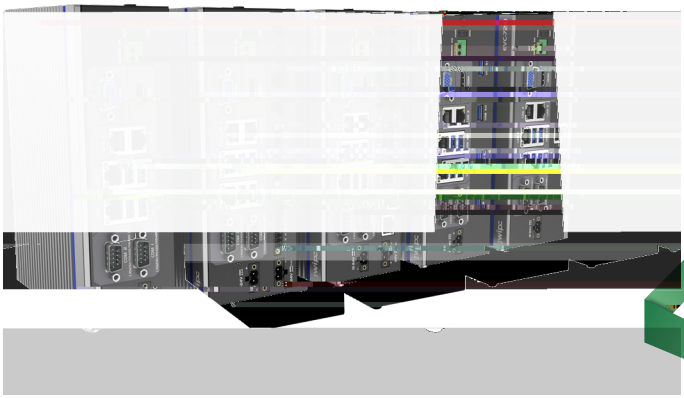
EVC-7210



Version 1.0

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1

1.1

EVC-7210 Intel Z390 LGA1151 6/8/9
CPU POE 4 /8 USB3.0

1.2

LED	- 1 Power LED, 1 HDD LED
	- 2 RS232/422/485(DB9),
	- 1 Mini-PCIe SIM 4G/5G)
Watch Dog	- 1 to 255 sec/min. per step
BIOS	- AMI UEFI/Legacy BIOS
	- Win7/Win10/Linux
	- : -10 50 ; : 0% 95%,
	- : -40 85 ; : 0% 95%,
	- With SSD:2Grms, IEC 60068-2-64, random 5~500Hz 1 hr/axis
	- With SSD: 15G, IEC 60068-2-27, half sine, 11ms duration
	- EVC-7210 : 12V to 24V DC-in, 2Pin - EVC-7211/7213: 24V DC in
	- /
W x H x D	- EVC-7210 63.5mm(W)*200mm(H)*150 mm(D) - EVC-7211/7213/7214: 78mm(W)*200mm(H)*150 mm(D) - EVC-7216: 82mm(W)*200mm(H)*150 mm(D)

