Atlas All-in-one

User Manual

Version:0.3

Copyright

Safety Instructions

1. Read these instructions carefully. Keep these instructions for future reference.
2. Please disconnect this equipment from AC outlet before cleaning. Don’t use liquid or sprayed detergent for cleaning. Use moisture sheet or cloth for cleaning.
3. Please keep this equipment from humidity.
4. Lay this equipment on a reliable surface when install. A drop or fall could cause injury.
5. Make sure power cord such a way that people cannot step on it. Do not place anything over the power cord.
6. All cautions and warnings on the equipment should be noted.
7. If the equipment is not used for long time, disconnect the equipment from main to avoid being damaged by transient over voltage.
8. Never pour any liquid into opening; this could cause fire or electrical shock.
9. If one of the following situations arises, get the equipment checked by a service personnel:
   a. The power cord or plug is damaged.
   b. Liquid has penetrated into the equipment.
   c. The equipment has been exposed to moisture.
   d. The equipment does not work well or you cannot get it work according to user manual.
   e. The equipment has dropped and damaged.
10. Do not leave this equipment in an environment unconditioned, storage temperature below -20°C or above 60°C, it may damage the equipment.
11. Unplug the power cord when doing any service or adding optional kits.

Lithium Battery Caution:

1. Danger of explosion can happen if the battery is incorrectly replaced. Replace only the original or equivalent type recommended by the manufacture. Dispose used batteries according to the manufacturer’s instructions.
2. Do not remove the cover, and ensure no user serviceable components are inside. Take the unit to the service center for service and repair.

CE Notice

This device complies with the requirements of the CE directive.

FCC Notice

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 in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables must be used in order to comply with emission limits.

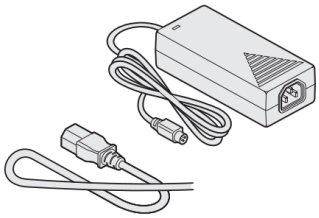
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

WEEE Notice

This appliance is labeled in accordance with European Directive 2002/96/EC concerning waste electrical and electronic equipment (WEEE). The Directive determines the framework for the return and recycling of used appliances as applicable throughout the European Union. This label is applied to various products to indicate that the product is not to be thrown away, but rather reclaimed upon end of life per this Directive.

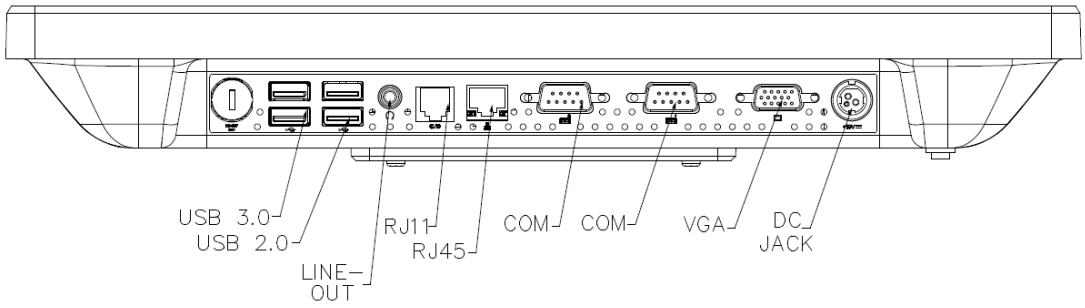
1 Packing List

1-1 Standard Accessories

a. 	b. 	a. System (with Stand) b. Power Cord and power supply (3-pin)

