



IES-4430

13th Gen Intel® Core™ i3/i5/i7

Processor

Fanless Embedded Edge System

User Manual

Acrosser Technology Co., Ltd.
www.acrosser.com

Industrial & Embedded Solutions

Disclaimer

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Purpose

This document is intended to provide the information about the features and use of the product.

Audience

The intended audiences are technical personnel, not for general audiences.

WARNING

Danger of explosion if batteries are incorrectly replaced. Always replace the battery with the same specifications. Dispose of used batteries according to the manufacturer's instructions.

Before running the system, make sure the power cord is firmly plugged into the socket.

CAUTION



IEC 60417-6042 (2010-11)



IEC 60417-6172 (2012-09)

All power cords must be disconnected during product repair.

Ver: 100

Date: Sep. 21, 2026

To read this User Manual on your smart phone, you will have to install an APP that can read PDF file format first. Please find the APP you prefer from the APP Market.

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1. System Introduction

The Acrosser IES-4430 is a rugged, fanless embedded edge system powered by 13th Gen Intel® Core™ i7/i5/i3 processors, delivering exceptional processing performance and power efficiency for next-generation edge computing. Built to withstand demanding industrial environments, this compact yet powerful system features an optimized cooling design, rich I/O connectivity for seamless device integration, and flexible expansion capabilities for versatile deployments. With its long-term lifecycle support and robust reliability, the IES-4430 is an ideal solution for factory automation, industrial Internet of Things (IIoT), and intelligent edge applications.

1.1. Specifications

(Specifications are subject to change without notice.)

General

Thermal Solution	• Fanless
CPU	• Intel® Core™ i7-1365UE,i5-1335UE,i3-1315UE
Memory	• Onboard LPDDR5 16GB(up to 32GB)
BIOS	• AMI

Network Interface

Ethernet (on-board)	• 1 x RJ45 Intel® I226IT 2.5GbE LAN • 1 x RJ45 Intel® I219LM GbE LAN • 1 x RJ45 Intel® I210IT GbE LAN(Optional)
----------------------------	---

Storage

HDD Bay	• 1 x 2.5"Internal HDD Bay
M.2 M Socket	• 1x M.2 M socket for 2280 NVMe

I/O

Panel	• 2 x Isolated RS-485 Terminal Block • 2 x RS232/422/485 DB9 • 2 x Isolated CAN Bus, Terminal Block • 3 x USB3.2 Gen2 (Type A)2 x HDMI
--------------	---

- 2 x USB2.0 (Type A)(1 x Optional)
- 1 x USB3.2 Gen1 (Type C)
- 4 x DI, 4 x DO Isolated (Optional)
- 4 x DI, 4 x DO Isolated terminal block
- 1 x HDMI
- 1 x DP
- 1 x Power Green LED
- 1 x Power Red LED (ATX)
- 6 x External Antenna holes

Internal I/O

- 1x M.2 E key Connector 2230
(with PCIe x1+USB2.0)
 - 2x M.2 B key Connector 3042/3052(with SIM socket)
(with PCIe x1+USB 3.2/2.0)
 - 1 x Nano SIM Card Socket
-

Other Features

Watchdog Timer

- Software programmable 0~255 Seconds, 0=disable timer.

Battery

- Lithium Battery, 3V 220mAH (CR2032), for RTC

Hardware Monitoring

- CPU Voltage
 - CPU Temperature
 - System Temperature
-

Security & Mgmt.

- On-board TPM 2.0
-

Power Requirement

Input Voltage

- 12-24 VDC

Power Consumption

- 90 W (typical)

Power Connector

- 3 pin terminal block
-

Software

OS Support

- Ubuntu 22.04 LTS
 - Windows 10,11(64-bit)
-

Mechanical & Environment

Dimension

- 175(L) x 120(W) x 82(H)mm

Operating Temperature

- 0 ~ 50°C (32~ 122°F)

Storage Temperature

- -40 ~ 80°C (-40 ~ 176°F)
-

Relative Humidity	• 5 to 95% @ non-condensing
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EMC & Safety

Certification	• CE, FCC Class A, RoHS 2
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Drop Test	• ISTA-2A 2006
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1.2. Package Contents

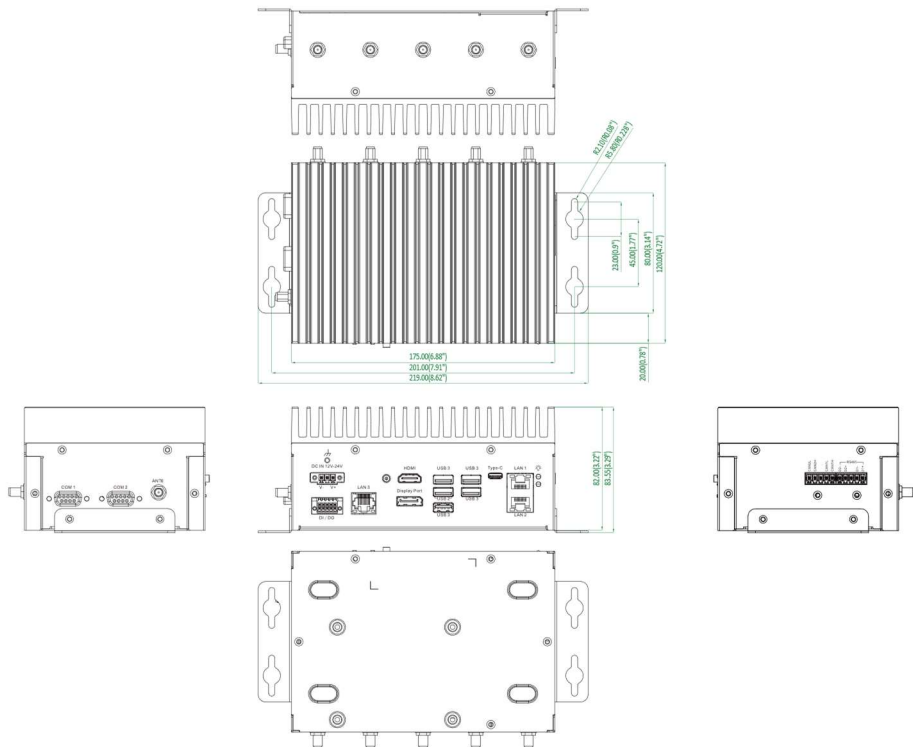
Check if the following items are included in the package.