2

2.1

3

3.1 EVC-7210~7216

□ 19″ □ □
■ □ VESA □
■ □ _____

3.2

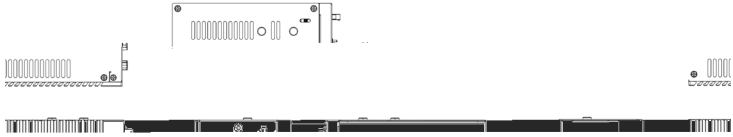
3.2.1 EVC-7210

mm



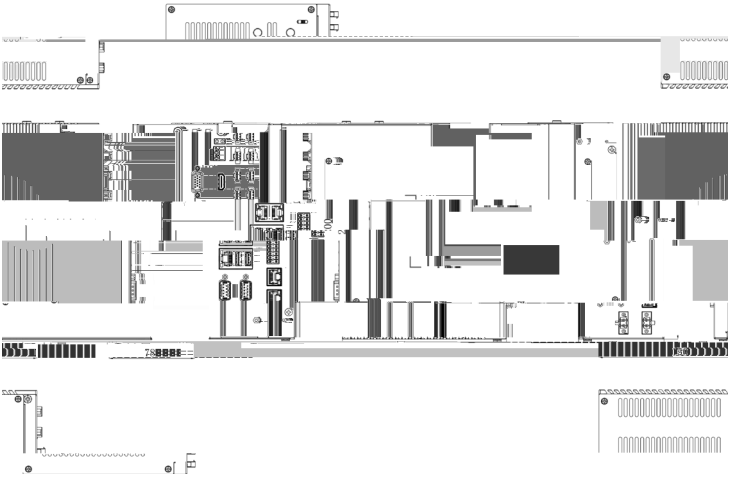
3.2.2 EVC-7211

mm



3.2.3 EVC-7213

mm



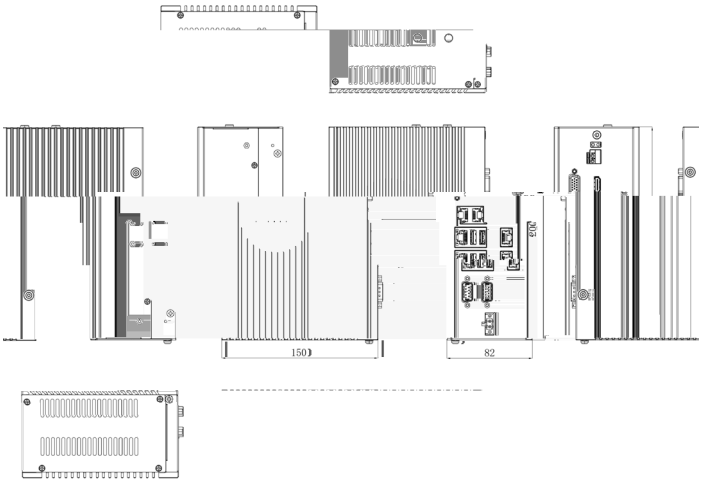
3.2.4 EVC-7214

mm



3.2.5 EVC-7216

mm



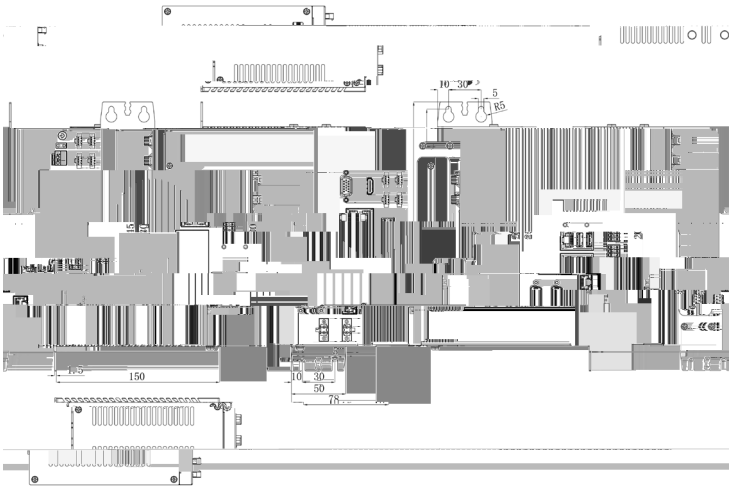
3.3

3.3.1 EVC-7210



3.3.2 EVC-7211

