

# MC-7400 User's Manual

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[www.moxa.com/product](http://www.moxa.com/product)

**MOXA**®

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# MC-7400 User's Manual

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# 1

## Introduction

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The chapter describes the product overview, package checklist, product features, and hardware specifications of the MC-7400 marine computer.

The following topics are covered in this chapter:

- **Overview**
- **Package Checklist**
- **Product Features**
- **Hardware Specifications**
  - Hardware Block Diagram

# Overview

The MC-7400 marine computer is powered by the 6th generation Intel Core™ i processor, delivering a full range of I/O connectivity, including NMEA 0183 ports, serial ports, Gigabit Ethernet ports, as well as USB 2.0/3.0 ports and a miniPCI slot for extensions. The MC-7400 is designed to provide outstanding PC performance, bringing a new level of flexibility and control to marine applications.

## Package Checklist

Each model ships with the following items:

- 1 MC-7400 computer
- Wall mounting kit, with 8 screws
- 1 3-pin terminal block for DC power input (DC model only)
- 1 2-pin terminal block for power ON/OFF switch
- 4 5-pin terminal blocks for NMEA 0183 ports (MC-7420 model only)
- 1 6-pin digital input terminal block (MC-7420 model only)
- 1 8-pin digital input terminal block (MC-7420 model only)
- Quick installation guide
- Warranty card

**NOTE** Please notify your sales representative if any of the above items are missing or damaged.

## Product Features

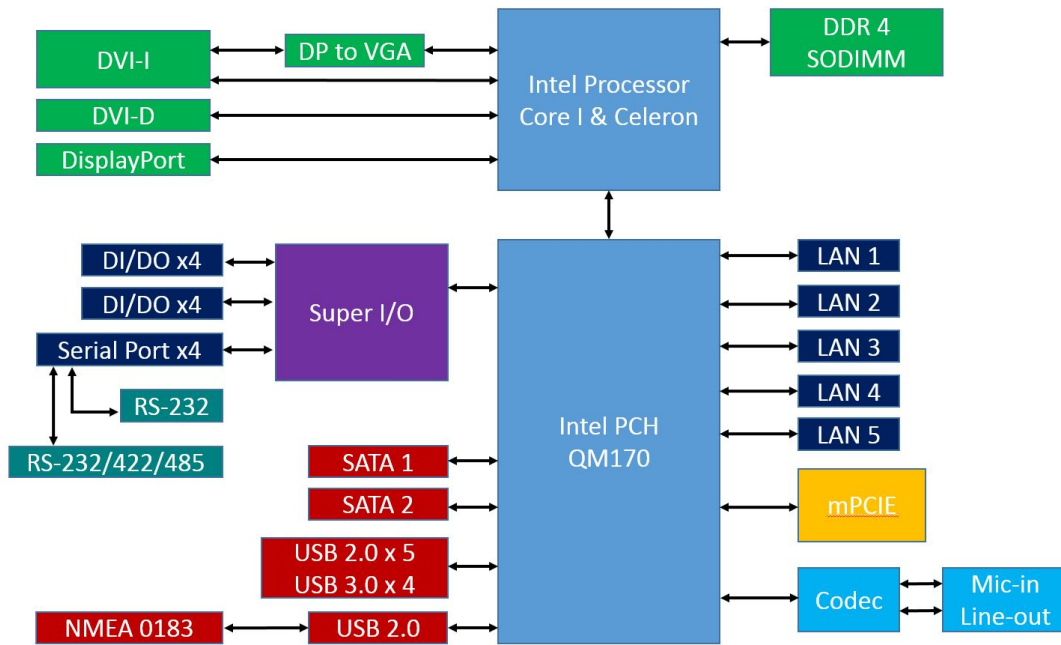
The MC-7400 embedded computer has the following features:

- 6th Gen. Intel® Core™ i5 processor
- DDR4 SO-DIMM memory up to 32 GB
- 3 independent displays (1 x DVI-I, 1 x DVI-D, 1 x DisplayPort)
- Various I/O interfaces including 9 x USB ports, 5 x LAN ports and 4 x COM ports
- 2 Removable 2.5" SSD storage bay
- AC or DC power model available
- Supports Win 10 IoT and Debian 9 operating systems
- Supports Moxa Proactive Monitoring utility for system status monitoring

# Hardware Specifications

**NOTE** The latest specifications for Moxa's products can be found at <https://www.moxa.com>.

## Hardware Block Diagram



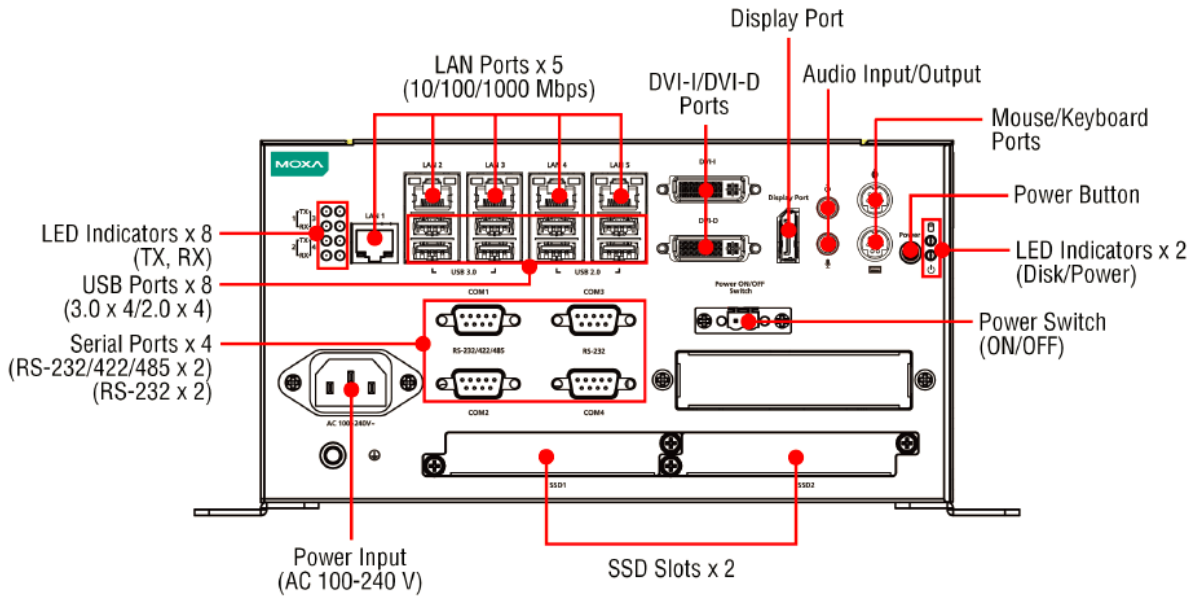
The MC-7400 computer is compact, well-designed, and built rugged enough for industrial applications. LED indicators help you monitor performance and identify trouble spots, multiple serial ports allow you to connect different devices, and the reliable and stable hardware platform lets you devote your attention to developing your applications.

The following topics are covered in this chapter:

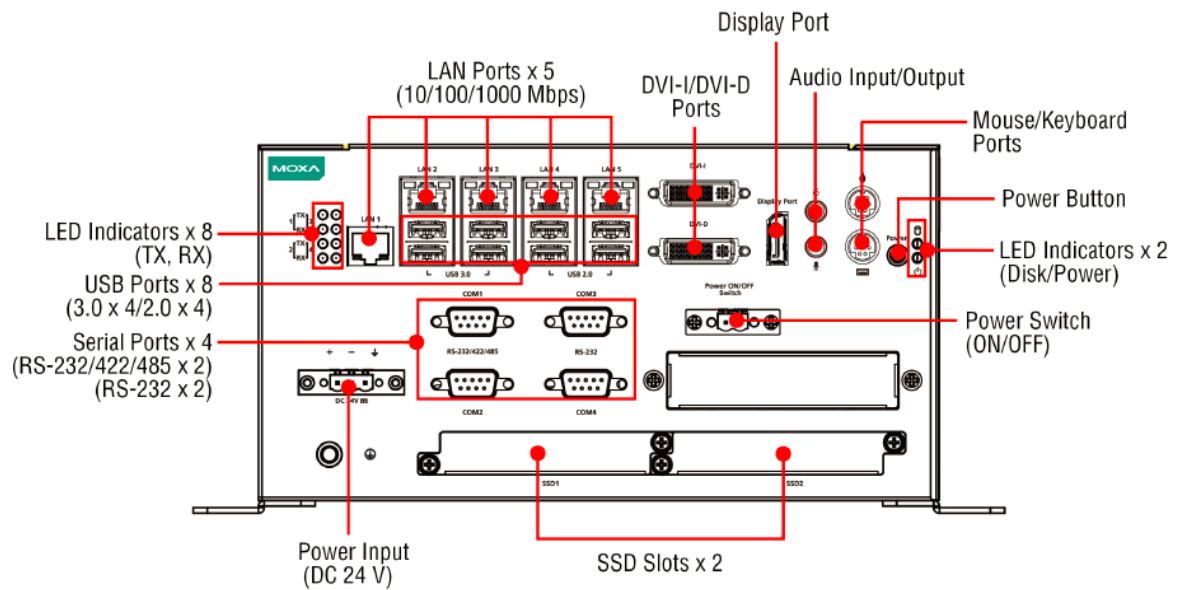
- ❑ **Appearance**
- ❑ **Dimensions**
- ❑ **LED Indicators**
- ❑ **Real-time Clock**