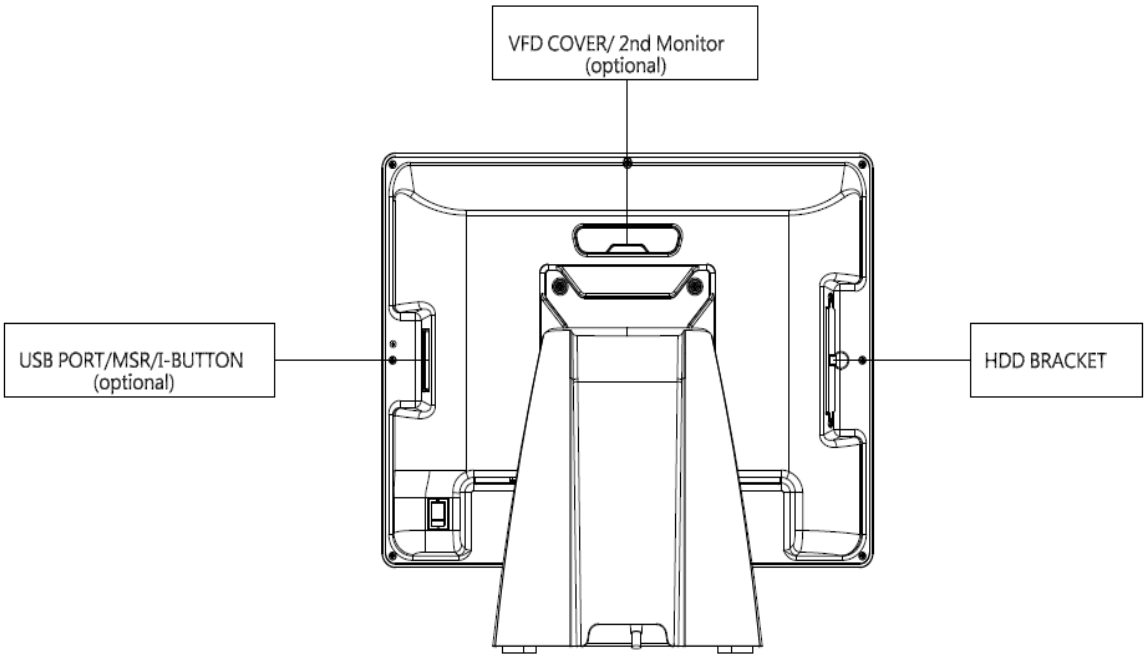
2 System View

2-1 I/O View



☆ **Please make sure 19V DC plug in the right direction before plugging in DC jack.**