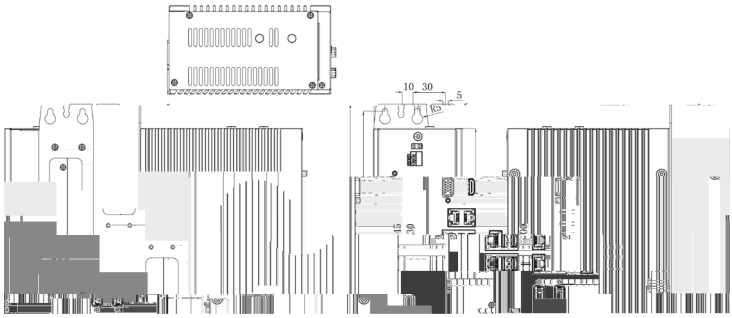
3.3.3 EVC-7213



3.3.4 EVC-7214



3.3.5 EVC-7216



4

4.1

⚠

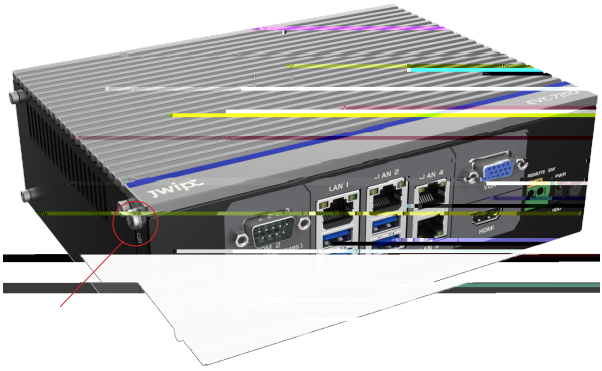
⚠

⚠

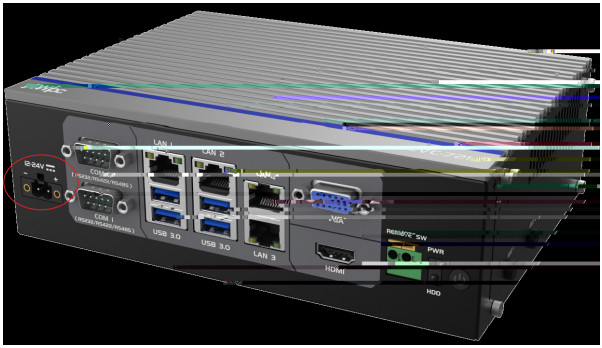
I/O USB I/O

4.2

I/O

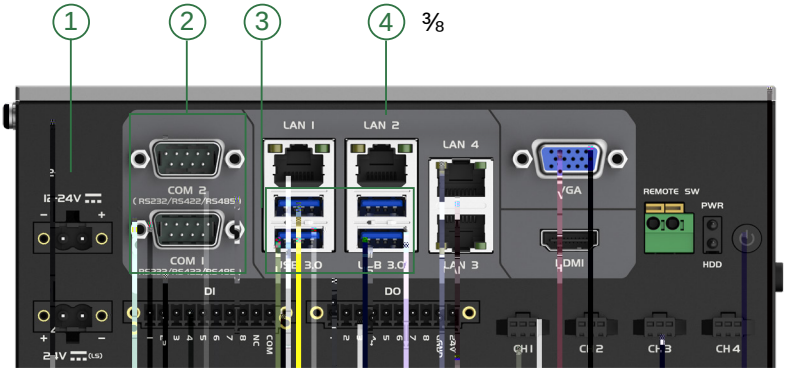
2.5mm2 0.1Ω	

4.3

DCIN / 12V~24V	

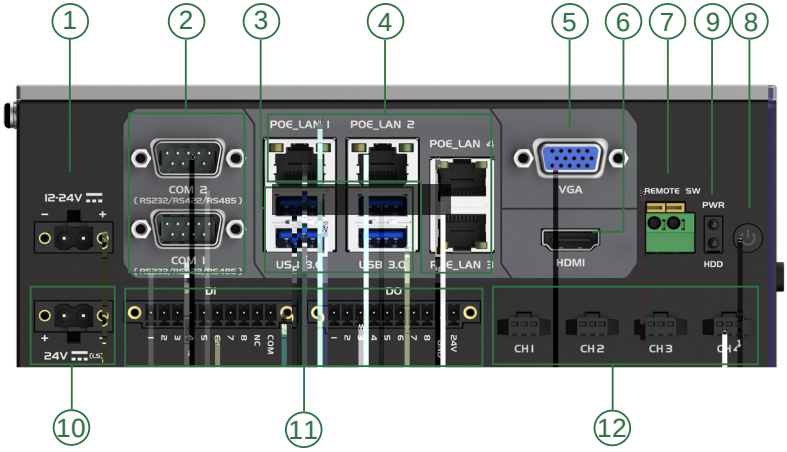
5.2 EVC-7211

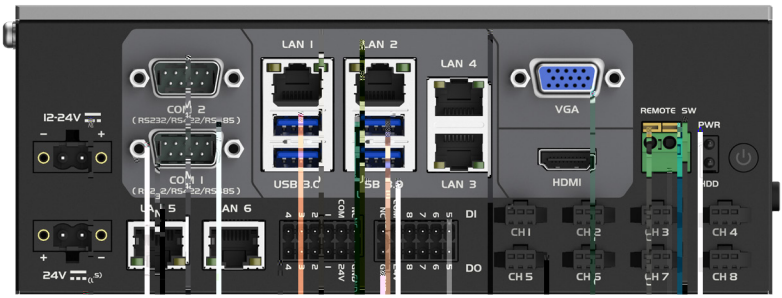