# Appearance

## MC-7410 AC Model

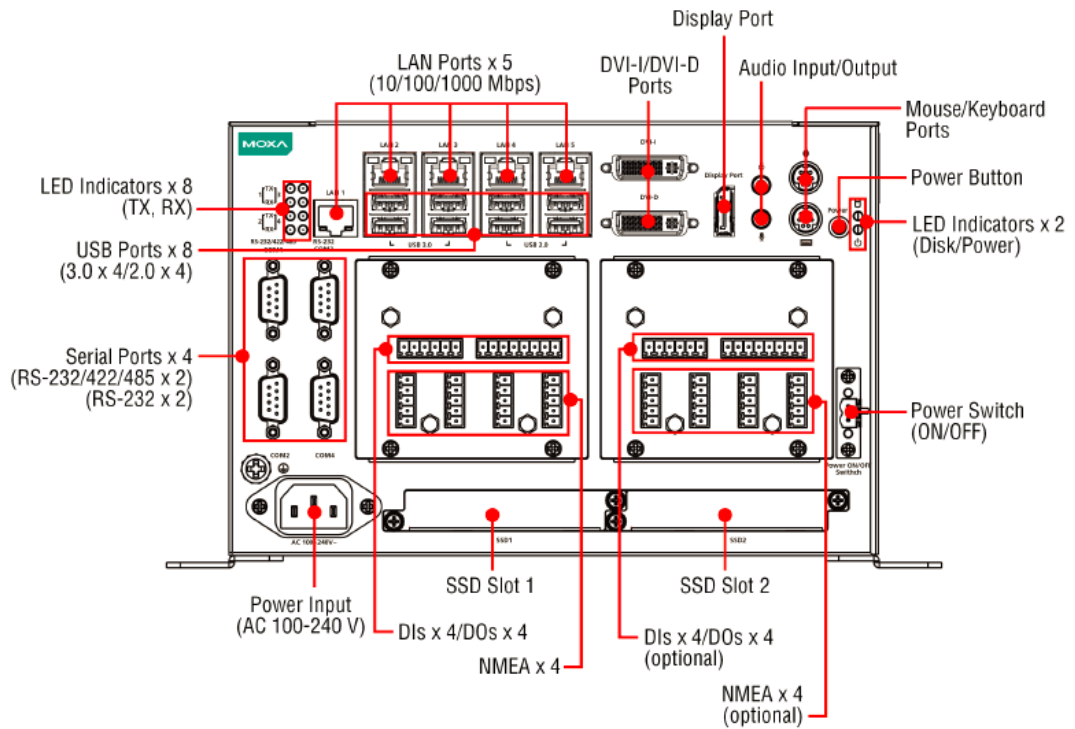


## MC-7410 DC Model

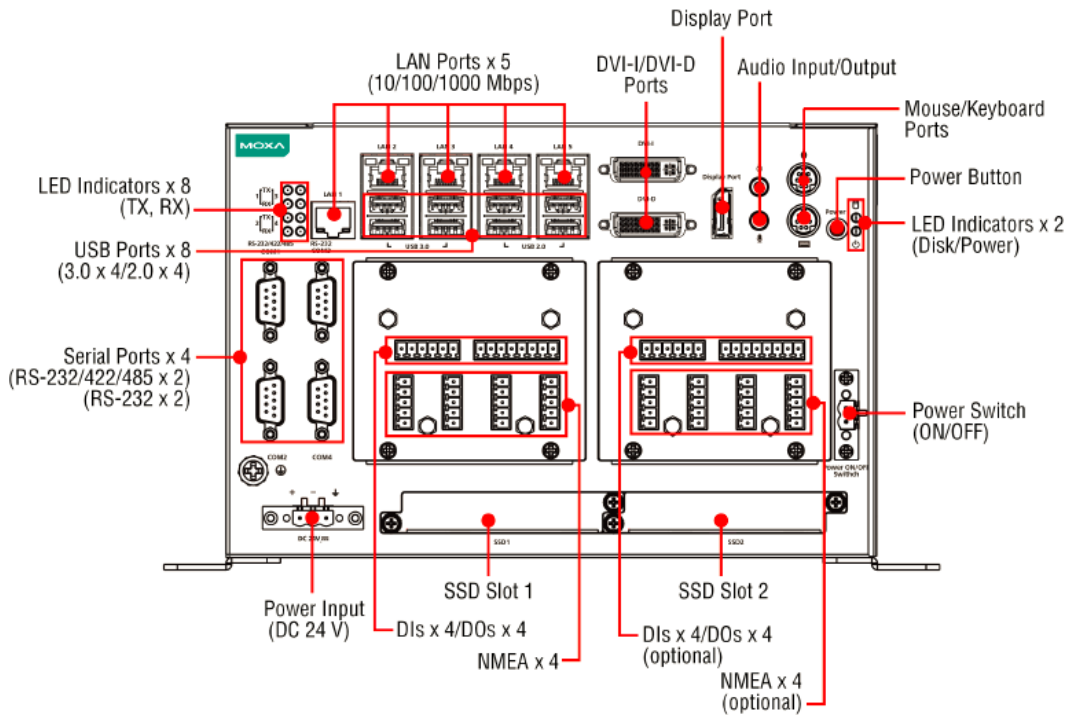




### MC-7420 AC Model



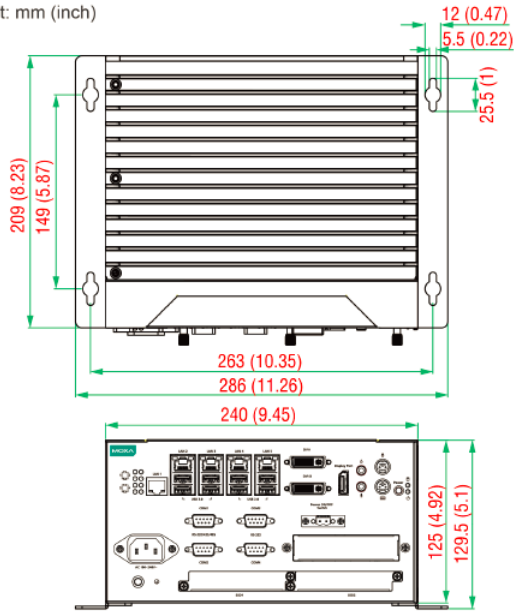
### MC-7420 DC Model



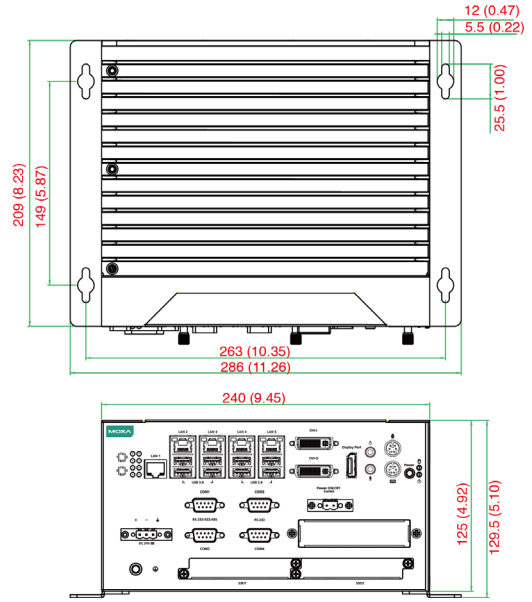
# Dimensions

**MC-7410 AC Model**

Unit: mm (inch)

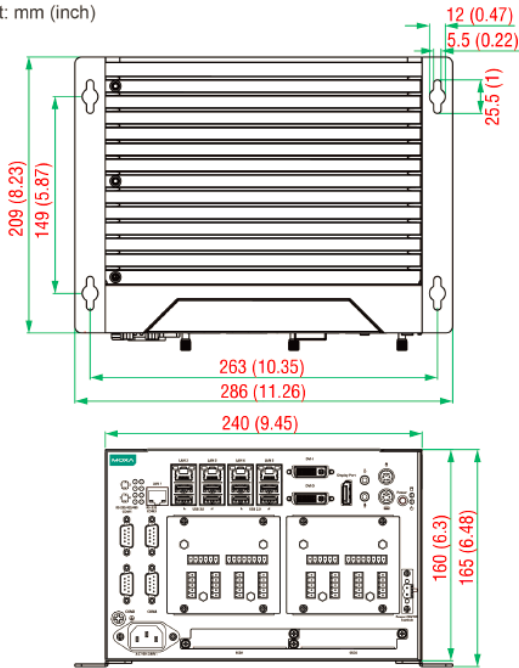


**MC-7410 DC Model**



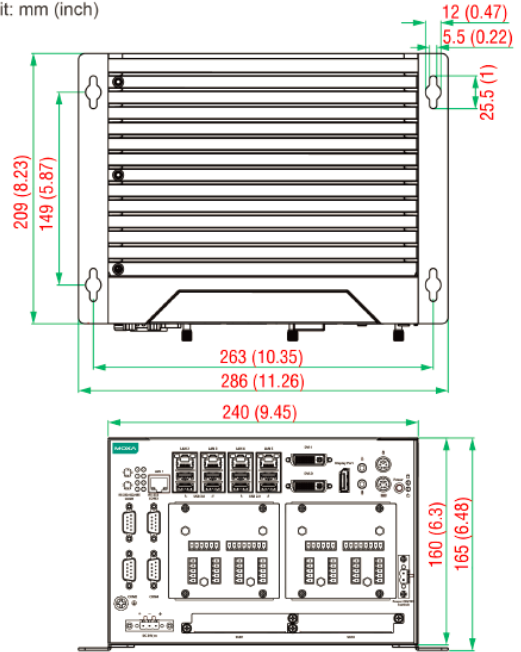
**MC-7420 AC Model**

Unit: mm (inch)



**MC-7420 DC Model**

Unit: mm (inch)



## LED Indicators

LED Name	LED Color	LED Function
Power	Green	Power is on and the device is functioning normally
	Off	Power is off or error powering the device
Storage	Yellow	Blinking: Data transmission
	Off	No data transmission
LAN (1 to 5)	Green	100 Mbps Ethernet mode
	Yellow	1000 Mbps (Gigabit) Ethernet mode
	Off	No activity or 10 Mbps Ethernet mode
Tx 1/2/3//4	Green	Blinking: Data is being transmitted
	Off	No data transmission
Rx 1/2/3//4	Yellow	Blinking: Data is being received
	Off	No data

## Real-time Clock

The embedded computer's real-time clock is powered by a lithium battery. We strongly recommend that you do **NOT** replace the lithium battery yourself. If the battery needs to be changed, contact the Moxa RMA service team at [http://www.moxa.com/rma/about\\_rma.aspx](http://www.moxa.com/rma/about_rma.aspx).



### ATTENTION

Used batteries are environmentally hazardous; dispose of them in the proper manner.



### WARNING

There is a risk of explosion if the wrong type of battery is used. To avoid this potential danger, be sure to use the correct type of battery. Contact the Moxa RMA service team if you have any questions about replacing your battery.

# Hardware Connection Description

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In this chapter, we show how to connect the embedded computers to the network and to various devices.

The following topics are covered in this chapter:

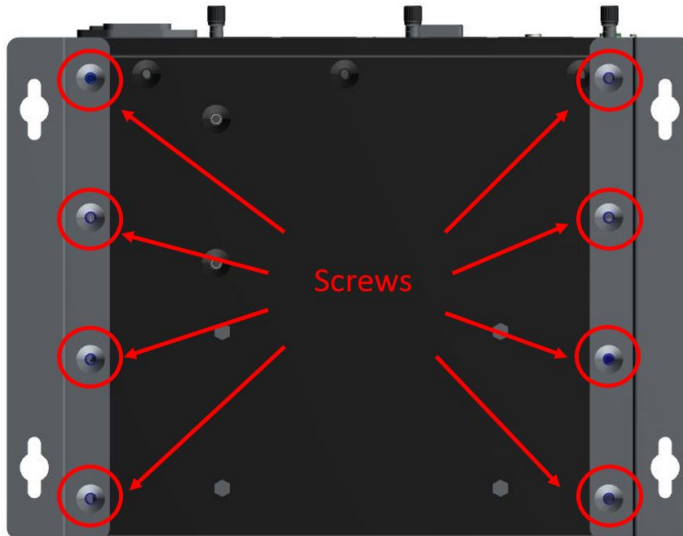
- ❑ **Installing the MC-7400**
  - Wall Mounting
- ❑ **Wiring Requirements**
- ❑ **Connecting the Power**
- ❑ **Grounding the MC-7400**
- ❑ **Connecting Data Transmission Cables**
  - Connecting to the Network
  - Connecting to a Serial Device
- ❑ **Connecting a PS/2 Keyboard and Mouse**
- ❑ **Connecting to the USB Device**
- ❑ **Connecting to Digital Input and Output Channels**
- ❑ **Connecting to a DVI-I/DVI-D Monitor**
- ❑ **Connecting to a DisplayPort Monitor**
- ❑ **Installing the Removable SATA Storage Drive**

# Installing the MC-7400

## Wall Mounting

The MC-7400 can be installed on a wall by using the wall-mounting kit that is included in the package.