	Item	Q'ty	Remark
☐	IES-4430 System	1	
☐	3 Pin Terminal block	1	
☐	5 Pin Terminal block	2	
☐	10 Pin Terminal block	1	
☐	Screw Pack	1	
☐	Bracket (Optional)	2	

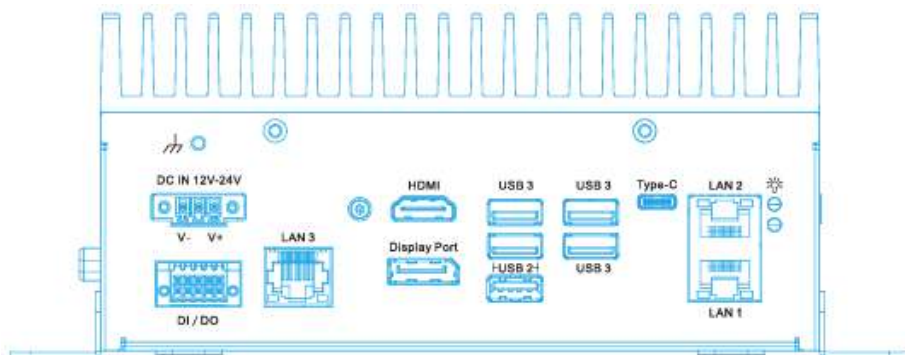
1.3. System Dissection

1.3.1. Dimensions

(Unit: mm)

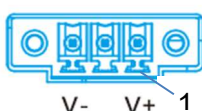


1.3.2. Front I/O Panel



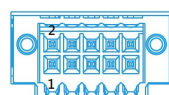
- Power**

12/24 DC power input connector(Pitch:3.81mm)

DC IN 12V-24V 	Pin	Signal	Remark
	1	V+ (DC 12V or 24V)	
	2	NC	
	3	V-	

- DI/DO (Optional)**

4In / 4Out GPIO connector

DI/DO 	Pin	Signal	Pin	Signal
	1	External_PowerV-	6	External_PowerV+
	2	DI 1	7	DO 1
	3	DI 2	8	DO 2
	4	DI 3	9	DO 3
	5	DI 4	10	DO 4

- **LAN 3 (Optional)**

Standard RJ45 GbE connector

LED		100	1000
Right	Link	Yellow	Yellow
	Active	Blinking	Blinking
Left	Speed	Orange	Green

- **Power Button**



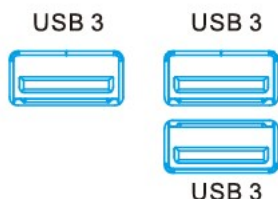
- **HDMI/DP**

Standard HDMI & Display Port1 connector



- **USB (Type A)**

Standard USB3.2 Gen2 Type A connector



- **USB (Type A) (One of is optional)**

Standard USB2.0 Type A connector



- **USB (Type C)**

Standard USB3.1 Type C connector



- **LAN 1**

Standard RJ45 2.5GbE connector

		LED	100	1000	2500
	Left	Link	Yellow	Yellow	Yellow
		Active	Blinking	Blinking	Blinking
	Right	Speed	OFF	Orange	Green

- **LAN 2**

Standard RJ45 GbE connector

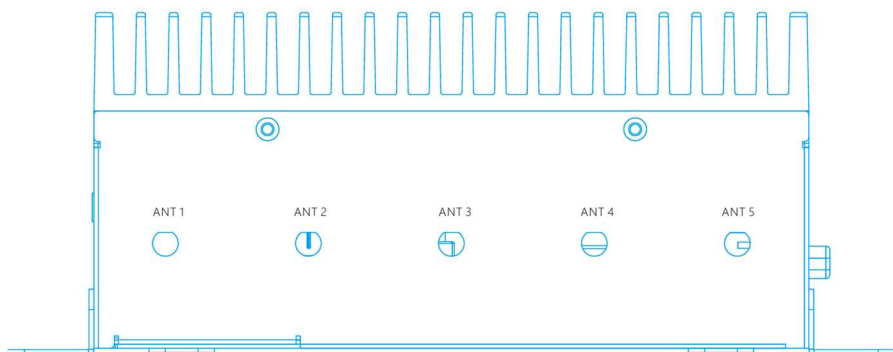
		LED	100	1000
	Left	Link	Yellow	Yellow
		Active	Blinking	Blinking
	Right	Speed	Green	Orange

- **Power**

System Power LED

  	Position	Color	Define
	Up	Green	Power
	Bottom	Red	ATX Power

1.3.3. Rear I/O Panel

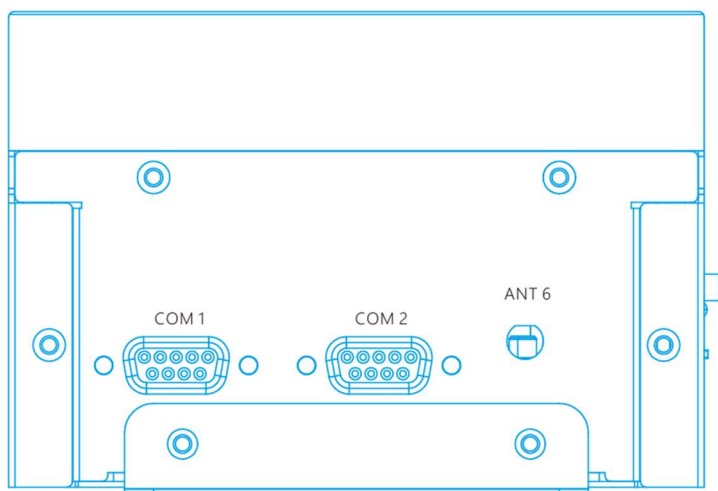


- **ANT1 ~ ANT5**

SMA Antenna Hole. Reserved for optional WLAN & WWAN (Wi-Fi & 4G LTE /5G)