1
2
3
4
LAN 1
LAN 2
LAN 4
LAN 3
COM 2
(RS232/RS422/RS485)
COM 1
VGA
DMI
REMOTE SW
PWR
HDD
DI
DO
CH 1
CH 2
CH 3
CH 4

5.3 EVC-7211(POE)

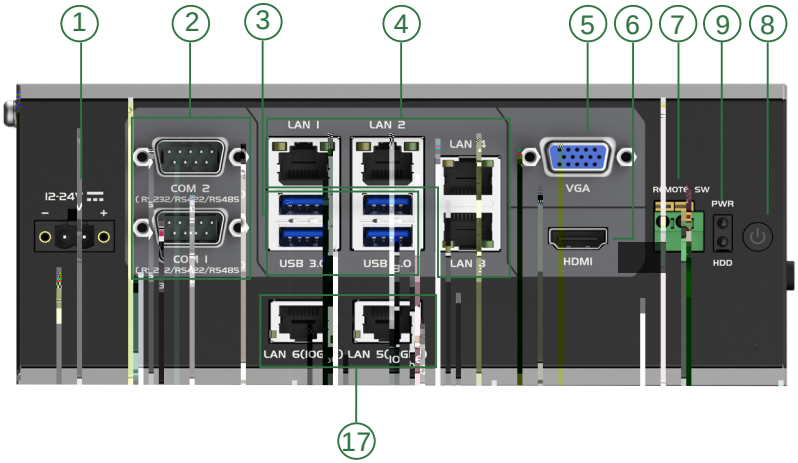





LAN 1
LAN 2
LAN 4
VGA
REMOTE SW
PWR
12-24V
COM 2
(RS232/RS422/RS485)
COM 1
(RS232/RS422/RS485)
USB 3.0
USB 2.0
LAN 3
HDMI
LAN 5
LAN 6
DI
DO
CH 1
CH 2
CH 3
CH 4
CH 5
CH 6
CH 7
CH 8
24V