2-2 Back View

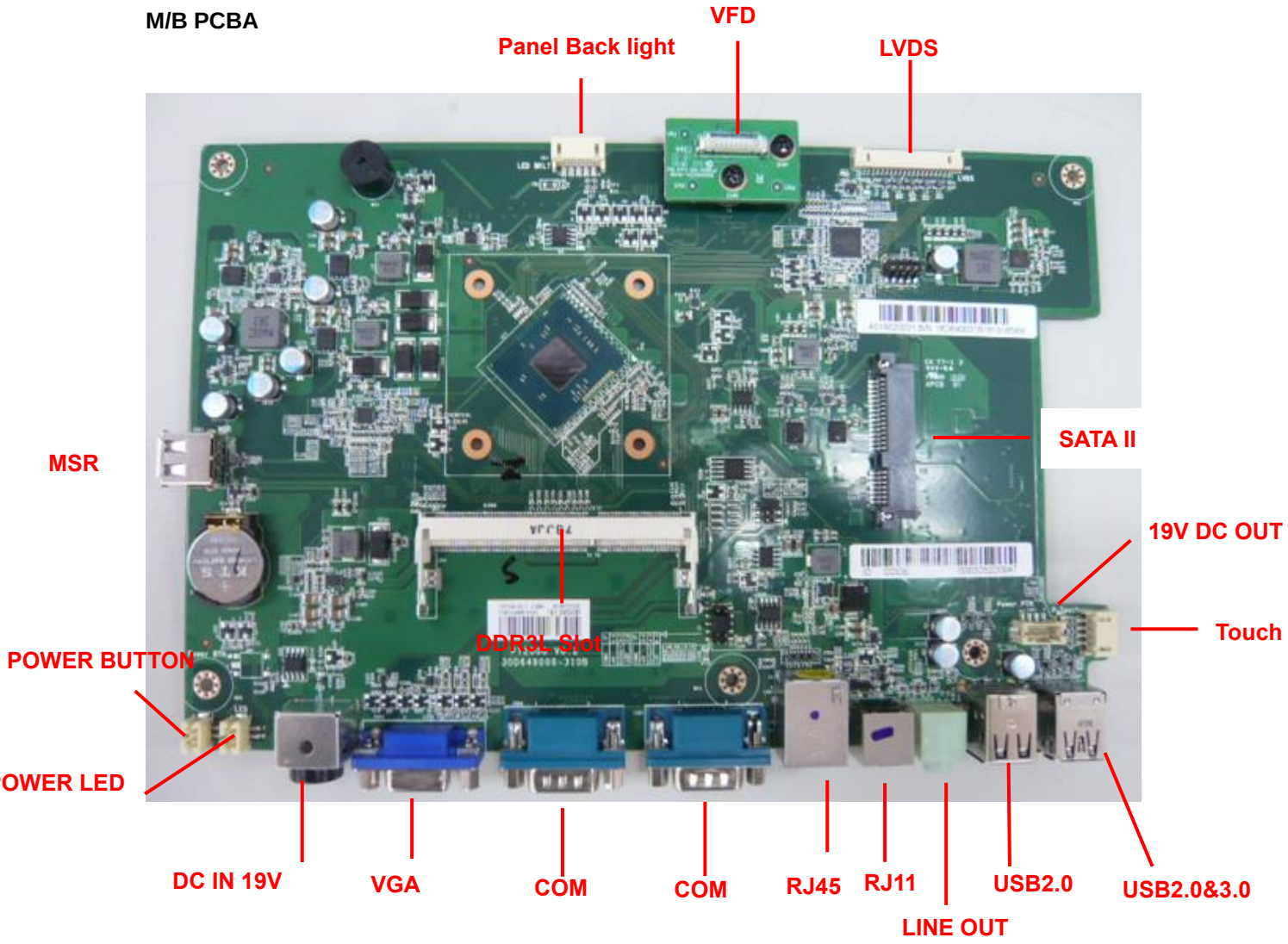


2-4 Specification

Display	Display Size		15" TFT LCD
	Resolution		1024 X 768
	Brightness / Color		300 cd/㎡ , 16.7M colors
	Backlight		LED
Touch Panel	Type		Projected Capacitive Touch
Processor	CPU/ Chipset		Intel® Celeron J1900 Quad-Core 2.0Ghz up to 2.42Ghz
Memory			X 1 DDR3L SO-DIMM, up to 8GB
Storage			X 1 (2.5" SATAII HDD or SSD)
I/O Connectors	USB 2.0		X 4 (Rear X 3, Side X 1)
	USB 3.0		X 1 (Rear)
	Powered COM (RS232)		X 2 (DB9 powered COM 5V/ 12V selected by jumper)
	Cash Drawer Port		X 1 (24V RJ11 Cash Drawer port)
	Audio Port	Line-out	X 1
	LAN		x 1 (RJ45 10/100/1000 Base-T)
	VGA		X 1 (DB15)
	DC In		Lockable 3-pin DC 19V input
Optional Peripherals			VFD, MSR, Fingerprint reader, Printer base
Power Supply			60W 19V lockable 3-pin Power Adaptor
OS Support			POSReady 7 / Win 10 IoT Enterprise, Windows 10 Pro, Linux
Environment	Temperature	Operation	32˚ to 95˚ F (0˚ to 40° C)
		Storage	-4° to 140° F (-20° to 60° C)
	Relative Humidity		20% to 80% non-condensing
Dimension (W x H x D) mm			364 x 410 x 257
Certifications			CE / FCC / LVD
Protection			IP64 on front bezel

2-4 Internal Layout

M/B PCBA



3 Pin Definition

1. LVDS connector

No.	Definition	No.	Definition
1	6-bit/8-bit selection	2	GND
3	DATA3+	4	DATA3-
5	GND	6	CLK+
7	CLK-	8	GND
9	DATA2+	10	DATA2-
11	GND	12	DATA1+
13	DATA1-	14	GND
15	DATA0+	16	DATA0-
17	GND	18	GND
19	+3.3V	20	+3.3V