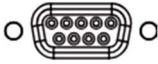
ANT1	ANT2	ANT3	ANT4	ANT5
Wi-Fi	Wi-Fi	4G LTE/5G	4G LTE/5G	4G LTE/5G/GPS

1.3.4. Left I/O Panel



- **COM1~2**

Standard RS-232/422/485 multi-protocol DB (male) connector

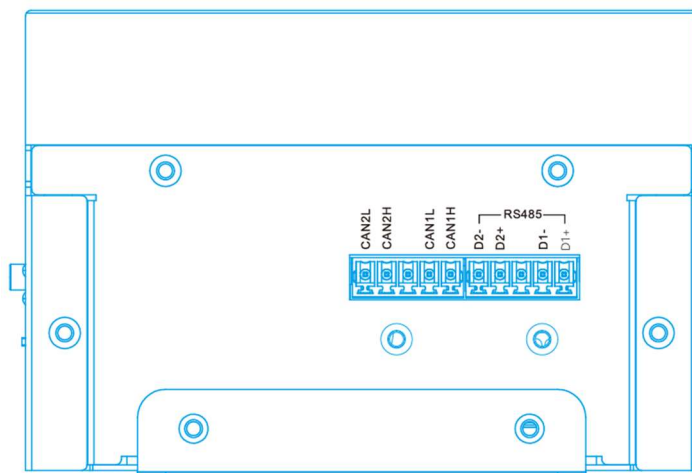
	DB9 PIN	RS-232	RS-422	RS-485
	1	DCD	RX-(B)	D-(B)
	2	RxD		
	3	TXD		
	4	DTR	TX+(A)	D+(A)
	5	GND	GND	GND
	6	DSR	RX+(A)	D+(A)
	7	RTS		
	8	CTS		
	9	RI	TX-(B)	D-(B)

- **ANT6**

SMA Antenna Hole. Reserved for optional WLAN & WWAN (Wi-Fi & 4G LTE /5G)

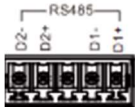
ANT6
5G

1.3.5. Right I/O Panel



- RS485**

2 Port RS485 Terminal Block connector

 1	Pin	RS485 1	RS485 2
	1	RS485_1_D+	
	2	RS485_1_D-	
	3	ISO_RS485_GND	ISO_RS485_GND
	4		RS485_2_D+
	5		RS485_2_D-

- CAN**

2 Port CANBus Terminal Block connector

 1	DB9 Pin	CANBus1	CANBus2
	1	CAN_H1	
	2	CAN_L1	
	3	ISO_GND	ISO_GND
	4		CAN2H
	5		CAN_L2

2. Components Assembly

Please follow the instruction to install the inner modules.

2.1. SIM Card Installation

Step 1: **Remove the Bottom Cover :**

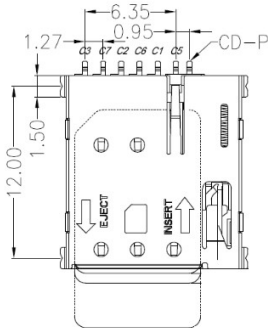
Prerequisite: Ensure the system is powered off and unplugged. °

Loosen and remove the **five (5) screws** securing the bottom cover, then carefully lift and remove the cover from the chassis.



Step 2: Insert the Nano SIM card into the designated slot as illustrated below.

(Note: Ensure the gold contacts are facing downwards and the notched corner aligns correctly with the orientation indicator.)

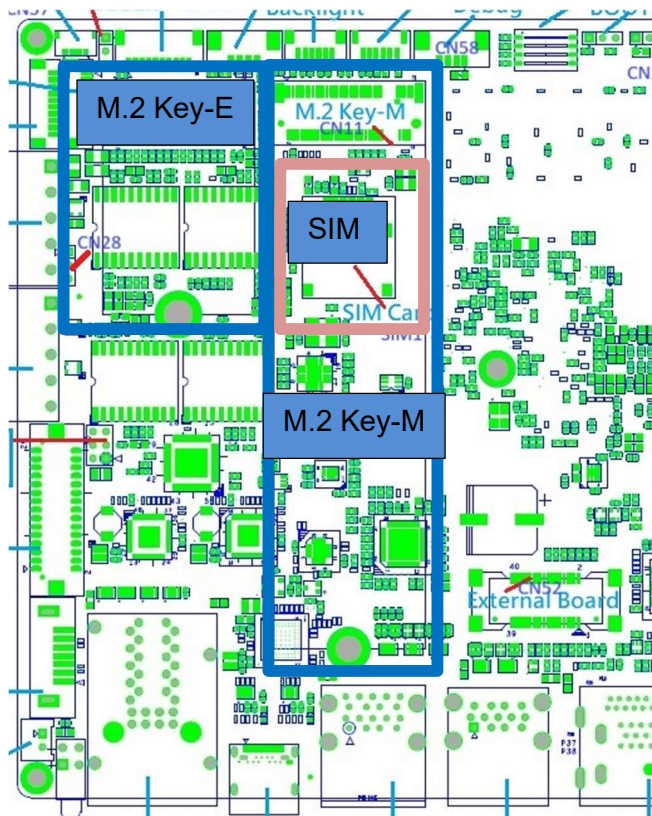


Step 3: Reinstall the Bottom Cover :

Place the bottom cover back onto the chassis, align the holes, and secure it by tightening the **five (5) screws** removed in Step 1.



2.2. PCB Parts Description



M.2 Key-E

M.2 Key-E connector for Wi-Fi 2T2R module

The Wi-Fi antenna is SMA female type. Please connect to the socket marked with ANT1 / ANT2 on the panel and have it fastened.

M.2 Key-B

M.2 Key-B connector with USB 2.0+3.0 signal & PCIe x1, for 4G LTE / 5G module

The 4G LTE / 5G antenna is SMA male type. Please connect to the socket marked with ANT3 / ANT4 / ANT 5 / ANT 6 on the panel and have it fastened.

[EN] The internal 4G LTE/5G expansion slot is strictly reserved for factory assembly and validation. To maintain system reliability, anti-vibration integrity, and warranty coverage, this module **cannot** be installed or replaced by the end-user. All cellular connectivity options must be requested prior to product shipment.