5.6 EVC-7216



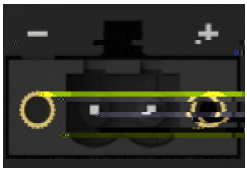

1
2
3
4
5
6
7
9
8
12-24V
COM 2
COM 1
LAN 1
LAN 2
LAN 3
LAN 4
VGA
HDMI
REMOTE SW
PWR
HDD
17

5.8

		LED	
POWER	PC		
			PC
HDD			

5.9

2pin

	1	DC-
	2	DC+

5.10.4 SATA_PWR1

1	+V5
2	GND
3	GND
4	+V12

5.10.5 SATA1

1	GND
2	

5.10.6 F_USB1

1	+V5	2	+V5
3	USB2_N1	4	USB2_N2
5	USB2_P1	6	USB2_P2
7	GND	8	GND
		10	GND

5.10.7 F_AUDIO1

1	MIC1_IN_L	2	GND
3	MIC1_IN_R	4	NC
5	FRONT_OUT_R	6	MIC1_SENSE
7	GND		
9	FRONT_OUT _L	10	FRONT_OUT _SENSE

5.10.8 FAN1

1	GND
2	+12V
3	FAN_TAC
4	FAN_CTL

5.10.9 JRSTBTN1

1	RESET_BUT
2	GND

5.10.10 JPOE

1	48V_1-	2	48V_1+
3	48V_2-	4	48V_2+
5	48V_3-	6	48V_3+
7	48V_4-	8	48V_4+

5.10.11 JPOE1

1	GND	2	+V_DCIN
3	GND	4	+V_DCIN
5	GND	6	+V_DCIN
7	GND	8	+V_DCIN

5.10.12 EVC-7211

MUART1 mcu log

1	RX
2	TX
3	GND

MBOOT1 mcu 2-3

1	3.3V
2	MCU_BOOT
3	GND

MSWD1 mcu

1	3.3V
2	SWDIO
3	SWCLK
4	NRST
5	GND

5.10.13 EVC-7213

MUART1 mcu log

1	RX
2	TX
3	GND

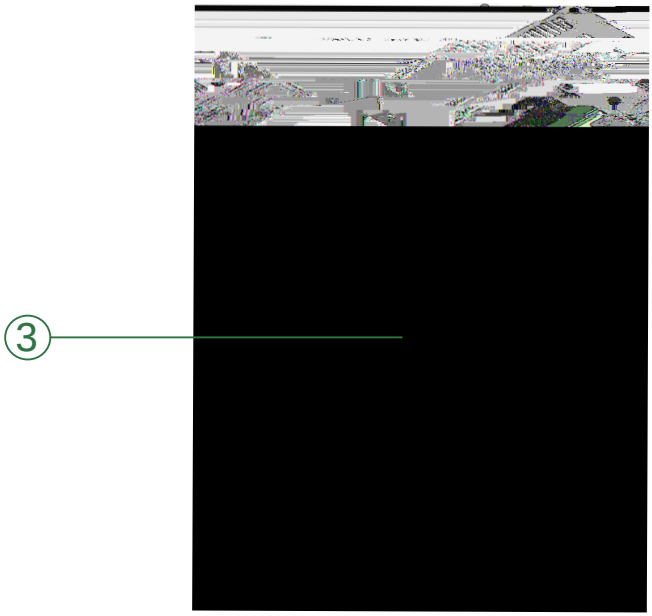
MSWD1 mcu

1	3.3V
2	SWDIO
3	SWCLK
4	NRST
5	GND

6

6.1

6.1.1 EVC-7210



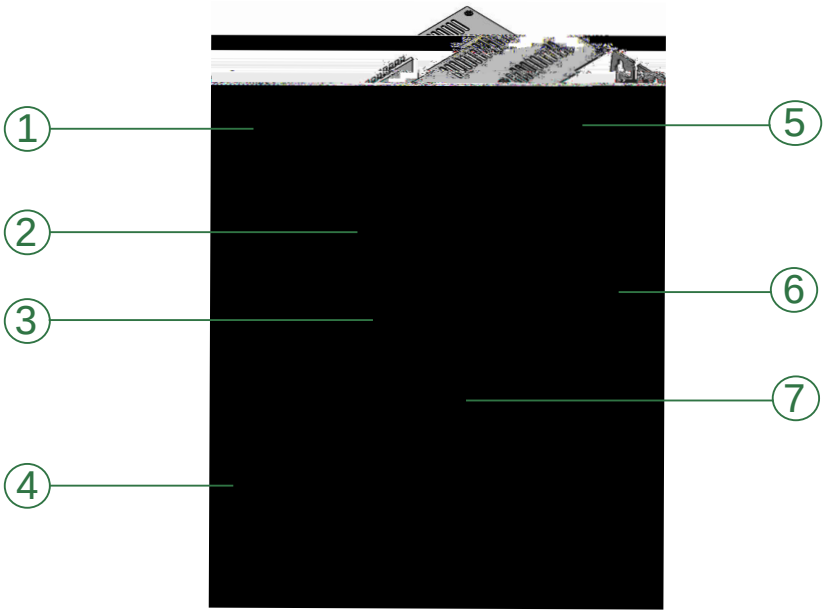
1		2		3	

6.1.2 EVC-7211



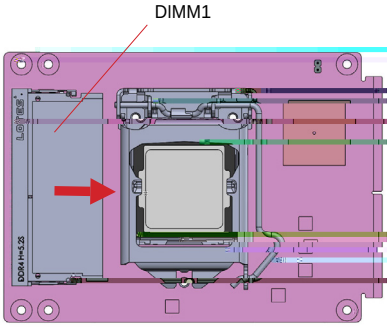
1		2		3	
4		5		6	
7					

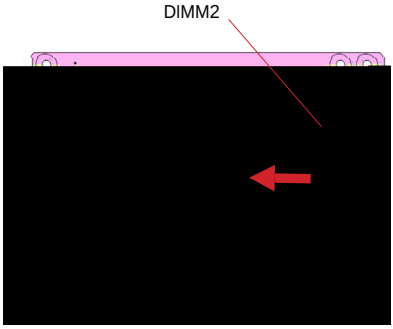
6.1.3 EVC-7213



1		2		3	
4		5		6	
7					

6.2





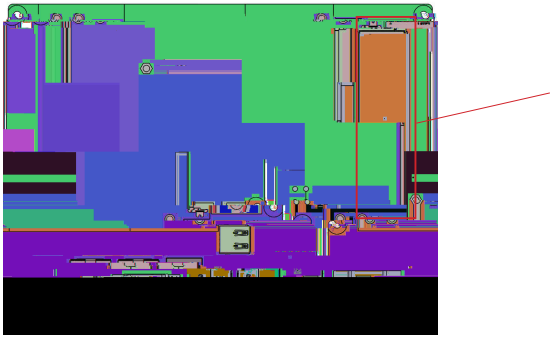
CPU

DIMM1 DIMM2

1.