2. SATA

No.	Definition	No.	Definition
S1	GND	P1	N/C
S2	SATA_TX0_P	P2	N/C
S3	SATA_TX0_N	P3	N/C
S4	GND	P4	GND
S5	SATA_RX0_N	P5	GND
S6	SATA_RX0_P	P6	GND
S7	GND	P7	+5V
		P8	+5V
		P9	+5V
		P10	GND
		P11	GND
		P12	GND
		P13	N/C
		P14	N/C
		P15	N/C

3. Power On/Off connector

No.	Definition
1	+5V Standby
2	+5V Status
3	Power On#
4	GND

4. Projected capacitive touch connector

No.	Definition
1	+5V
2	USB D-
3	USB D+
4	GND

5. Resistive touch connector

No.	Definition
1	+5V
2	RxD
3	TxD
4	GND

6. Sideward MSR connector Pin Definition

No.	Definition
1	+5V
2	USB D-
3	USB D+
4	GND

7. VFD connector

No.	Definition
1	RTS#
2	DSR#
3	TxD
4	RxD
5	CTS#
6	DTR#
7	+5V
8	USB D-
9	USB D+
10	GND

8. CN1: MB to small card connector

No.	Definition
1	+19V
2	+19V
3	GND
4	GND

4 Rear I/O Interface

System

1. DC Jack Pin Definition

No.	Definition
1	+19V
2	Ground
3	+19V

2. 2-Layer USB2.0 connector Pin Definition

No.	Definition	No.	Definition
1	+5V	5	+5v
2	D-	6	D-
3	D+	7	D+
4	GND	8	GND

3. 2-Layer USB3.0+2.0 connector Pin Definition

No.	Definition	No.	Definition
1	+5V	8	TX-
2	D-	9	TX+
3	D+	10	+5V
4	GND	11	D-
5	RX-	12	D+
6	RX+	13	GND
7	GND		

4. LAN: RJ45 Pin Definition

No.	Wire color(T568B)	Definition
1	White / Orange	Transmit
2	Orange	Transmit
3	White / Green	Receive
4	Blue	1000Base-T
5	White / Blue	1000Base-T
6	Green	Receive
7	White / Brown	1000Base-T
8	Brown	1000Base-T

5. COM connector Pin Definition

No.	Definition
1	DCD#
2	RxD
3	TxD
4	DTR#
5	GND
6	DSR#
7	RTS#
8	CTS#
9	+5V/+12V/Ring

COM1	J2
+V5	1-3
Ring/Default	3-5
+12V	7-9

COM2	J2
+V5	2-4
Ring/Default	4-6
+12V	8-10

You can change the com port voltage by jumper

6. RJ11 (Cash Drawer) connector Pin Definition

No.	Definition
1	GND
2	C/D_OPEN#
3	C/D Status
4	+24V
5	N/C
6	GND

7. Line-out Jack Pin Definition

No.	Definition
1	GND
2	GND
3	LINE_OUT
4	LINE_OUT
5	Detect

8. JS1: Small card to printer connector Pin Definition

No.	Definition
1	+24V
2	+24V
3	GND
4	GND

4. Cash Drawer

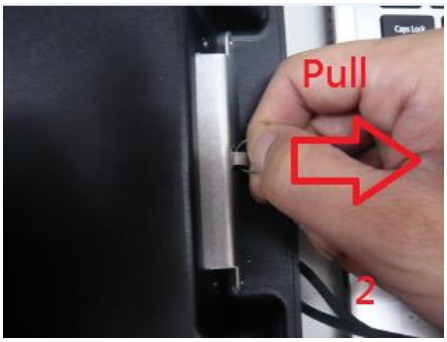
No.	Definition
1	FC
2	Drawer 1
3	DRSW
4	VDR
5	Drawer 2
6	GND