M.2 Key-M

M.2Mlconnector with PCIe x4 2280 NVME SSD

Note: If any of the above modules are additionally installed by the user, please purchase the corresponding thermal solution separately to avoid potential system operation issues.

2.3. Hard Disk Installation

Step 1: **Remove the Bottom Cover :**

Prerequisite: Ensure the system is powered off and unplugged.

Loosen and remove the five (5) screws securing the bottom cover, then carefully lift and remove the cover from the chassis.



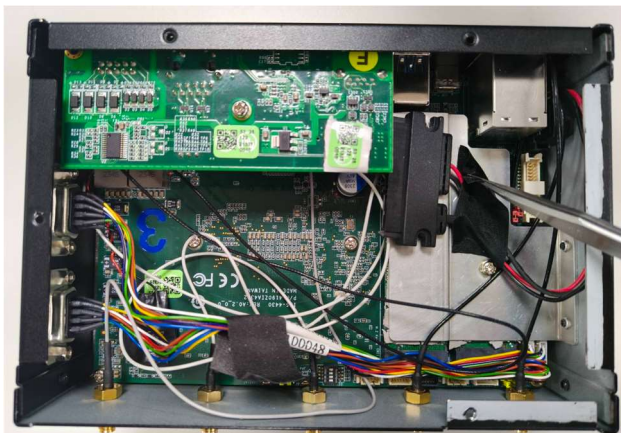
Step 2: Mount the HDD to the Bracket :

Align the 2.5" SSD/HDD with the mounting holes on the bottom cover bracket, and secure it firmly using **four (4) HDD screws**.



Step 3: Prepare the SATA Cable :

Peel off the protective tape fixing the internal SATA cable inside the chassis to release the cable for connection.



Step 4: Connect the SATA Cable to the HDD :

Carefully attach the SATA data and power combo cable to the connector on the newly installed HDD. Ensure the connection is securely seated.



Step 5: Reinstall the Bottom Cover :

Place the bottom cover back onto the chassis, align the holes, and secure it by tightening the **five (5) screws** removed in Step 1.



2.5. RF Cable Installation

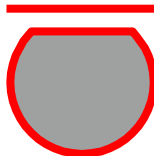
Step 1: Connect the RF plug to the module connector.



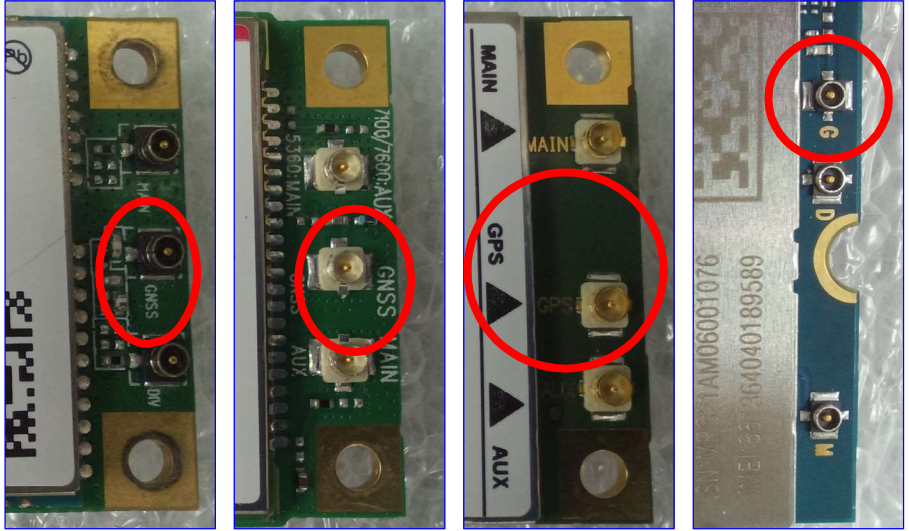
Notes:

- Wi-Fi: Support 2 RF cables at least.
- 4G LTE: Support 1 RF cable at least, up to 3 RF cables.
- 5G: Support 2 RF cables at least, up to 4 RF cables.

Step 2: The foolproof position and shape of the joint should correspond with the opening of the system panel.



Step 3: Assemble the SMA end of the RF Cable and lock it with gasket and nut.



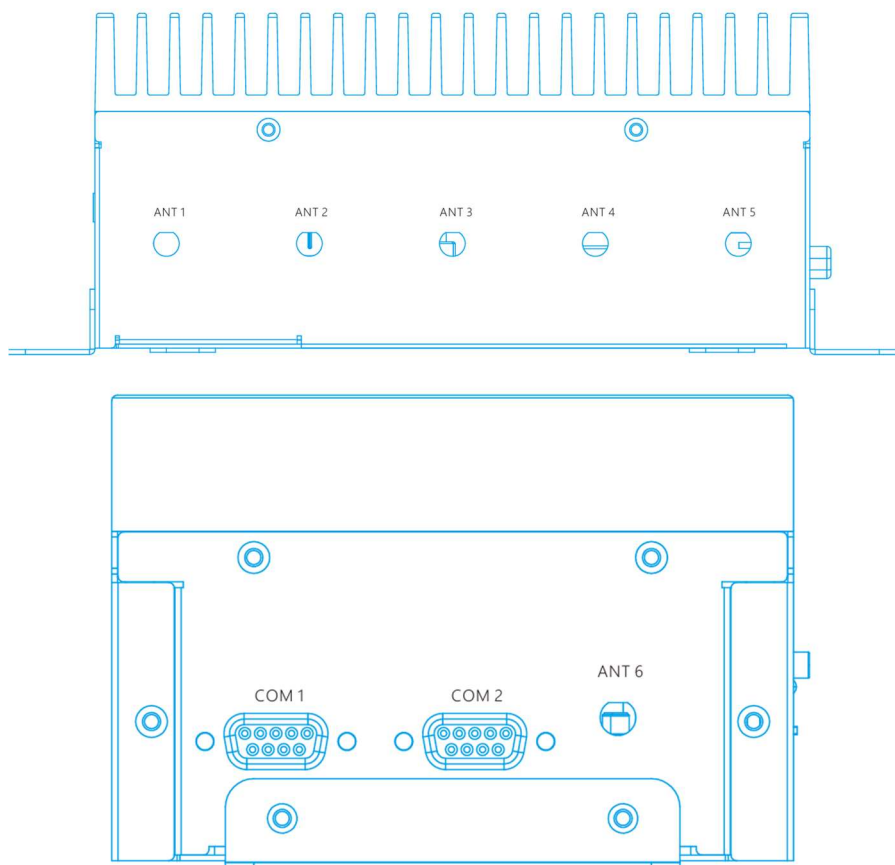
Notes:

- For the connector marked as GNSS or GPS, please install it on the system panel where the GPS antenna is located.
- The connector marked as MAIN or AUX is a 4G LTE / 5G connector, please install it on the system panel marked 4G or 5G antenna. Use the MAIN connector first.