**STEP 1:** Use eight screws for each bracket and attach the brackets to the rear of the MC-7400.



**STEP 2:** Use two screws ( $\varnothing 3.7$  mm, 60 mm in length) per side to attach the MC-7400 to a wall.



# Wiring Requirements

Read and follow these common safety precautions before proceeding with the installation of any electronic device:

- Use separate paths to route wiring for power and devices. If power wiring and device wiring paths must cross, make sure the wires are perpendicular at the intersection point.

**NOTE** Do not run signal or communication wiring together with power wiring in the same wire conduit. To avoid interference, wires with different signal characteristics should be routed separately.

- Use the type of signal transmitted through a wire to determine which wires should be kept separate. The rule of thumb is that wiring that shares similar electrical characteristics can be bundled together.
- Keep input wiring and output wiring separate.
- It is advisable to label the wiring on all devices in the system.



## ATTENTION

### Safety First!

Be sure to disconnect the power cord before installing and/or wiring your MC-7400.

### Wiring Caution!

Calculate the maximum possible current in each power wire and common wire. Observe all electrical codes dictating the maximum current allowable for each wire size. If the current goes above the maximum ratings, the wiring could overheat, causing serious damage to your equipment.

### Temperature Caution!

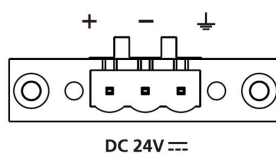
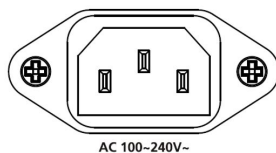
Be careful when handling the unit. When the unit is plugged in, the internal components generate heat, and consequently the outer casing may feel hot to the touch.

# Connecting the Power

The MC-7400 Series comes with a 100 to 240 VAC power input for AC power model, or a 24 VDC power input (via the terminal block) for DC power model. If power is supplied properly, the **Power** LED will light up.

For safety reasons, please use DC terminal block cables with the following specifications:

**Wire range: 14-22 AWG**



**NOTE** The DC model should be supplied by a UL-listed power source, whose output meets the ES1 standard and is rated at 24 VDC, 4.06 A (min.). If you need further assistance selecting a power source, contact a Moxa representative.

# Grounding the MC-7400

Grounding and careful wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting the power.



### ATTENTION

This product is intended to be mounted on a well-grounded surface, such as a metal panel.

The location of the earthing/grounding wire on the terminal block power connector is shown in the diagram below. Connect the wire to an appropriately grounded metal surface.

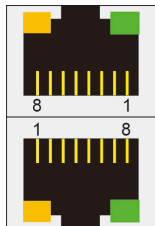
# Connecting Data Transmission Cables

This section describes how to connect the MC-7400 computer to the network and/or serial devices.

## Connecting to the Network

Plug your network cable into the computer’s Ethernet port. The other end of the cable should be plugged into your Ethernet networking device. When the cable is properly connected, the LEDs on the embedded computer’s Ethernet port will glow to indicate a valid connection.

The 10/100/1000 Mbps Ethernet LAN ports use 8-pin RJ45 connectors. The following diagram shows the pinouts for these ports.



The LED indicators on the right-top (for the upper LAN connector) and right-bottom (for the lower LAN connector) corners glow a solid green color when the cable is properly connected to a 100 Mbps Ethernet network. The LED will flash on and off when Ethernet packets are being transmitted or received.

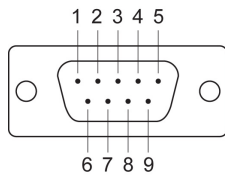
The LED indicators on the left-top and left-bottom corners glow a solid yellow color when the cable is properly connected to a 1000 Mbps Ethernet network. The LED will flash on and off when Ethernet packets are being transmitted or received.

Pin	10/100 Mbps	1000 Mbps
1	ETx+	TRD(0)+
2	ETx-	TRD(0)-
3	ERx+	TRD(1)+
4	-	TRD(2)+
5	-	TRD(2)-
6	ERx-	TRD(1)-
7	-	TRD(3)+
8	-	TRD(3)-

## Connecting to a Serial Device

The serial ports use DB9 connectors. COM1 and COM2 support RS-232, RS-422, or RS-485. The AP from the CD can be used to configure both COM1 and COM2. For detailed instructions, please refer to Appendix C. The pin assignments are shown in the following table:

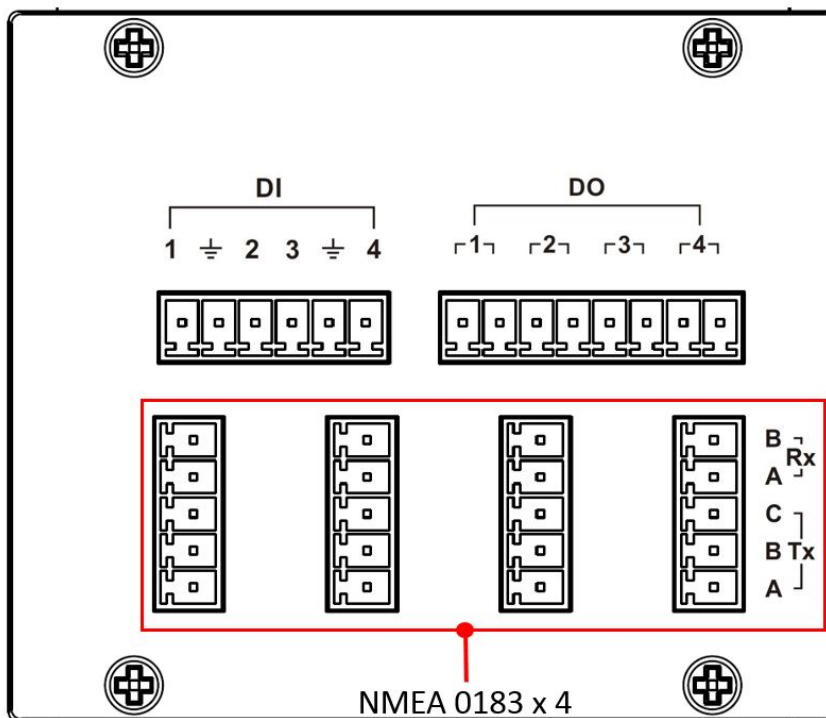
### DB9 Male Port



### RS-232/422/485 Pinouts

Pin	RS-232	RS-422	RS-485 (4-wire)	RS-485 (2-wire)
1	DCD	TxDA(-)	TxDA(-)	-
2	RxD	TxDB(+)	TxDB(+)	-
3	TxD	RxDB(+)	RxDB(+)	DataB(+)
4	DTR	RxDA(-)	RxDA(-)	DataA(-)
5	GND	GND	GND	GND
6	DSR	-	-	-
7	RTS	-	-	-
8	CTS	-	-	-

Additionally, there are four NMEA 0183 ports with terminal blocks on the front panel of the computer. Refer to the following figures for the location of the NMEA ports and the pin assignments.



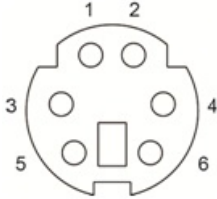


# Connecting a PS/2 Keyboard and Mouse

Your MC-7400 computer comes with 2 PS/2 mini-DIN connectors on the rear panel to connect to a PS/2 keyboard and PS/2 mouse.

This 6-pin mini-DIN connector has the pin assignments shown below.

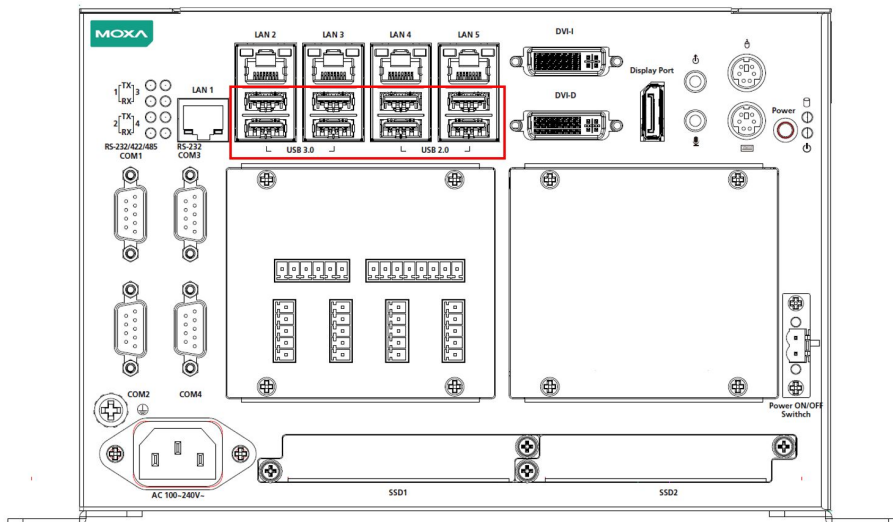
**PS/2 Connector**



Pin No.	Signal Definition
1	PS/2 Keyboard Data
2	PS/2 Mouse Data
3	GND
4	VCC
5	PS/2 Keyboard Clock
6	PS/2 Mouse Clock

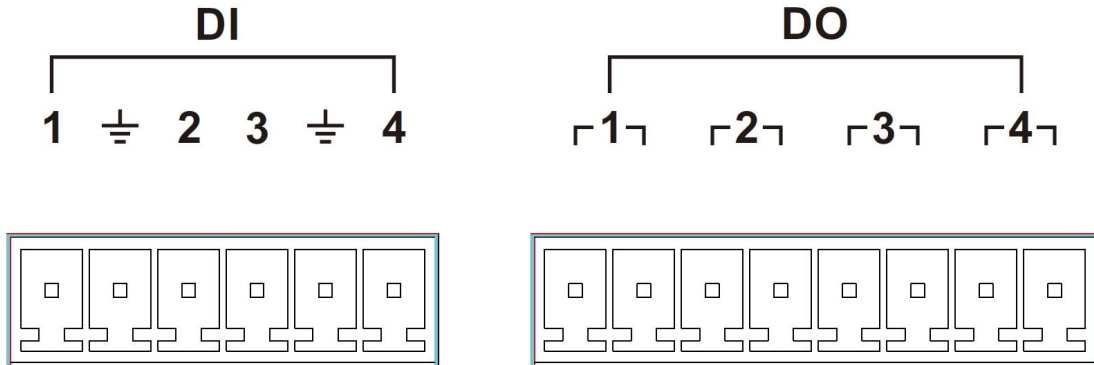
# Connecting to the USB Device

The MC-7400 comes with two USB 2.0 hosts on the front panel, four USB 2.0 hosts, and two SuperSpeed USB 3.0 hosts on the rear panel. The USB ports support peripherals such as a keyboard or mouse, or storage devices such as a portable HDD or DVD-ROM. Please note that USB 3.0 interfaces are not supported by the Windows XP platform.