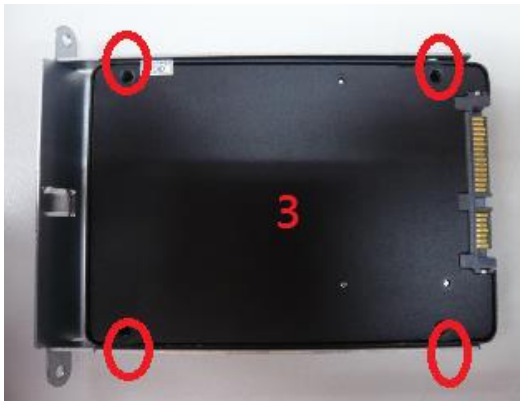
Electrical characteristics

- Driving voltage : DC 24V;
- Driving current : Maximum 0.8A (In 510 ms)

5 System Assembly & Disassembly

5-1. HDD



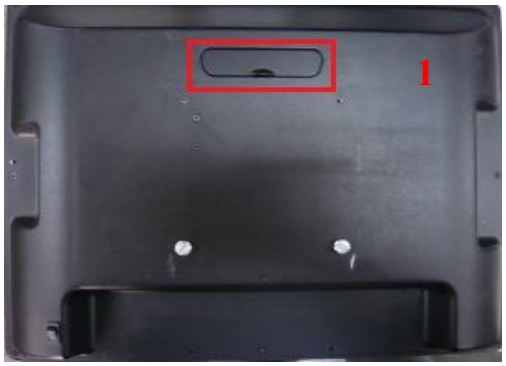


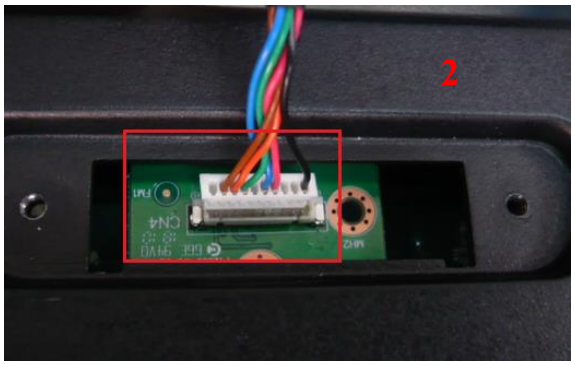
1. Loosen the 2 screws.
2. Pull out the hard tray case in an outward direction to remove it from the system.
3. Install the hard drive in the hard drive case and fasten 4 hard drive case screws.

5-2. Memory

1. Loosen 11 screws and remove the back cover.
2. Insert the RAM into the RAM slot.

5-4. VFD / 8”/ 9.7” or 10” 2nd Display





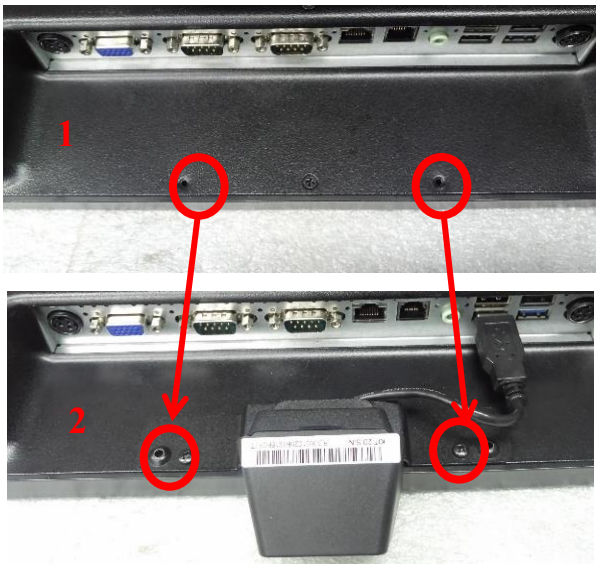
1. Remove top cover.

2. Either plug the VFD cable into the VFD connector or plug the 8” or 10” 2nd display cable into the

2nd display's connector (note: display connector can only be connected to one device at a time).