2.6. Antenna Installation

Connect your antennas according to your system configuration.



ANT1	ANT2	ANT3	ANT4	ANT5	ANT6
Wi-Fi	Wi-Fi	4G LTE / 5G	4G LTE / 5G	4G LTE / 5G /GPS	5G

Wi-Fi:

Connect female type antenna to the male type socket **ANT 1** and **ANT 2**

GPS:

Connect male type antenna tail cable to the female type socket **ANT 5**.

4G LTE / 5G:

Connect male type antenna to the female type socket marked with **ANT3** and **ANT 4** or **ANT6**.

Notes The internal 4G LTE/5G expansion slot is strictly reserved for factory assembly and validation. To maintain system reliability, anti-vibration integrity, and warranty coverage, this module **cannot** be installed or replaced by the end-user. All cellular connectivity options must be requested prior to product shipment.

3. BIOS Settings

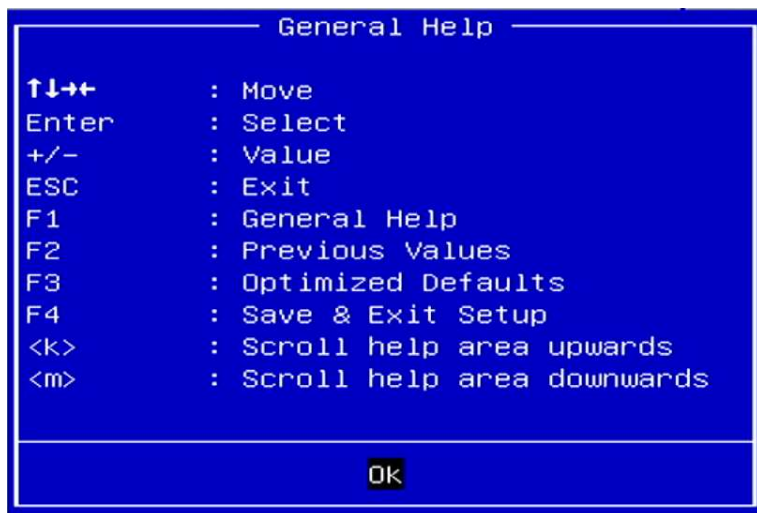
This chapter introduces the BIOS menus, which allow users to modify BIOS settings and control various system functions. The following topics are covered:

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

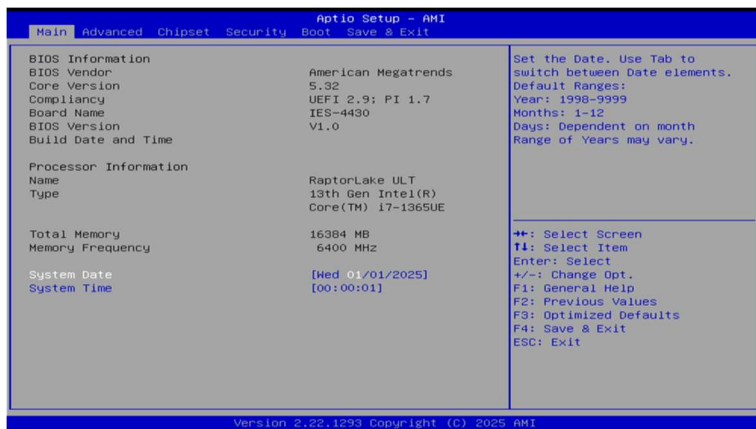
Press the <Del> key on your keyboard to enter the BIOS setup. The main BIOS setup menu will then be displayed. You can access the other BIOS function settings.

Press the <F1> key to display general help.

Use the <Up>/<Down>/<Left>/<Right> keys to highlight the item, then use the + / - keys to select the value in each item, or press the <Enter> key to select the item and configure the function.



3.1. Main Setup



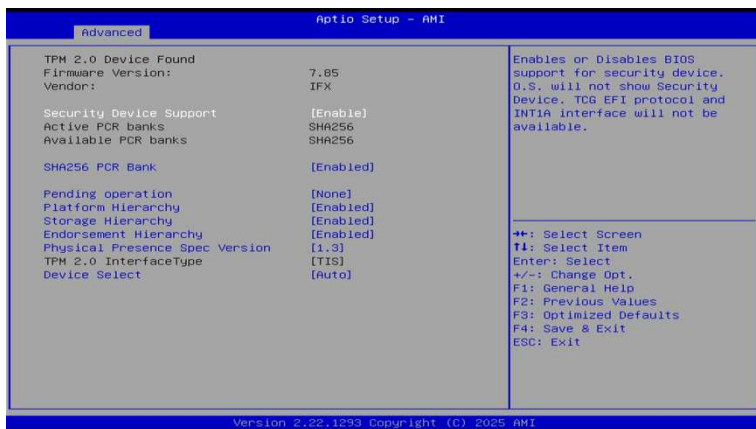
- **BIOS Vender**
Displays the BIOS vendor, where we suppliers license from.
- **Core Version**
Displays the BIOS vendor's kernel core version.
- **Compliance**
Displays this BIOS supporting industry standards compliance.
- **Board Name**
Displays the Main Board name.
- **BIOS Version**
Displays the project version.
- **Build Date and Time**
Displays this BIOS build date and time.
- **Processor Information**
Display the processor name and type.
- **Total Memory**
Displays the total memory size of the system.
- **System Date**
Set the system date. Use Tab to switch between Date elements. Use + / - or numbers to change the value.
- **System Time**
Set the system time. Use Tab to switch between Date elements. Use + / - or numbers to change the value.