2.
3. 30° DIMM1/2

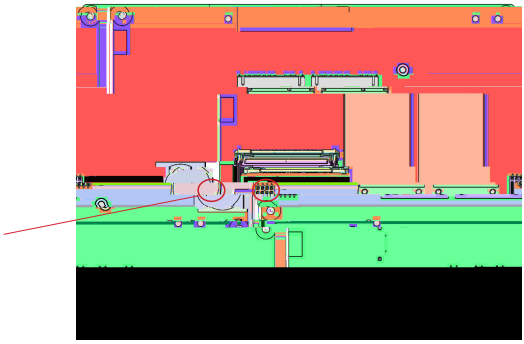
6.3 M.2 2242/2280



M.2 1 M2 M.2 2242/2280 NVMe SSD

1. 30°
2. M.2 2242 M.2 2280 M.2 2242

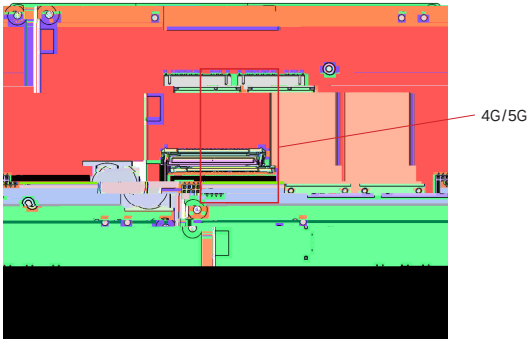
6.4 mSATA SSD



mSATA 2 mSATA mSATA SSD

30°

6.5 4G/5G



4G/5G

4G/5G 30°

7 BIOS

7.1 BIOS

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

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

7.2 BIOS

BIOS Setup BIOS

SETUP
a. SETUP
b.

BIOS BIOS

7.2.1 BIOS

<DEL> BIOS

Press <Delete> to enter SETUP

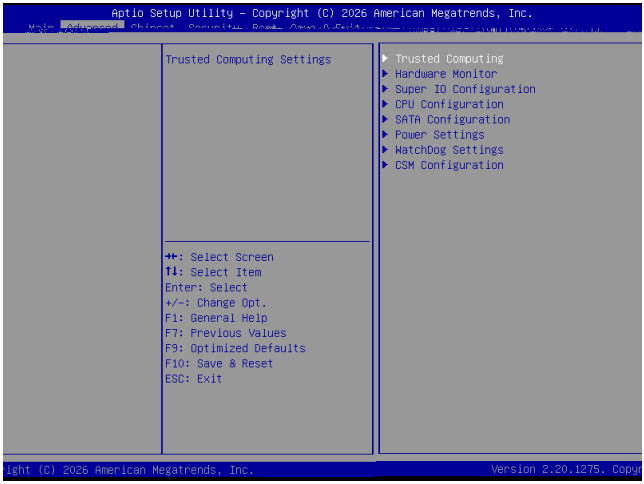
Press <F11> to enter Boot Menu

7.2.2

<Enter> <F1> <Esc>

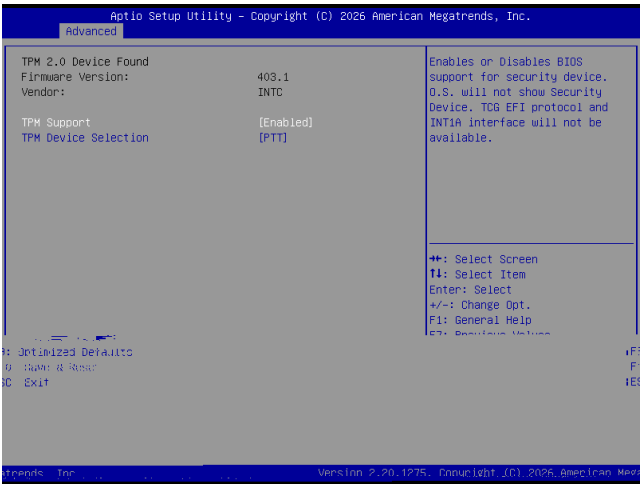
Type	
	/
	CMOS SETUP
	CMOS

7.5 Advanced



Trusted Computing		
Hardware Monitor		
Super IO Configuration	IO	
CPU Configuration	CPU	
SATA Configuration	SATA	
Power Settings		
WatchDog Settings		
CSM Configuration	CSM	

- Trusted Computing <Enter>



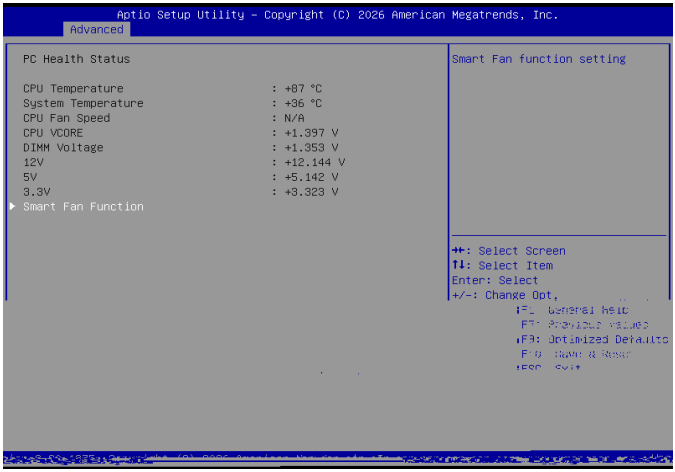
TPM Support

TPM Disable,Enable.