3. Install VFD with 2 screws / Install 8"or 10"2nd display with 2 screws.

5-5. 1D/2D Barcode Scanner



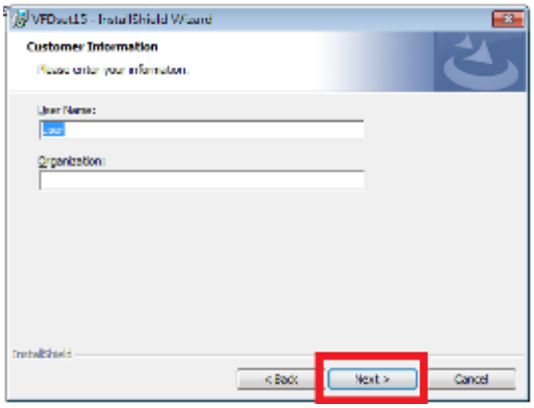
1. Install the barcode scanner with bracket attached by tightening the 2 screws
2. Plug the barcode scanner Type-A Male USB cable into a USB port

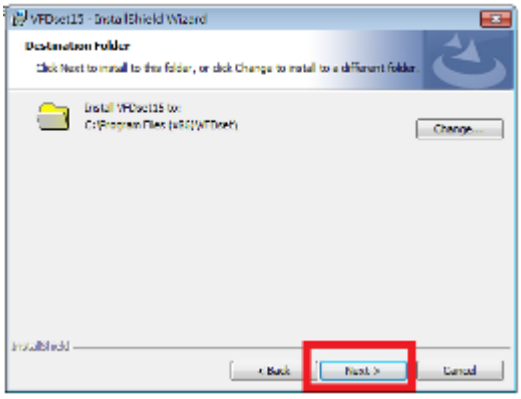
6 Device Driver Installation

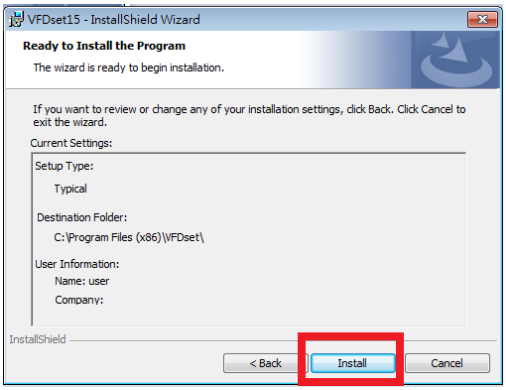
6-1. VFD

1. Power on VFD and waiting test page of EEPROM test, Baud rate and Command page. Set up the customer display by " VFDset.exe”

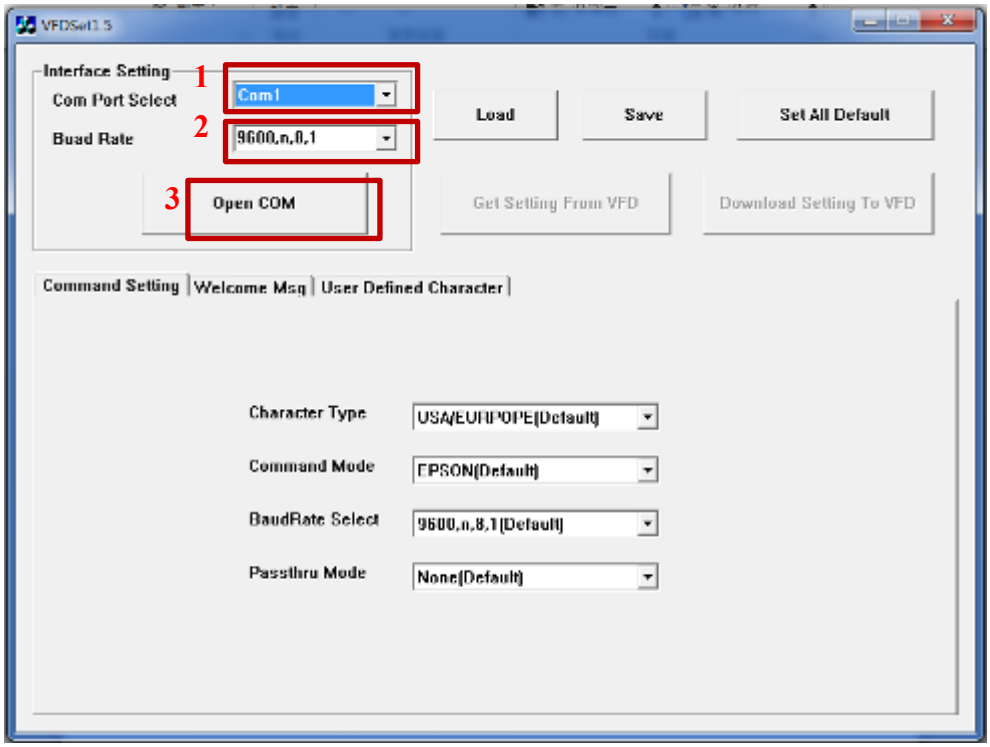
2. Setup VFDset.exe software.