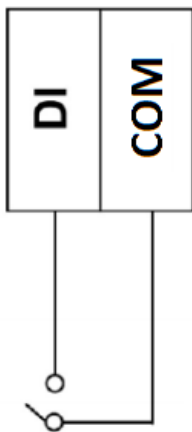


# Connecting to Digital Input and Output Channels

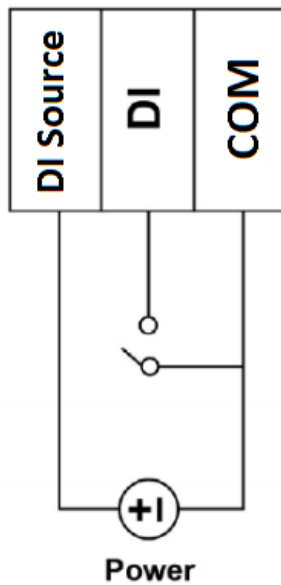
The MC-7400 comes with four digital input and four digital output channels on the front panel. These input/output channels can be connected with the terminal blocks that have been included in the package.



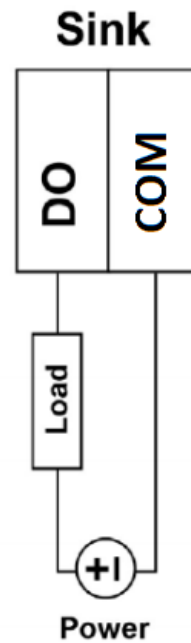
DI Dry Contact



DI Wet Contact

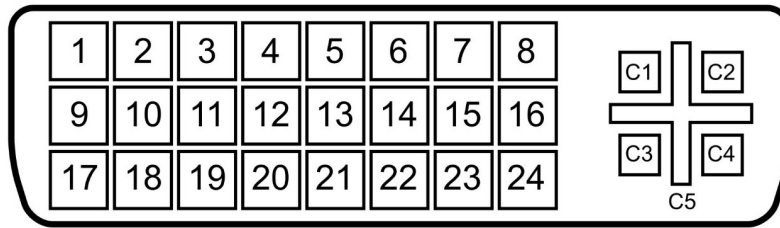


DO Contact



## Connecting to a DVI-I/DVI-D Monitor

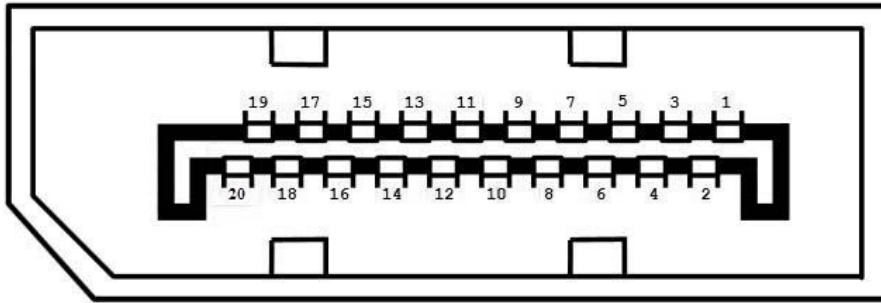
The MC-7400 computer come with one DVI-I and one DVI-D connectors that can connect to DVI monitors. Use the cable to connect one end to the DVI-I connector and the other end to the monitor. See the following table for DVI-I/DVI-D connector pin assignments.



Pin No.	Signal Definition
1	T.M.D.S. Data2-
2	T.M.D.S. Data2+
3	T.M.D.S. Data2/4 Shield
4	N/C
5	N/C
6	DDC Clock
7	DDC Data
8	Analog Vertical Sync
9	T.M.D.S. Data1-
10	T.M.D.S. Data1+
11	T.M.D.S. Data1/3 Shield
12	N/C
13	N/C
14	+5V Power
15	Ground (return for +5V, HSync, and VSync)
16	Hot Plug Detect
17	T.M.D.S. Data0-
18	T.M.D.S. Data0+
19	T.M.D.S. Data0/5 Shield
20	N/C
21	N/C
22	T.M.D.S. Clock Shield
23	T.M.D.S. Clock+
24	T.M.D.S. Clock-
C1	Analog Red
C2	Analog Green
C3	Analog Blue
C4	Analog horiz. Sync
C5	Analog GND

## Connecting to a DisplayPort Monitor

The MC-7400 computer come with one DisplayPort connector to connect to monitor which support 4K resolution.

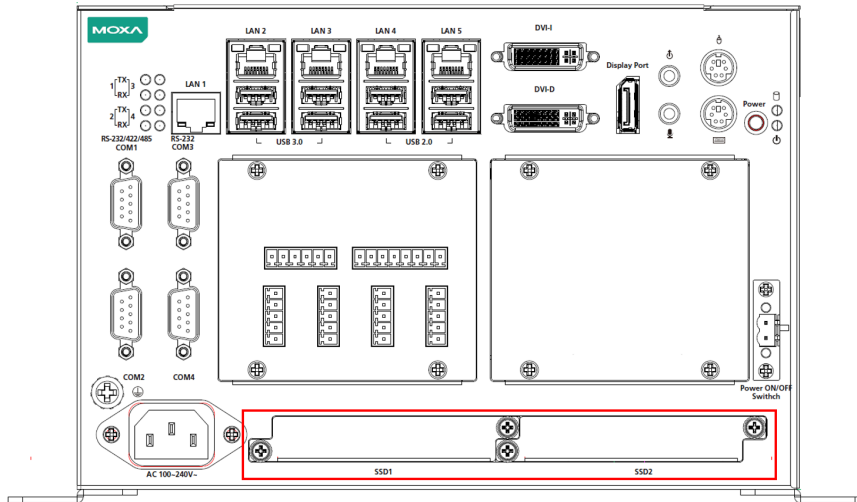


Pin No.	Signal Definition
1	ML_Lane 0 (p)
2	GND
3	ML_Lane 0 (n)
4	ML_Lane 1 (p)
5	GND
6	ML_Lane 1 (n)
7	ML_Lane 2 (p)
8	GND
9	ML_Lane 2 (n)
10	ML_Lane 3 (p)
11	GND
12	ML_Lane 3 (n)
13	CONFIG1
14	CONFIG2
15	AUX CH (p)
16	GND
17	AUX CH (n)
18	Hot Plug
19	Return
20	DP_PWR

# Installing the Removable SATA Storage Drive

The MC-7400 computer comes with two removable SATA storage tray that is accessible through the front panel. Either a SATA hard disk or solid state drive may be installed, but only use of an SSD will ensure full anti-vibration compliance. To install a SATA storage device, please follow these instructions:

1. Disconnect the MC-7400 from the power source.
2. To remove the storage device tray, unfasten the two thumbscrews that secure the removable tray. The storage tray's location is indicated in the following diagram:



3. Pull out the removable tray and fasten the storage device, such as HDD or SSD, on the tray.



# BIOS Setup

---

This chapter describes the BIOS settings of the MC-7400 computer. The BIOS is a set of input/output control routines for peripherals. The BIOS is used to initialize basic peripherals and helps boot the operating system before the operating system is loaded. The BIOS setup allows the user to modify the system configurations of these basic input/output peripherals.

The following topics are covered in this chapter:

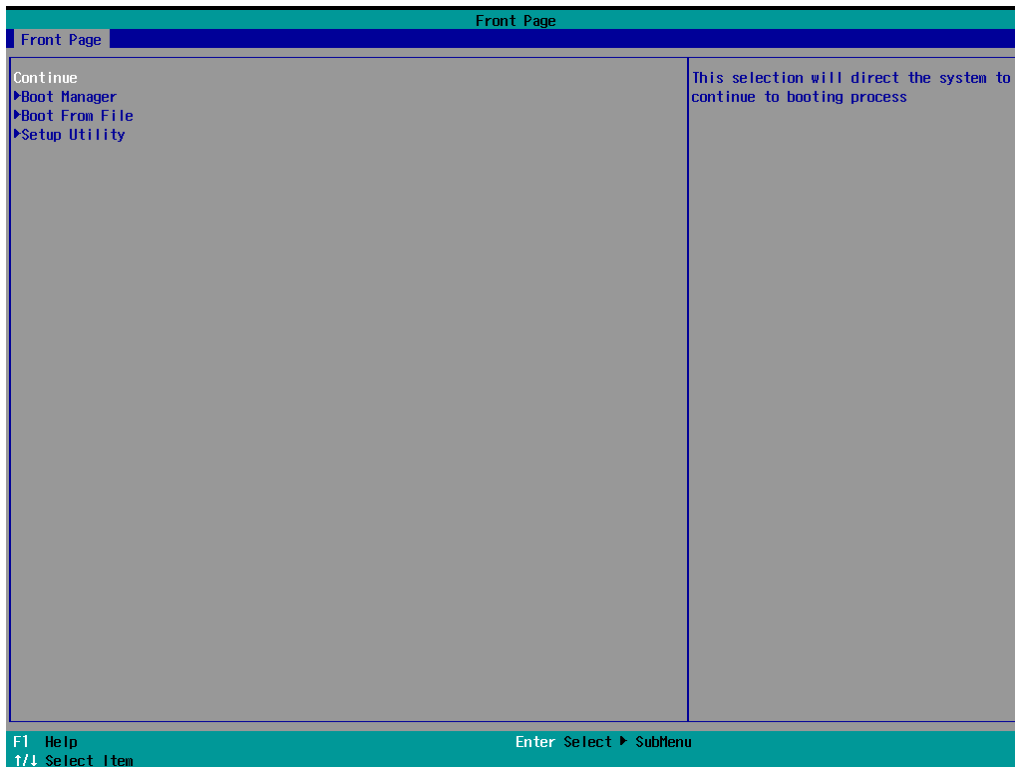
- ❑ **Entering the BIOS Setup**
- ❑ **Main Information**
- ❑ **Advanced Settings**
  - Boot Configuration
  - SATA Configuration
  - Internal Graphics Device
  - Miscellaneous Configuration
  - SIO ITE8768E
  - Smart Recovery Info
- ❑ **Security Settings**
  - Set Supervisor Password
- ❑ **Power Settings**
  - Auto Wake on S5
  - Wake on LAN
- ❑ **Boot Settings**
  - Boot Type
  - PXE Boot to LAN
  - Add Boot Options
  - Boot Delay Time
  - Legacy Normal Boot Menu
  - Boot Type Order
- ❑ **Exit Settings**
  - Exit Saving Changes
  - Save Change Without Exit
  - Exit Discarding Changes
  - Load Optimal Defaults
  - Load Custom Defaults
  - Save Custom Defaults
  - Discard Changes
- ❑ **Upgrading the BIOS**