TPM Device Selection

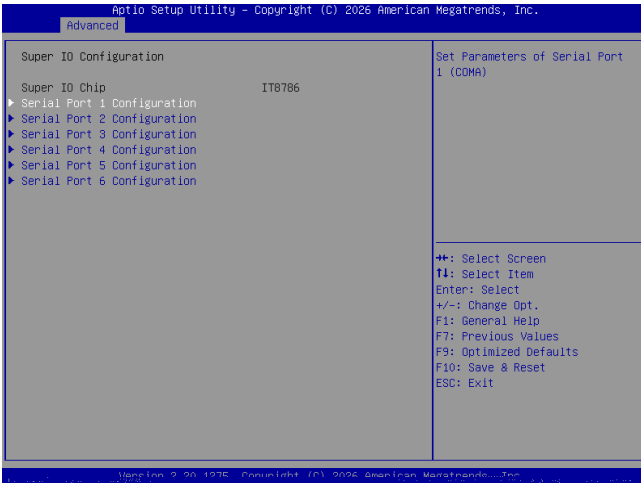
TPM dTPM, PTT.

- Hardware Monitor <Enter>



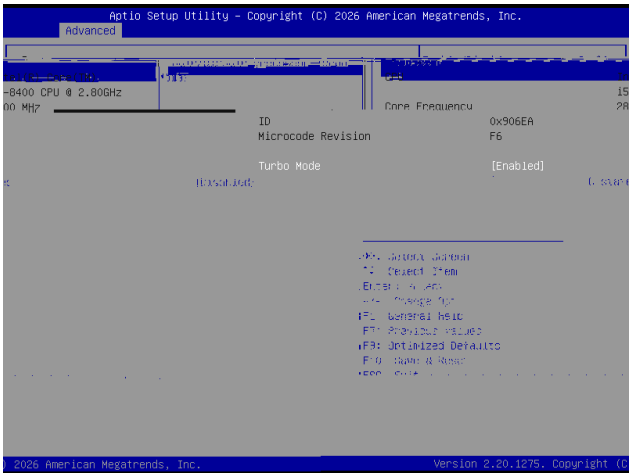
Smart Fan Funtion

- Super IO Configuration <Enter>



Serial Port 1/2/3/4/5/6 Configuration

- CPU Configuration <Enter>



Turbo Mode

Turbo Disabled,Enabled.

C states

CPU Disabled,Enabled.

Power Loss

/ / AC

Of , On,Last Status.

USB Wakeup

USB Enabled,Disabled.

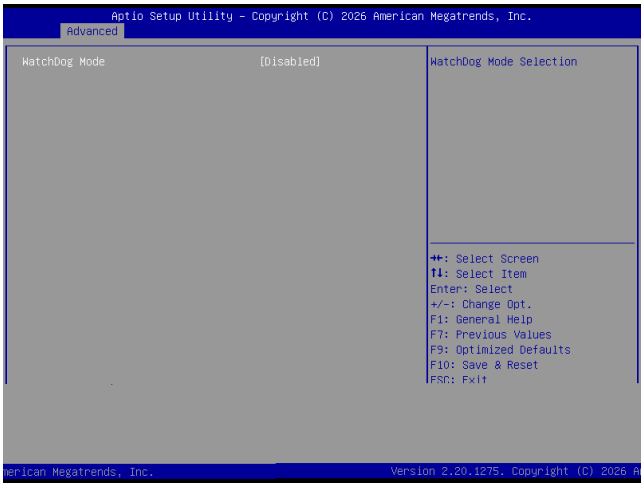
LAN Wakeup

Enabled,Disabled.

RTC Wakeup

RTC Disabled,Fixed Time,Dynamic Time.