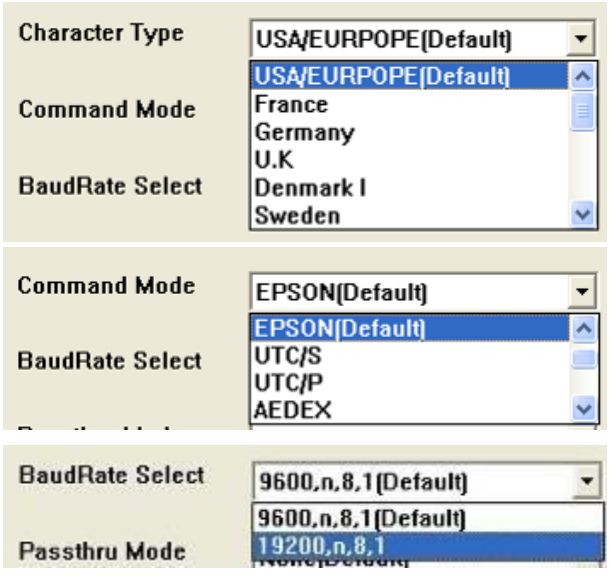
3. To execute “VFDset.exe” for setting up communication between software and VFD module.



Please then follow the steps as shown in the above figure, the baud rate will show on states page of VFD module (Note: You may check it when power on VFD module), then click “Open COM” button.

4. “Get Setting from VFD” button to get all the settings from TD and it’ll refresh the “VFDset.exe” software.