3.2. Advanced Setup



- **Trusted Computing**
Select the Trusted Computing item to enter the submenu of that item.
- **F81804 Super IO Configuration**
Select the F81804 Super IO Configuration item to enter the submenu of that item.
- **Hardware Monitor**
Select the Hardware Monitor item to enter the submenu of that item.
- **Serial Port Console Redirection**
Select the Serial Port Console Redirection item to enter the submenu of that item.
- **USB Configuration**
Select the USB Configuration item to enter the submenu of that item.
- **Network Stack Configuration**
Select the Network Stack Configuration item to enter the submenu of that item.
- **NVMe Configuration**
Select the NVMe Configuration item to enter the submenu of that item.

3.2.1. Trusted Computing



- **Security Device Support**
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.
Option : Enable 、 Disable
- **SHA256 PCR Bank**
Enable or Disable SH256 PCR Bank
Option : Enabled 、 Disabled
- **Pending operation**
Schedule an Operation for the Security Device.
Option : None 、 Clear

NOTE :

Your Computer will reboot during restart in order to change state of Security Device.

- **Platform Hierarchy**
Enable or Disable Platform Hierarchy.
Option : Enabled 、 Disabled
- **Storage Hierarchy**
Enable or Disable Storage Hierarchy.
Option : Enabled 、 Disabled
- **Endorsement Hierarchy**
Enable or Disable Endorsement Hierarchy.
Option : Enabled 、 Disabled
- **Physical Presence Spec Version**
Select to Tell O.S. to support PPI Spec Version 1.2 or 1.3
Option : 1.2 、 1.3
- **Device Select**
TPM 1.2 will restrict support to TPM 1.2 device, TPM 2.0 will restrict support to TPM 2.0 devices, Auto will support both with the default set to TPM 2.0 devices if not found, TPM 1.2 device will be enumerated.
Option : TPM 1.2 、 TPM 2.0 、 Auto

3.2.2. F81804 Super IO Configuration



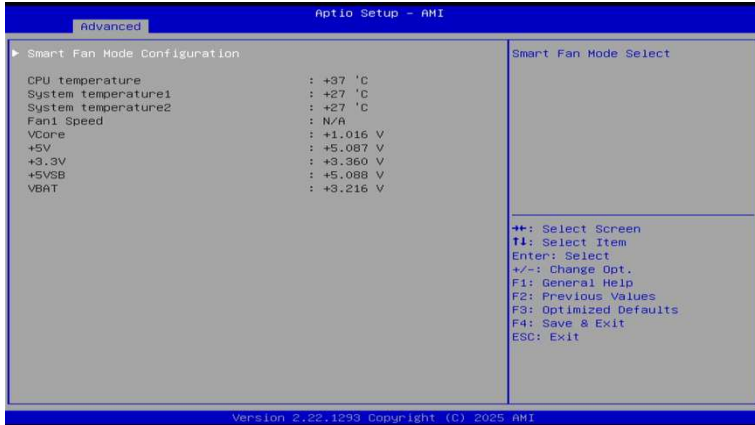
- **Serial Port 1 Configuration**
- **Serial Port 2 Configuration**

Select the Serial Port x Configuration item to enter the submenu of that item.

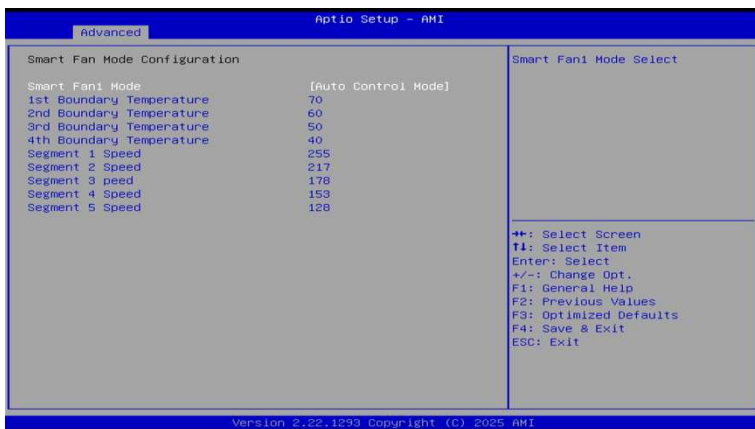


- **Serial Port**
Select Enabled to enable the onboard serial port.
Option : Enabled 、 Disabled
- **Change Settings**
This option specifies the base I/O port address and the interrupt Request address of Serial Port.
Select [Auto] to let the BIOS automatically assign the base I/O and IRQ address.
- **Serial Port Mode**
Select serial port transmission mode.
Option : RS-232 、 RS-422 Full Duplex 、 RS-422 Terminator 、 RS-485 Full Duplex 、

3.2.3. Hardware Monitor



- **Smart Fan Mode Configuration**
Select the Smart Fan Mode Configuration item to enter the submenu of that item.



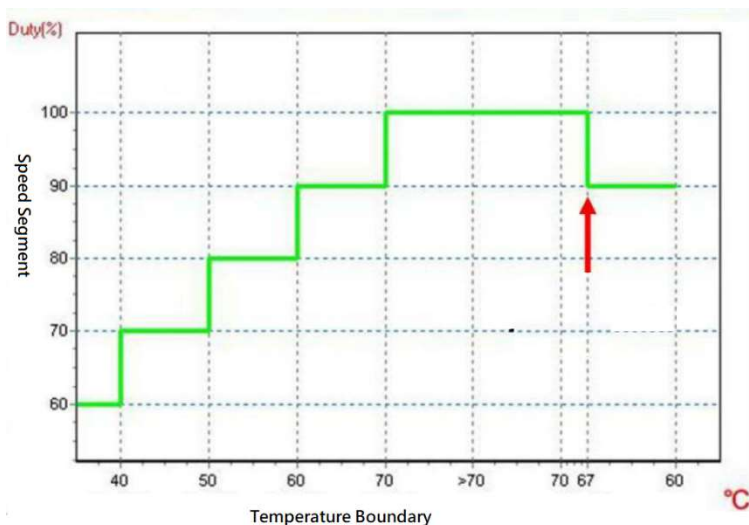
- **Smart Fan Mode**
Control the fan speed with these options
Option : Auto Control Mode - Manual Mode
- **1st Boundary Temperature**
- **2nd Boundary Temperature**
- **3rd Boundary Temperature**

- **4th Boundary Temperature**
Input a temperature between 1 ~ 127°C.
- **Segment 1 Speed**
- **Segment 2 Speed**
- **Segment 3 Speed**
- **Segment 4 Speed**
- **Segment 5 Speed**
Input a fan speed between 0 ~ 255.