# Entering the BIOS Setup

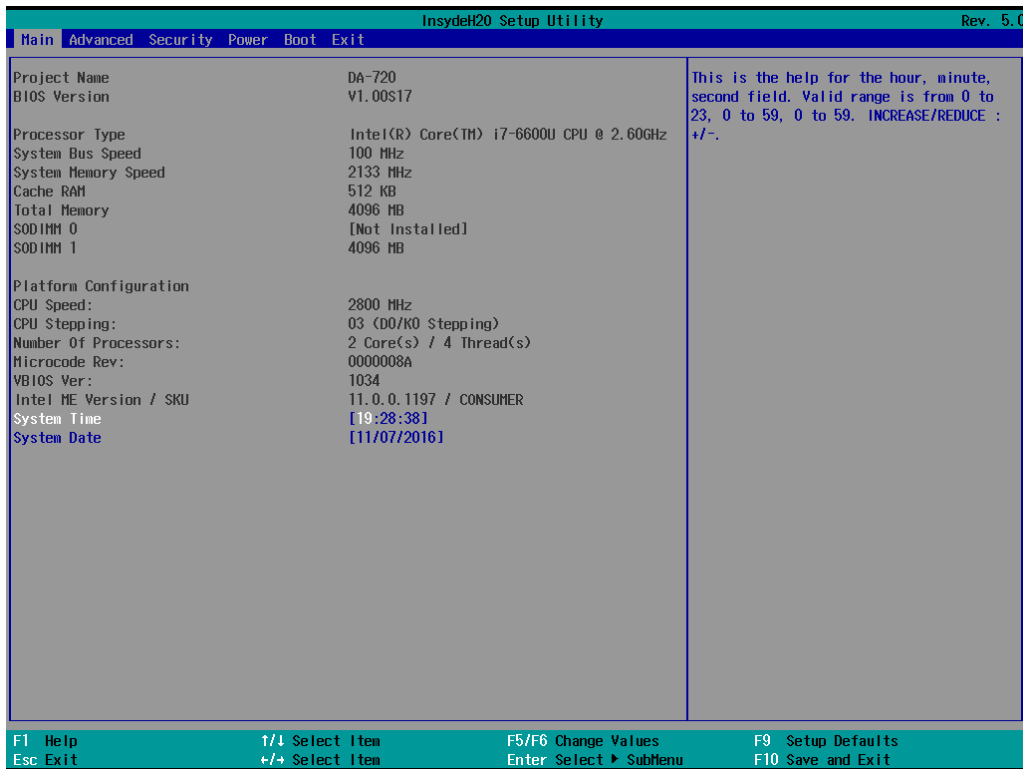
To enter the BIOS setup utility, press the "F2" key while the system is booting up. The main **BIOS Setup** screen is displayed. The following four options are available:

- Continue:** Continue to boot up
- Boot Manager:** Select the device for booting up
- Boot From File:** Select the UEFI boot-up file
- SCU:** Enter the BIOS configuration

Select **SCU** to enter the **BIOS configuration**.



The following BIOS configuration screen will be shown when you enter SCU option:



When you enter SCU, a basic description of each function key is listed at the bottom of the screen. Refer to these descriptions to learn how to use them.

<b>F1</b>	<b>General Help</b>	↑ ↓ .	<b>Select Item</b>
<b>F5/ F6</b>	<b>Change Values</b>	← →	<b>Select Menu</b>
<b>F9</b>	<b>Setup Defaults</b>	<b>ESC</b>	<b>Exit</b>
<b>F10</b>	<b>Save and Exit</b>	<b>EN TER</b>	<b>Select or go to Submenu.</b>

**NOTE** The information displayed for a **Processor Type** may vary depending on the computer model that you have purchased.

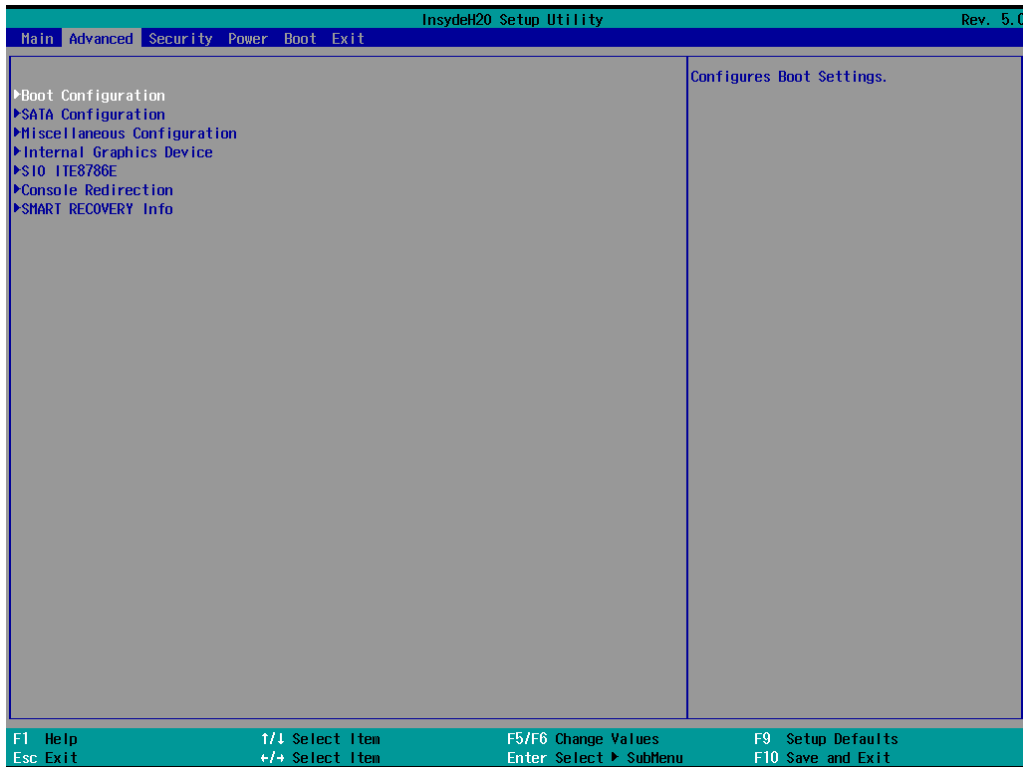


# Main Information

The **Main** page indicates the system information, such as model name, BIOS version, and CPU type. You can view the basic system hardware information on this page.

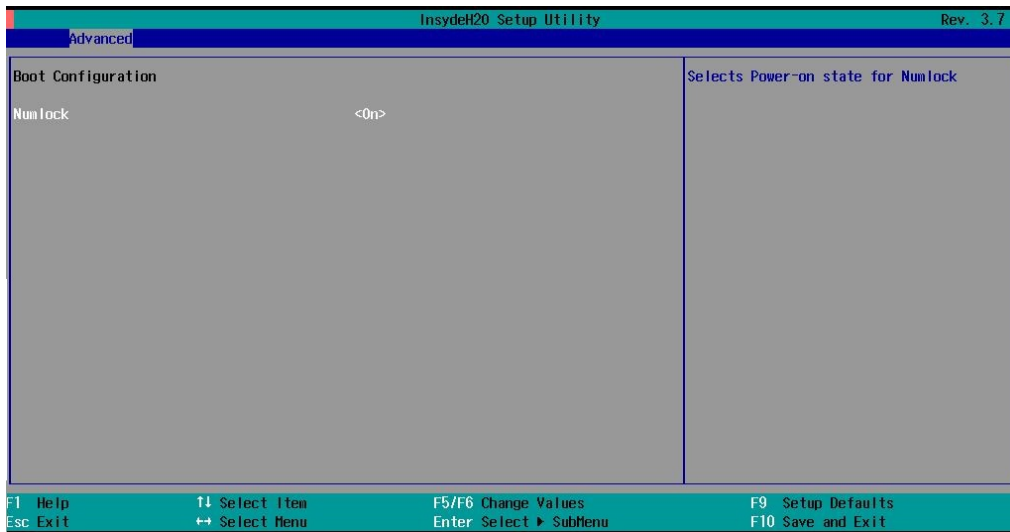
# Advanced Settings

The **Advanced** option displays configuration information on Boot, SATA, internal graphics device, SIO, and Smart Recovery feature.



## Boot Configuration

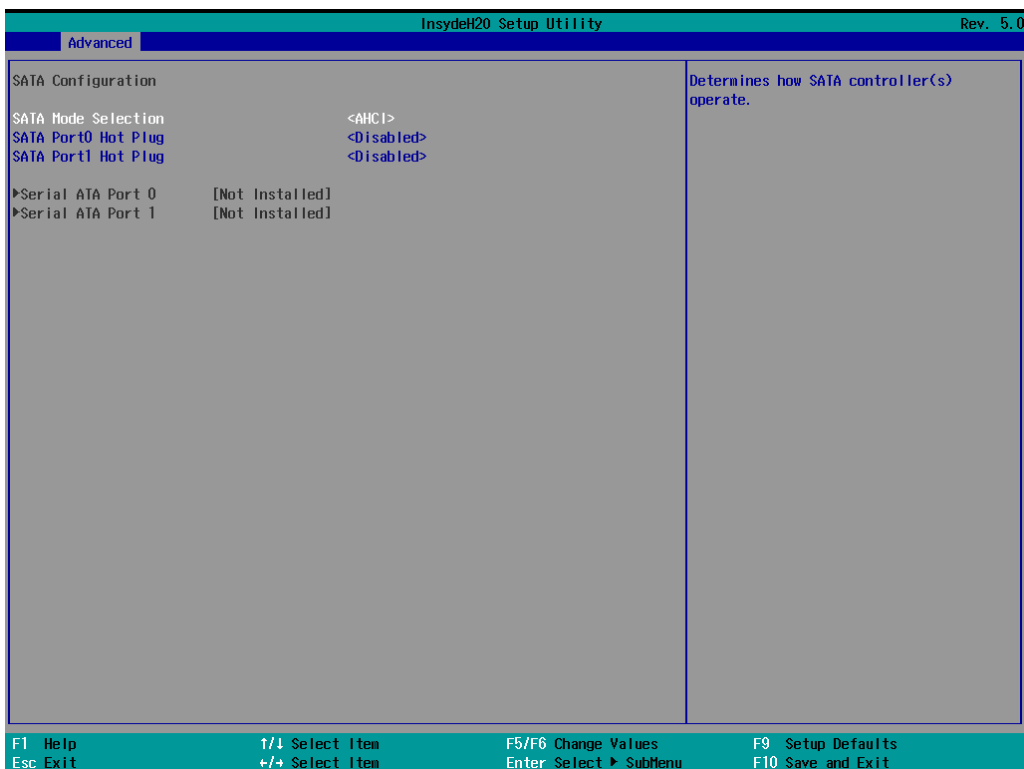
This feature allows you to configure a default setting for the keys on the number pad of the computer keyboard. Turning the **NumLock** on allows you to use the number keys to type out numbers and turning it off activates the key's other functions such as using the keypad as an arrow pad.



Option: On (default), Off.

## SATA Configuration

The host drive controller can be configured for AHCI or RAID mode. When the AHCI mode is selected, the following screen is displayed:



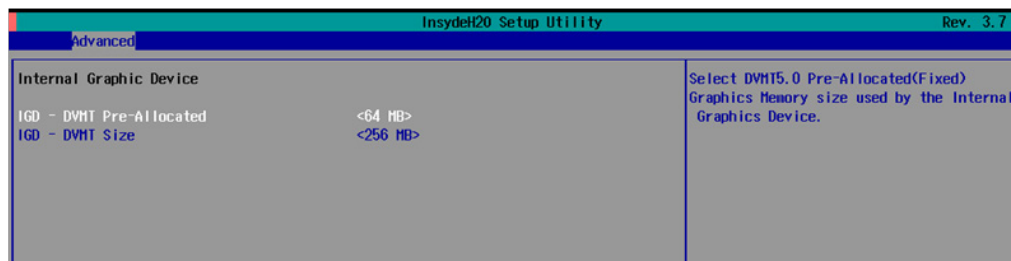
## SATA Port 0 to 2 Hot Plug

This feature allows you to enable/disable hot plugging capabilities (the ability to remove the drive while the computer is running) for the storage drives installed on the system.

