuperIo_Data_Port, 0x07);
//d. Set WDT mode Second or Minute    Register 0x72 Bit7 value:1-Second;0- Minute
IoWrite8(SuperIo_Index_Port, 0x72);
//Set Second mode
IoWrite8(SuperIo_Data_Port, IoRead8(SuperIo_Data_Port) | 0x80);
// Set Minute mode
// IoWrite8(SuperIo_Data_Port, IoRead8(SuperIo_Data_Port) & 0x7F);
//e.Set WDT Time-out value    5 Second or Minute
IoWrite8(SuperIo_Index_Port, 0x73);
IoWrite8(SuperIo_Data_Port, 0x5);
//Enabled WDT
IoWrite8(SuperIo_Index_Port, 0xF1);
IoWrite8(SuperIo_Data_Port, IoRead8(SuperIo_Data_Port) | 0x44);

//Disabeld WDT
IoWrite8(SuperIo_Index_Port, 0x73);
IoWrite8(SuperIo_Data_Port, 0x0);
IoWrite8(SuperIo_Index_Port, 0xF1);
IoWrite8(SuperIo_Data_Port, IoRead8(SuperIo_Data_Port) & 0xBB);
//f.Exit Super IO Configuration Mode
IoWrite8(SuperIo_Index_Port, 0x02);
IoWrite8(SuperIo_Data_Port, 0x02);
```

9 #JSLR#

9.4#JSLR#

##

```
#define MEM_BASE 0XFD6B0000
Offset
GPIO1=0X960 GPIO2=0X950 GPIO3=0XA90 GPIO4=0XA60
GPIO5=0XA50 GPIO6=0XA40 GPIO7=0XA30 GPIO8=0XA20


BIT9                :   0               ; 1
BIT8                :   0               ; 1
BIT1                        1       ; 0
BIT0                        1       ; 0


        GPIO1
UINT16 OFFSET = 0X960;

        GPIO1           low    Bit9=1 BIT8=0 BIT0=0
MmioWrite16(MEM_BASE + OFFSET, ( MmioRead16(MEM_BASE + OFFSET) & (~(BIT0 + BIT8 +
BIT9 )) | BIT9)   );

        GPIO1           , Bit9=0 BIT8=1
MmioWrite16(MEM_BASE + OFFSET, ( MmioRead16(MEM_BASE + OFFSET) & (~(BIT8 + BIT9 )) |
BIT8)   );

Value= MmioRead16(MEM_BASE + OFFSET) | BIT1
BIT1       1               0
```

					XVE6	XVE5	FRP	0DQ	SFl	SFlh
SIM0-7240	Z390	2 DDR4	3	4 SATA	8	6	6	6	5	2

(Pb)	(Hg)	(Cd)	(Cr( ))	(PBBs)	(PBDEs)	(DBP)	(DIBP)	(BBP)	2-(DEHP)
×	○	○	○	○	○	○	○	○	○
×	○	○	○	○	○	○	○	○	○
×	○	○	○	○	○	○	○	○	○
×	○	○	○	○	○	○	○	○	○
×	○	○	○	○	○	○	○	○	○
×	○	○	○	○	○	○	○	○	○
×	○	○	○	○	○	○	○	○	○
×	○	○	○	○	○	○	○	○	○
×	○	○	○	○	○	○	○	○	○
×	○	○	○	○	○	○	○	○	○
×	○	○	○	○	○	○	○	○	○

1 ○
×
2