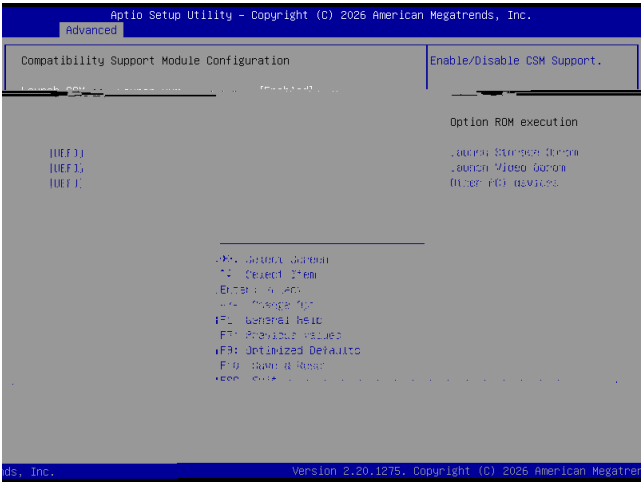
- WatchDog Con f guration <Enter>



WatchDog Mode

Enabled,Disabled.

▸ CSM Configuration <Enter>



Launch CSM

CSM Disabled,Enabled.

Launch Storage Oprom

Storage Oprom Do not launch,UEFI,Legacy.

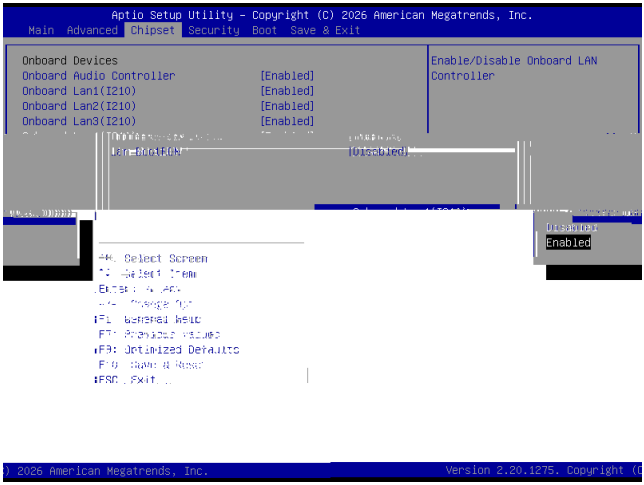
Launch Video Oprom

Oprom Do not launch,UEFI,Legacy.

Other PCI devices

PCI Oprom Do not launch,UEFI,Legacy.

7.6 Chipset



Onboard Audio Controller

Enabled,Disabled.

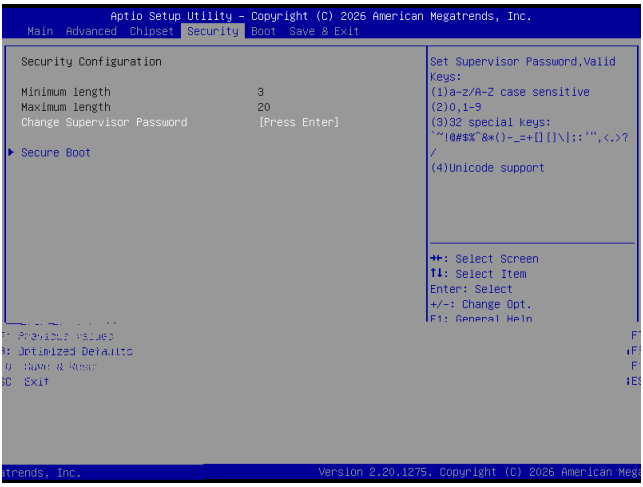
Onboard LAN 1/2/3/4 Controller

Enabled,Disabled.

Lan BootROM

PXE Disabled,Enabled.

7.7 Security



Change Supervisor Password

1. Change Supervisor Password <Enter>
2. “ Create New Password ” 3~20

<Enter> “ Confrm Password ”

“ Invalid Password! ”

“ Change Supervisor Password ” “ Enter Current Password ”

“ Create New Password ” <Enter>

7.8 Boot

Setup Prompt Timeout

Bootup NumLock State
Numlock On NumLock
Of Numlock
On,Of.
USB Mass Storage Support
USB
Disabled,Enabled.
Full Screen Logo
Logo
Disabled,Enabled.
Boot Option #1-10

7.8 Save & Exit



Save Changes and Reset

Discard Changes and Exit Setup

Load Default Settings

8 WDT

8.1 WDT

```
#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);
```

10

11

11.1

		/
		1 2 12
	“ ”	
		1 2 3
		Winpe
I O		