Options: Disable (default), Enabled

## Internal Graphics Device

Allows you to enable/disable the internal graphics device.



### IGD—DVMT (pre-allocated)

Allows you to configure pre-allocated memory capacity for the IGD. Pre-allocated graphics memory is invisible to the operating system.

Options: 64 MB (default), 32 MB, 96 MB, 128 MB, 256 MB, 512 MB

**DVMT** is a BIOS solution where the optimum amount of memory is dynamically allocated and de-allocated as needed for balanced graphics and system performance, through Intel® Direct AGP and a highly efficient memory utilization scheme. DVMT ensures the most efficient use of available system memory resources for maximum 2D/3D graphics performance.

### IGD—DVMT Size

Allows you to configure the maximum amount of memory DVMT will use when allocating additional memory for the internal graphics device.

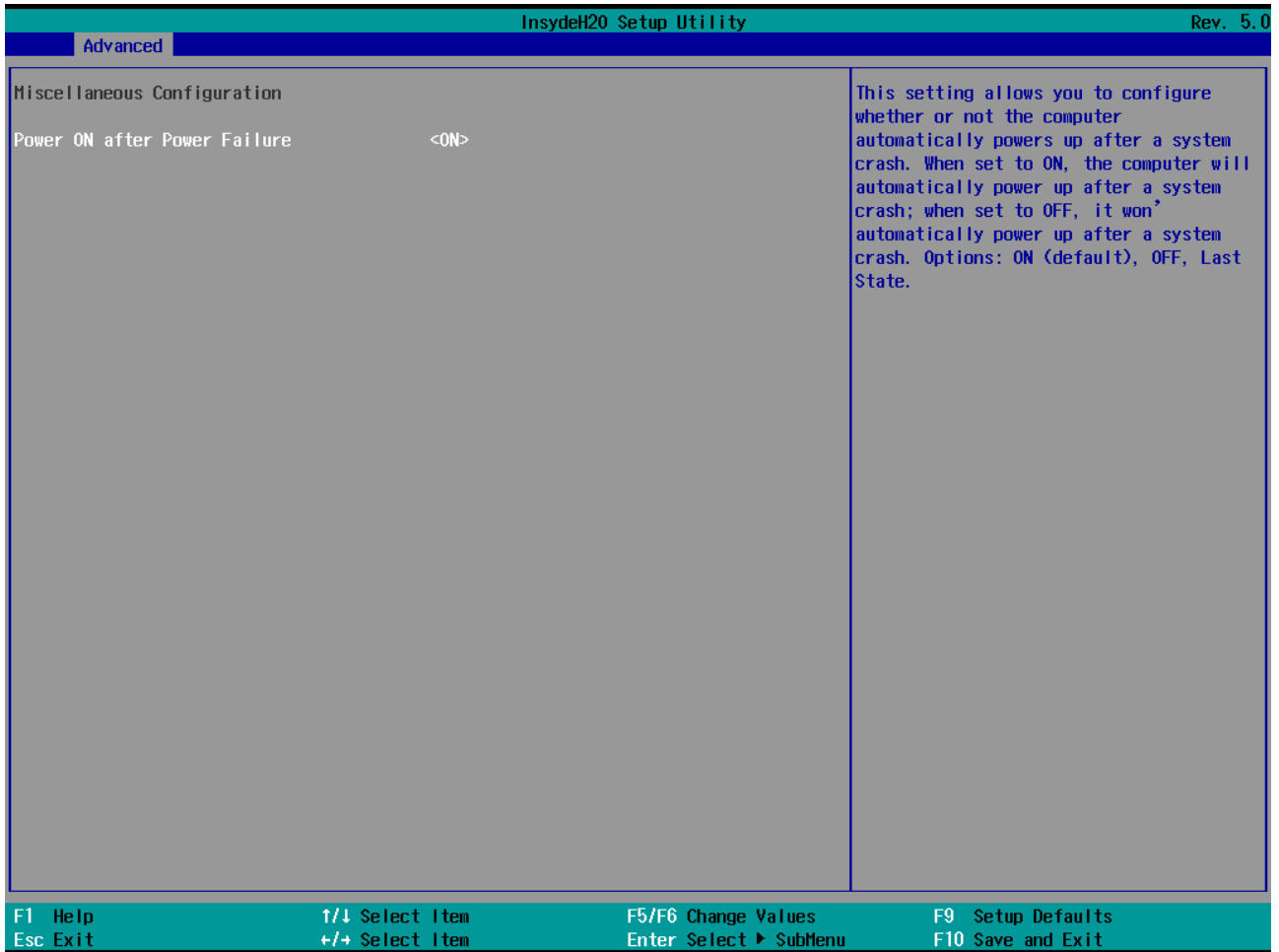
Options: 256 MB (default), 128 MB, Max

# Miscellaneous Configuration

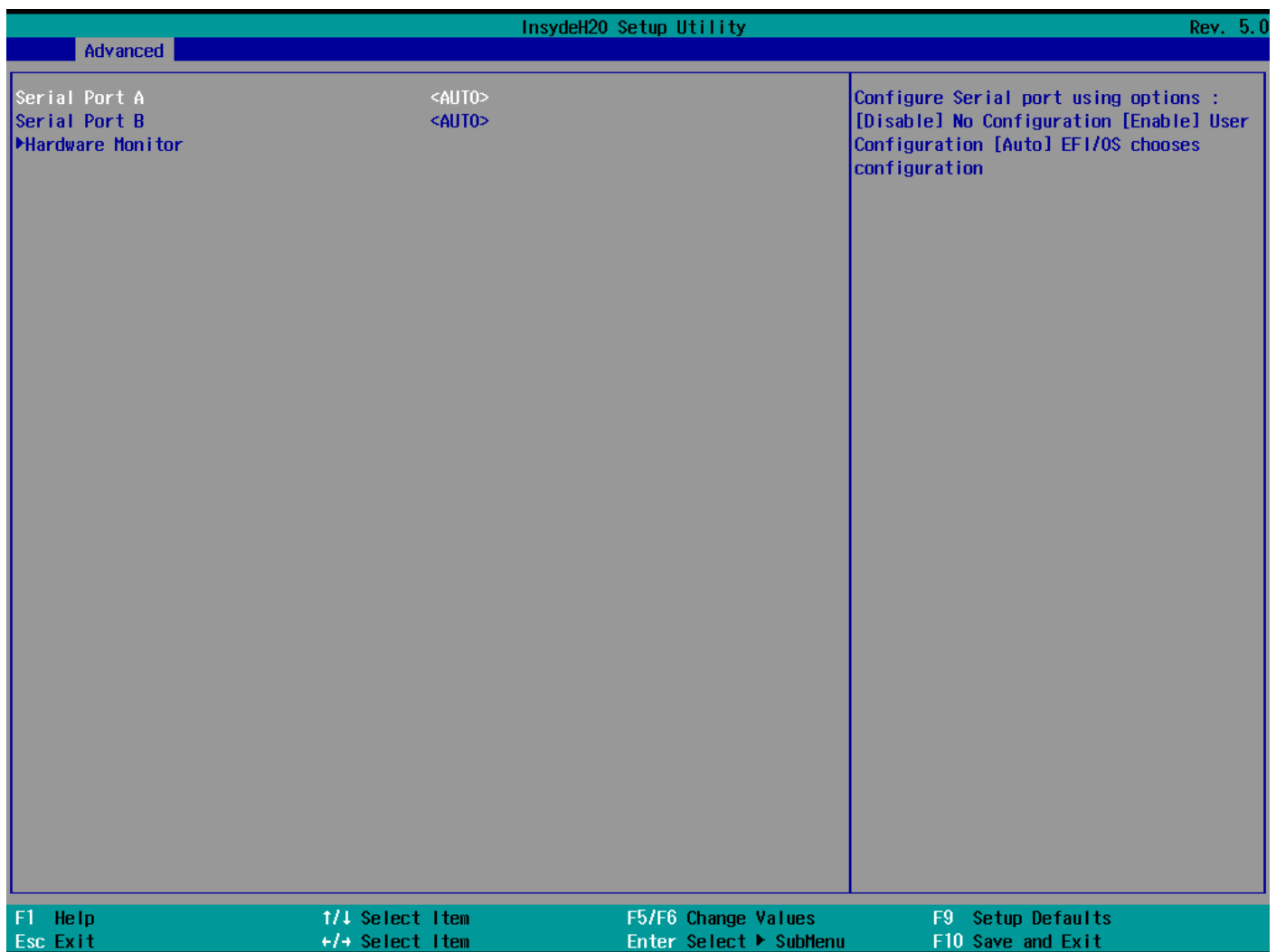
## Power ON after Power Failure

Allows you to enable/disable the automatic power up of your computer after a system crash.

Options: ON (default), OFF, Last State



## SIO ITE8768E



### Serial Port A

Allows you to configure the serial port A.

Options:

Auto (Default)	The system chooses the configure for the resource
Enable	User configures the resource
Disable	Port is disabled and no configuration is possible

### Serial Port B

Allows you to configure the serial port B.

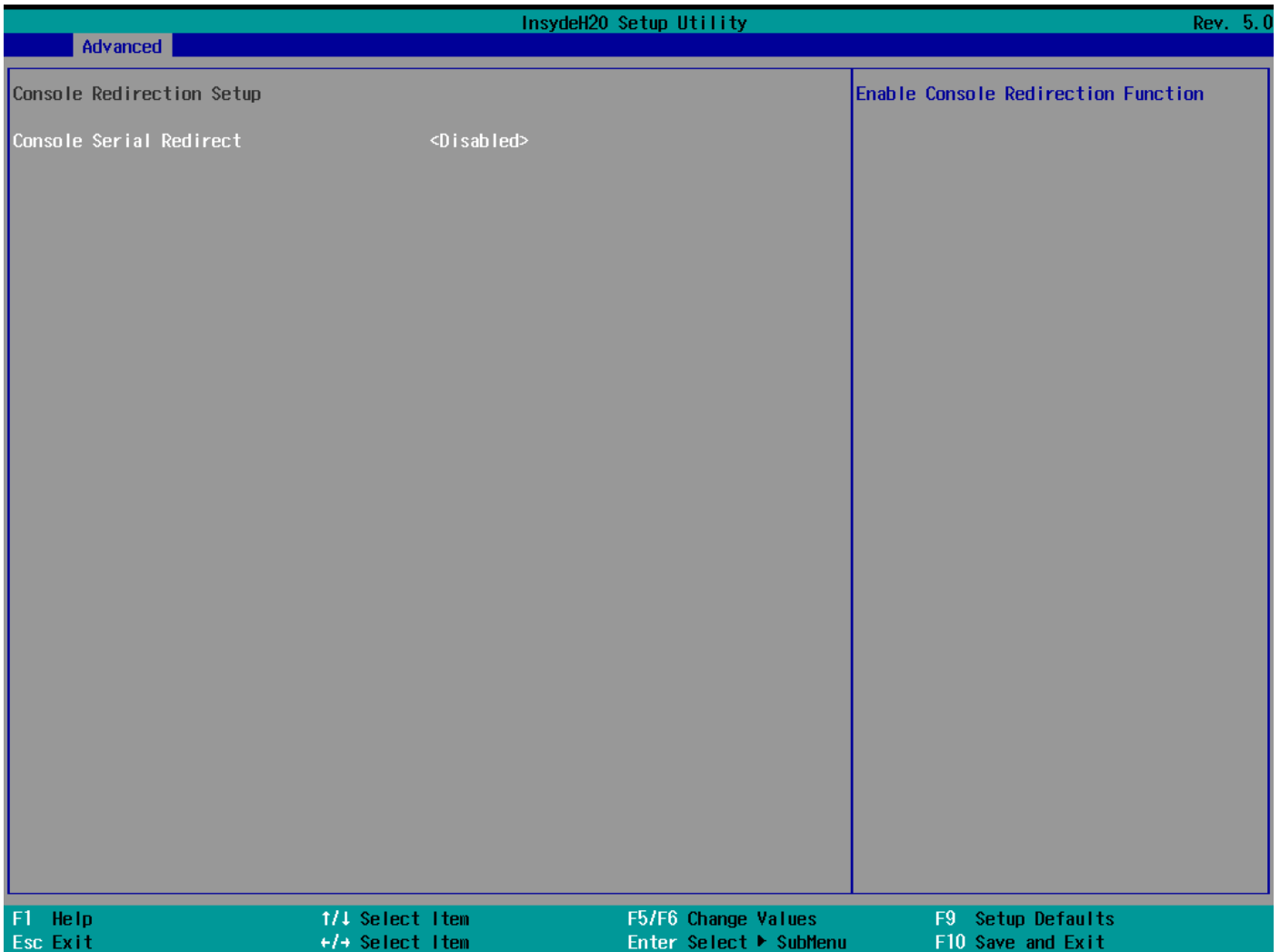
Options:

Auto (Default)	The system chooses the configure for the resource
Enable	User configures the resource
Disable	Port is disabled and no configuration is possible

## Hardware Monitor

This feature allows you to view hardware statistics like CPU and system temperature, voltage levels, and other chipset related information.

## Console Redirection



### Console Serial Redirect

Enables console redirection function. The display will also output to serial port synchronously.

## Smart Recovery Info

This feature allows you to view the smart recovery settings for your computer.



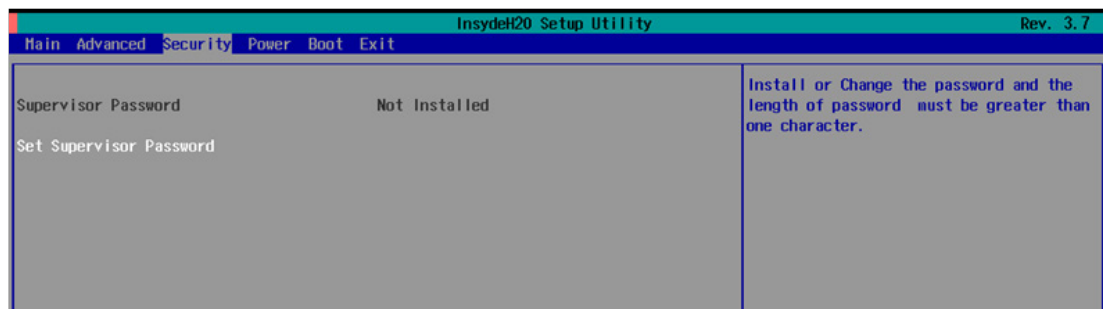
## Load Smart Recovery Default

Allows you to load the default values for the Smart Recovery function. For details on the Smart Recovery feature, refer to the *Smart Recover Software User's Manual*.

Options: Yes (default), No

## Security Settings

This feature allows you to configure security settings with a supervisor password and user password.



## Set Supervisor Password

Allows you set the supervisor password.

To set the password, enter the password, and then confirm the password again.

To delete the password, enter **Set Supervisor Password** and enter the old password. Leave the new password fields blank, and press Enter.

Set Supervisor Password

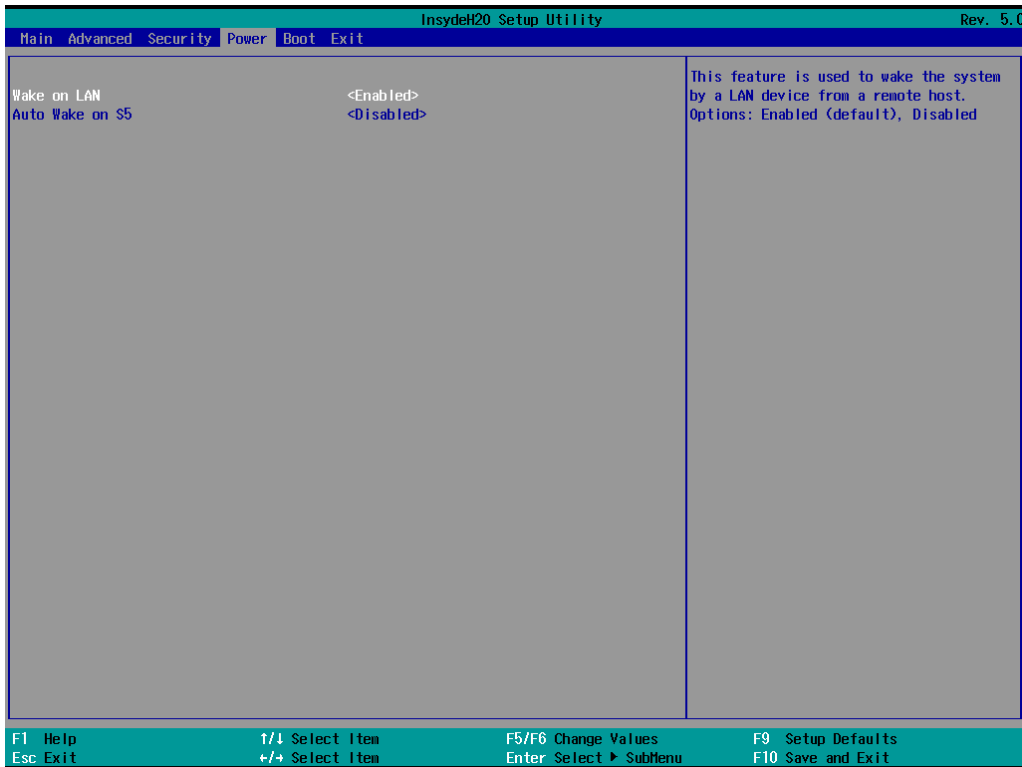
Please type in your new password [  ]

Please confirm your new password [  ]

# Power Settings

The **Power** menu allows you to configure the power settings for your computer.

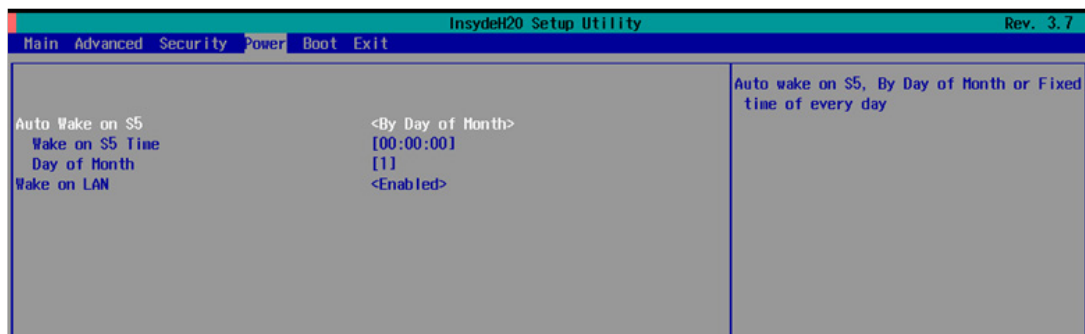
The **Advanced CPU Control** option is only available on i7 platform. The **C-States** option is disabled by default.



## Auto Wake on S5

This feature allows you to configure auto wake up from S5 status. S5 stands for Soft Off, where the PSU remains engaged but power to all other parts of the system is cut off. Auto-wake on S5 schedules a soft-reboot at certain periodic times that can be specified in the BIOS.

Options: Disabled (default); By Every Day (user specifies a regular daily time when the computer will power up); By Day of Month (user specifies a regular day each month when the computer will power up)





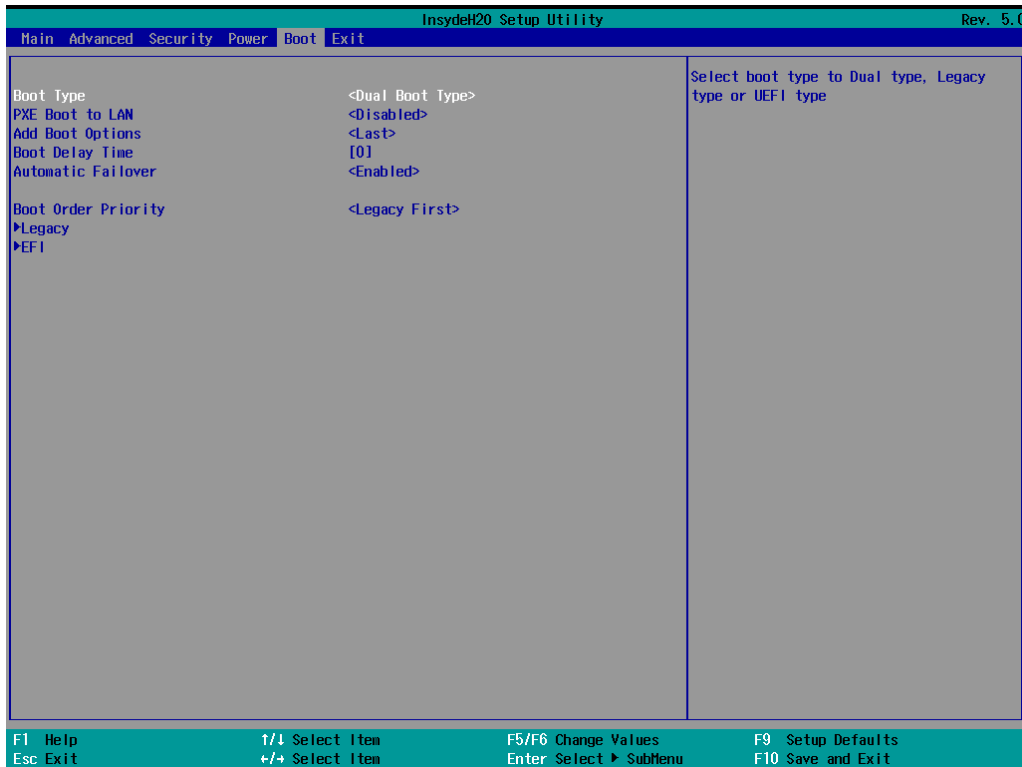
## Wake on LAN

This feature is used to configure a wake on the system by a LAN device from a remote host.

Options: Enabled (default), Disable.

## Boot Settings

The feature allows you to configure boot settings.



## Boot Type

Allows you to enable/disable quick boot function.

Options: Dual Boot Type (default), Legacy Boot Type, UEFI Boot Type.

## PXE Boot to LAN

Allows you to enable/disable PXE boot to LAN function.

Options: Disabled (default), Enabled

## Add Boot Options

Allows you to add the boot order options for shell, network, and removable media.

Options: Last (default), First

## Boot Delay Time

Allows you to configure the delay time value for users to input hot key during POST time.