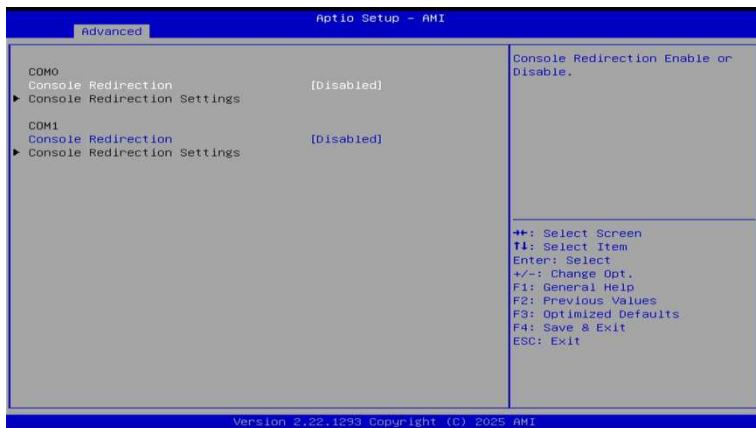
NOTE :

[Manual Mode] : You can set fixed fan speed.

[Auto Control Mode] : the fan speed is automatically adjusted based on temperature boundaries. By configuring different temperature settings, the system can dynamically control the fan speed to optimize both cooling performance and noise levels.



3.2.4. Serial Port Console Redirection



- **Console Redirection**
Use this option to enable or disable Console Redirection.
Option : Enabled 、 Disabled



- **Terminal Type**
Use this item to select the preferred terminal emulation type for out-of-band management.
Option : VT100 、 VT100+ 、 VT-UTF8 、 ANSI
- **Bits per second**
Use this item to select the serial port transmission speed. The speed used in the host computer and the client computer must be the same.
Option : 9600 、 19200 、 57600 、 115200
- **Data Bits**

Use this item to set the data transmission size.

Option : 7 、 8

- **Parity**

Use this item to select the parity bit.

Option : None 、 Even 、 Odd 、 Mark 、 Space

- **Stop Bits**

The item indicates the end of a serial data packet.

Option : 1 、 2

- **Flow Control**

Use this item to set the flow control to prevent data loss from buffer overflow. When sending data, if the receiving buffers are full, a “stop” signal can be sent to stop the data flow. Once the buffers are empty, a “start” signal can be sent to restart the flow. Hardware flow uses two wires to send start/stop signals.

Option : None 、 Hardware RTS/CTS

- **VT-UTF8 Combo Key Support**

Use this item to enable or disable the VT-UTF8 Combo Key Support for ANSI/VT100 terminals.

Option : Enabled 、 Disabled

- **Recorder Mode**

With this mode enabled only text will be sent. This is to capture terminal data.

Option : Enabled 、 Disabled

- **Resolution 100x31**

Use this item to enable or disable extended terminal resolution support.

Option : Enabled 、 Disabled

- **Putty KeyPad**

Use this item to select Function Key and Keypad on Putty.

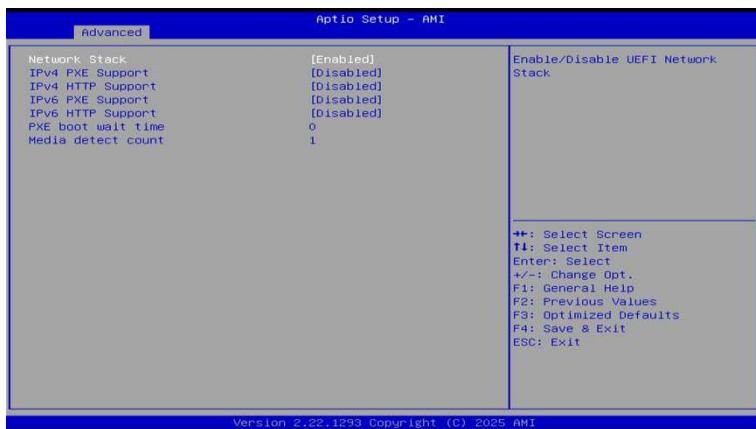
Option : VT100 、 LINUX 、 XTERMR6 、 SCO 、 ESCN 、 VT400

3.2.5. USB Configuration



- XHCI Hand-off**
 This is a work-around solution for operating systems that do not support XHCI (Extensible Host Controller Interface) hand-off. The XHCI ownership change should be claimed by the XHCI driver.
 Option : Enabled 、 Disabled
- USB Mass Storage Driver Support**
 Select Enabled for USB Mass Storage Driver support.
 Option : Enabled 、 Disabled

3.2.6. Network Stack Configuration



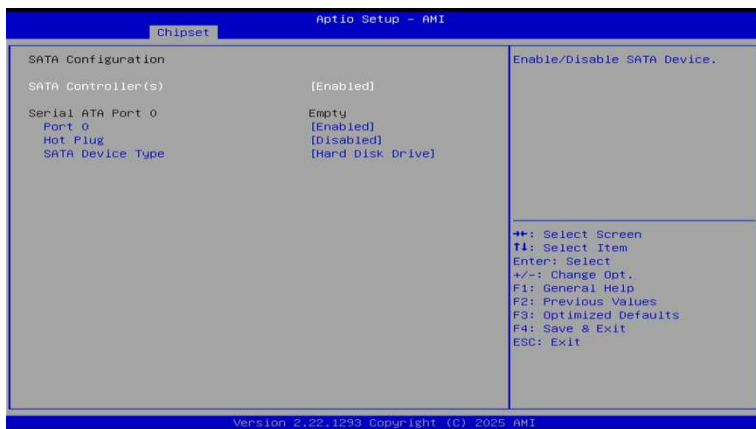
- **Network Stack**
Enables or disables UEFI Network Stack
Option : Enabled 、 Disabled
- **Ipv4 PXE Support**
Enable or disable the Ipv4 PXE support.
Option : Enabled 、 Disabled
- **Ipv4 HTTP Support**
Enable or disable the Ipv4 HTTP support.
Option : Enabled 、 Disabled
- **Ipv6 PXE Support**
Enable or disable the Ipv6 PXE support.
Option : Enabled 、 Disabled
- **Ipv6 HTTP Support**
Enable or disable the Ipv6 HTTP support.
Option : Enabled 、 Disabled
- **PXE boot wait time**
Click ESC key to cancel the PXE boot wait time.
- **Media detect count**
Set up the media detecting wait time by seconds.

3.3. Chipset



- **SATA Configuration**
Select the SATA Configuration item to enter the submenu of that item.
- **HD Audio**
Enables or disables the onboard High Definition Audio function..
Option : Enabled 、 Disabled
- **VT-d**
Enables or disables Intel Virtualization Technology for Directed I/O (VT-d).
Option : Enabled 、 Disabled
- **Intel (VMX) Virtualization Technology**
When enabled, a VMM can utilize the additional hardware capabilities provided by Intel Vanderpool Technology.
Option : Enabled 、 Disabled

3.3.1. SATA Configuration



- **SATA Controller(s)**
Enables or disables all SATA controller
Option : Enabled 、 Disabled
- **Port(x)**
Select SATA Port x function enabled or disabled.
Option : Enabled 、 Disabled
- **Hot Plug**
Select SATA Port x hot plug function enabled or disabled.
Option : Enabled 、 Disabled
- **SATA Device Type**
Select SATA Port x device type.
Option : Hard Disk Drive 、 Solid State Drive

3.4. Security Setup



- **Administrator Password**
Press Enter to create a new, or change an existing Administrator password.
- **User Password**
Press Enter to create a new, or change an existing User password.

3.5. Boot Setup



- **Bootup NumLock State**
Select the keyboard NumLock state
Option : On \ Off
- **Quiet Boot**

Enables or disables Quiet Boot option
Option : Disabled · Enabled

- **Boot Option Priorities**
Specifies the boot sequence from the available devices.

3.6. Save & Exit Setup



- **Save Changes and Reset**
Reset the system after saving the changes.
- **Discard Changes and Reset**
Reset system setup without saving any changes.
- **Restore Defaults**
Restore/Load Default values for all the setup options.

4. Software Installation and Programming Guide

4.1. Introduction

4.1.1. GPIO

The system provides a GPIO interface, allowing users to configure GPIO pins using GPIO APIs. When a pin is set as an input, its state can be read. When a pin is set as an output, users can set it to either high or low.

Pin number	GPIO name	Pin number	GPIO name
0	DO1 (DIO0_4)	4	DI1 (DIO0_0)
1	DO2 (DIO0_5)	5	DI2 (DIO0_1)
2	DO3 (DIO0_6)	6	DI3 (DIO0_2)
3	DO4 (DIO0_7)	7	DI4 (DIO0_3)

4.1.2. Watchdog

The system provides a Watchdog timer. When the timer expires, the system will reboot. Users can use the Watchdog APIs to configure and access the timer. The Watchdog timer can be set to a value between 1 and 255 seconds. Setting the timer to zero disables it.

4.2. File Descriptions

- **TestUtility.exe**

GPIO 、Reset Button 、Watchdog and Lan Bypass functional test utility.

- **BoardDevLib.h**

This file contains API declarations and macro definitions.

- **BoardDevLib.a**

The static library for linux.

- **BoardDevLib.so**

The dynamic library for linux.

- **Install_Driver**

This file is a Linux shell script. Running this file will help you install the environment and modprobe the driver on Linux.

- **Readme**

If this is your first time using this utility, please read the README file first.

4.3. API List and Descriptions

4.3.1. GPIO

Syntax	int Get_GPI_Status (int pin)
Description	Get the state of the GPI input pin. Input pin only has pin number 4 ~ 7
Parameters	pin : pin number, range is 0 ~ 7
Return Value	1: HIGH, 0: LOW.

Syntax	int Set_GPO_Status (int pin, int sts)
Description	Set the state of the GPO output pin Output pin only has pin number 0 ~ 3
Parameters	pin : pin number, range is 0 ~ 7 sts : GPO status, 1: HIGH, 0: LOW.
Return Value	0 : successful, -1: fail.

Syntax	int Get_GPO_Status (int pin)
Description	Get the state of the GPO output pin. Output pin only has pin number 0 ~ 3
Parameters	pin : pin number, range is 0 ~ 7
Return Value	1: HIGH, 0: LOW.

4.3.2. Watchdog

Syntax	void WDT_Start (int time)
Description	Set the time value of the watchdog timer register and start the countdown.
Parameters	time : watchdog time value, range is 1 ~ 255
Return Value	Returns the value of the time counter as an unsigned integer.

Syntax	void WDT_Stop (void)
Description	Stop the watchdog timer.
Parameters	None
Return Value	None

4.3.3. Notes

Syntax	int Lib_Init (void)
Description	This function must be called before using GPIO and the watchdog.
Parameters	None
Return Value	0: successful, -1: fail.

Syntax	void Lib_Close (void)
Description	Call this function if no other functions are used in the program.
Parameters	None
Return Value	None

5. FAQ

Q 1. *Where is the serial number located on my system ?*

- The serial number (S/N) is an alpha-numeric character located on the bottom or side chassis.

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- Acrosser Model Name: _____
- Acrosser Serial Number: _____

Describe System Configuration

- CPU Type: _____
- Memory Size: _____
- Storage Device (e.g. HDD, CF, or SSD): _____
- Additional Peripherals (e.g. Graphic Card): _____
- Operating System & Version (e.g. Windows 7 Embedded): _____
- Special API or Driver: _____
(If yes, please provide it for debug.)
- Running Applications: _____
- Others: _____

Describe Your Problems or Questions:

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