Options: 0 Second (default), 3 Seconds, 5 Seconds, and 10 Seconds

## Automatic Failover

This setting allows you to enable automatic failover to the next boot device if the default device fails to boot.

Enable: If the default device fails to boot, the system will automatically try to boot up the next device.

Disable: If the default device fails to boot, the system will display a warning message and the go into firmware.

## Boot Order Priority

This setting allows you to determine the booting priority of the EFI device. If this setting is set to **EFI First**, the EFI device will boot first; if the setting is **Legacy First**, the legacy device will boot first.

Options: Legacy First (default), EFI first

## Legacy Normal Boot Menu

This setting allows you to configure the boot menu.

Options: Normal, Advance (default)

## Boot Type Order

This setting allows you to configure the boot order of the devices. To change the boot order, use the "-" or "F5" key to move down the list, or the "+" or "F6" key to move up the list, and then press **Enter**.

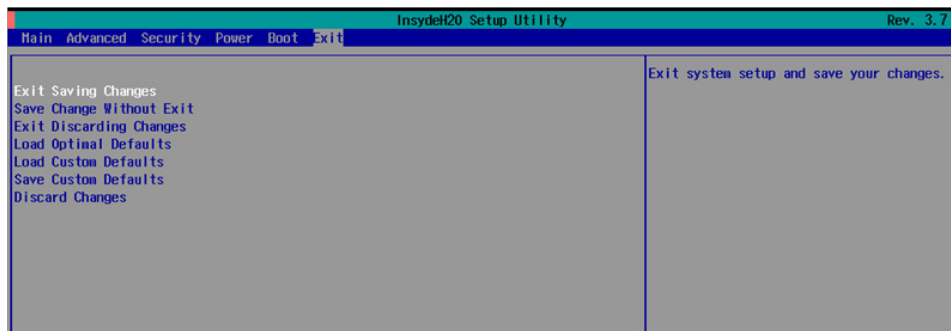
Options: Hard Disk Drive (default), CD/DVD-ROM Drive, USB, Others

## EFI

Adjust boot order settings for EFI device

# Exit Settings

The feature allows users to save configuration changes and exit the BIOS environment.



## Exit Saving Changes

Allows you to exit the BIOS environment and save the values you have just configured.

Options: Yes (default), No

## Save Change Without Exit

Allows you to save changes without exiting the BIOS environment.

Options: Yes (default), No

## Exit Discarding Changes

Allows you to exit without saving any changes that might have been made to the BIOS.

Options: Yes (default), No

## Load Optimal Defaults

Allows you to revert to the factory default BIOS values.

Options: Yes (default), No

## Load Custom Defaults

Allows you to load custom default values for the BIOS settings.

Options: Yes (default), No

## Save Custom Defaults

Allows you to save the current BIOS values as a custom default image. You can restore the system to this custom default image anytime using the **Load Custom Defaults** option.

Options: Yes (default), No

## Discard Changes

Allows you to discard all settings you have just configured. Options: Yes (default), No

# Upgrading the BIOS

This section describes how to upgrade the BIOS.

**IMPORTANT** BIOS upgrades, if not done correctly, can permanently damage the computer. We strongly recommend that you contact Moxa's technical support staff for assistance in order to obtain all necessary tools and the most current advice before attempting to upgrade the BIOS on any Moxa device.

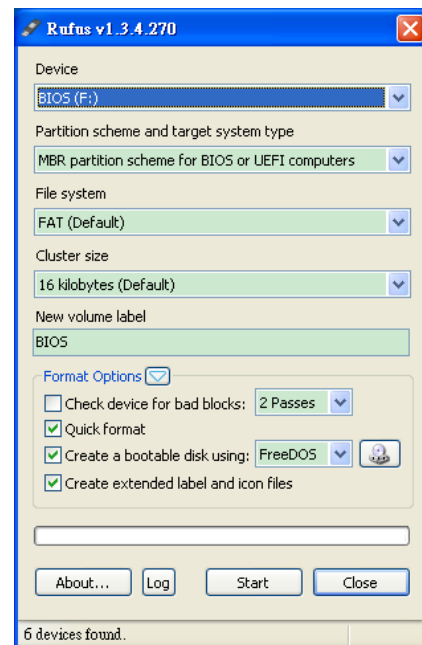
## Step 1: Create a Bootable USB Disk

Before upgrading the BIOS, you must create a bootable USB RAM drive, which you can use as a system rescue device. A useful software suite, Rufus for creating a bootable USB RAM drives can be downloaded at:

<https://rufus.akeo.ie/>

To create a bootable USB disk using Rufus software, do the following:

1. Start Rufus and select the USB device that you want to use as a bootable disk from the **Device** drop-down list.
2. Select **MBR partition scheme for BIOS or UEFI computers** to boot from a legacy BIOS or UEFI.
3. Select **FAT (Default)** from **File system** drop-down list.
4. Select **16 kilobytes (Default)** for **Cluster size**.
5. Enter a drive name under **New volume label**.
6. Select the **Quick format, Create a bootable disk using FreeDOS**, and **Create extended label and icon files** format options.
7. Click **Start** to format and create the bootable USB drive.



## ATTENTION

We suggest you use a USB drive with under 2 GB disk space, as larger USB drives may not support FAT file format and consequently fail to boot.

## Step 2: Prepare the Upgrade File

You must use the BIOS upgrade installation file to upgrade the BIOS. Contact Moxa's technical department for assistance.

1. Get the BIOS upgrade installation file. The file name should have following format: **682AxxSx.exe** (xx refers to version numbers).
2. Copy the file to the Bootable USB Disk.

### Step 3: Run the upgrade program on the MC-7400 Computer

1. Reboot the computer, press F12 while booting up to enter the Boot Manager
2. Select USB Disk as the first boot source. Press Enter to continue.



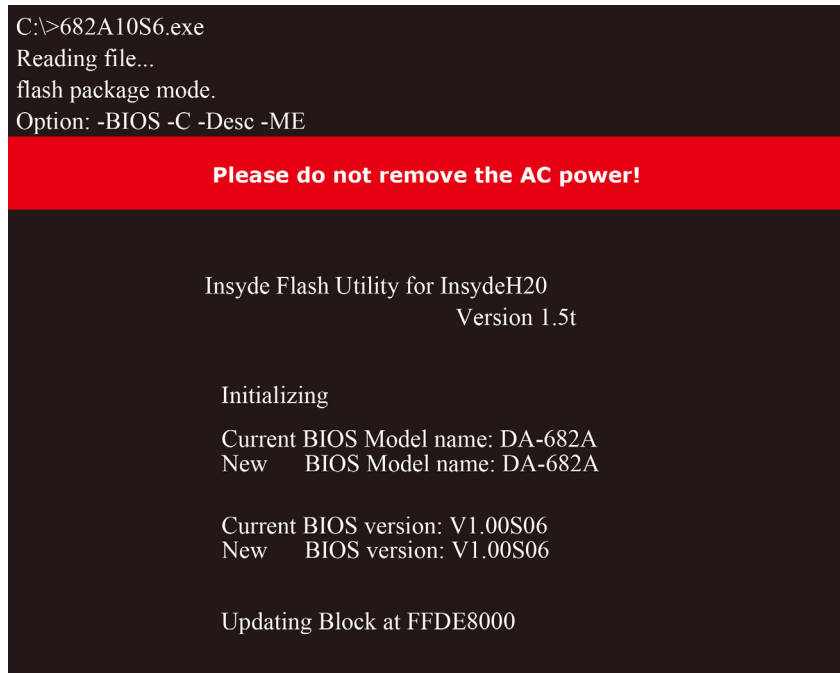
3. When the boot up process is complete, the DOS screen is displayed. Go to the directory where the upgrade file is located. For example, if the upgrade file is stored in the DA-720 folder, type `cd DA-720`.

```
C:\>cd DA-720
```

4. Run the upgrade program by typing `DA-72010017.exe`. Please note that the upgrade filename will vary depending on the computer versions.

```
C:\ DA-720>DA-72010017.exe
```

5. Wait until the upgrade process is complete.



6. When the upgrade is finished, the computer will automatically reboot. You can check the BIOS version on Main page of the BIOS Setup to confirm the upgrade.



**ATTENTION**

DO NOT switch off the power supply during the BIOS upgrade, since doing so may cause the system to crash.

# A

## Regulatory Approval Statement

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This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Class A:** FCC Warning! This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



**European Community**

**Warning:**

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

# B

## Adjusting the Audio Mixer Function

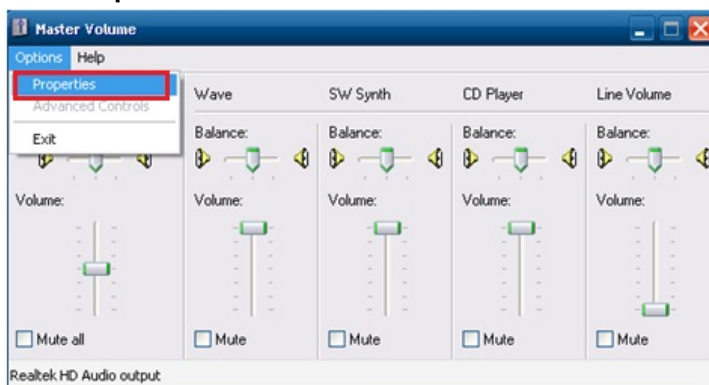
This chapter describes how to adjust the of the MC-7400's audio settings for the **Mixer** function in the Windows XP and Windows XP Embedded operating systems.

Since the **Mixer** function is enabled by default, you need modify the default settings of the Realtek audio device so that sounds picked up from the microphone will not be recorded. Follow the steps below:

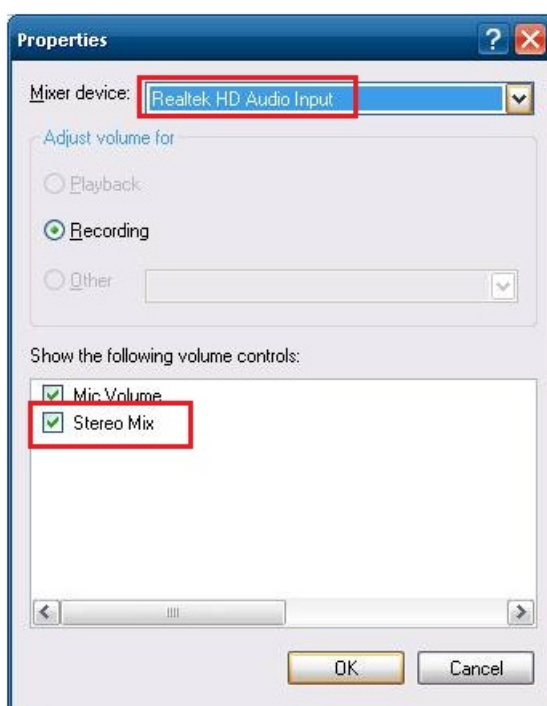
1. Right-click the volume icon and select **Open Volume Control**.



2. Select **Properties**.



3. Select **Realtek HD Audio Input** from the Mixer device drop-down list, and check **Stereo Mix**. Click **OK** to continue.





- 4. Uncheck **Stereo Mix** and choose **Mix Volume** to complete the configuration.