5. Select “Character Type”/ “Command Mode”/ “Baud Rate Select”/ “pass thru Mode”.



6. Click “Set All Default” button to show default setting, the Default table is

Character Type ：USA

Command Type ：EPSON/EURPOPE

Baud Rate Setting ：9600/n/8/1

Pass-through Mode ：None

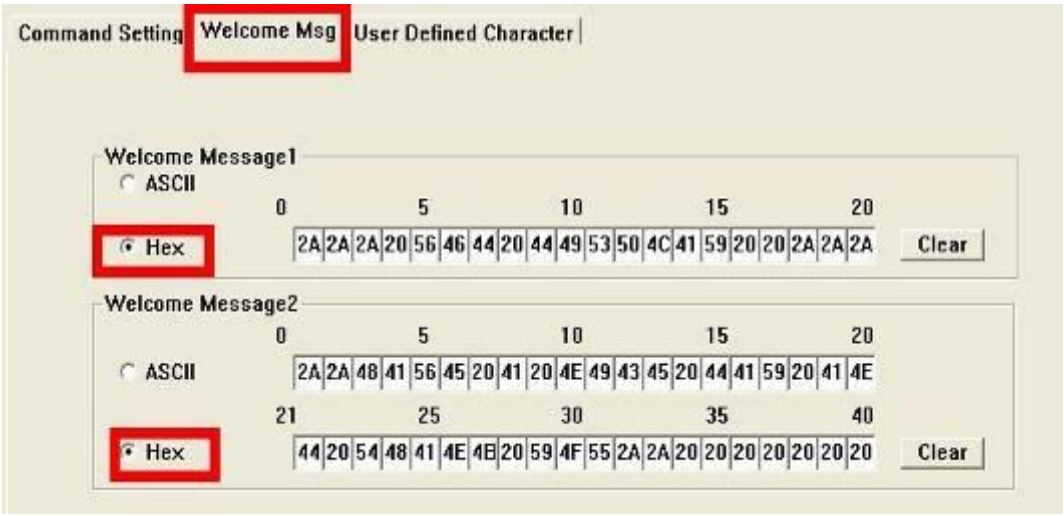
Welcome msg line1 ：*** VFD DISPLAY ***

Welcome msg line2 ：**HAVE A NICE DAY AND THANK YOU **

7. Welcome Message

Welcome Message line1 maximum 20 characters, line 2 maximum 20 characters, total of 40 characters.

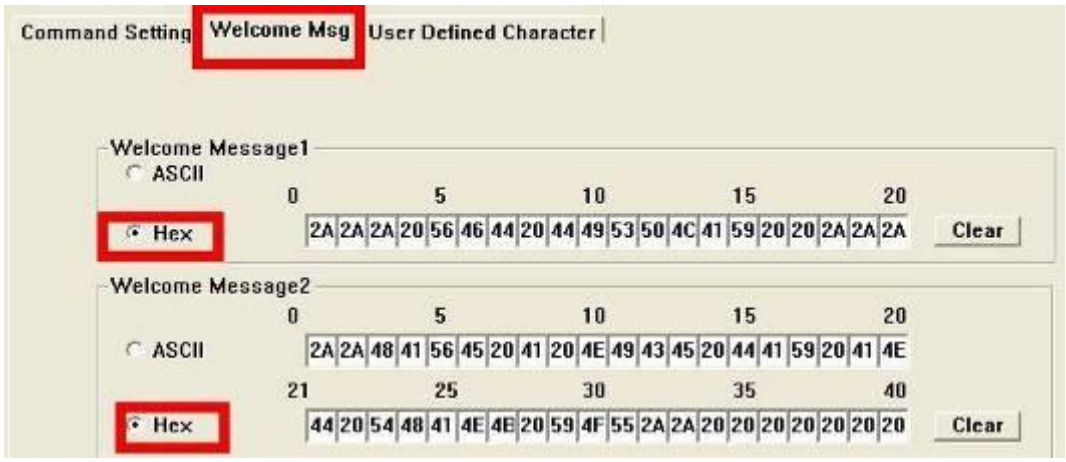
a. ASCII mode



You can type the character by keyboard (0x20h ~ 0x7Fh), if you press clear icon, it will clear the all Message characters on AP.

b. Hex mode

Hex mode can define the character from 0x20h to0xFFh，the range 0x80~0XFF which depends on the code page table.



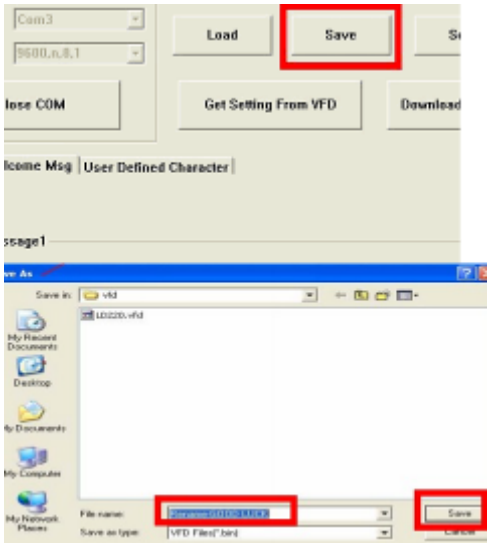
Like the first character (0x80)，in default code page will show　on VFD module.

8. Click “Download setting to VFD” button

This button is to download the setting from VFDset.exe to VFD module. After success dialog “Download O.K! Please restart!” message popped up. Please restart display for enable new setting

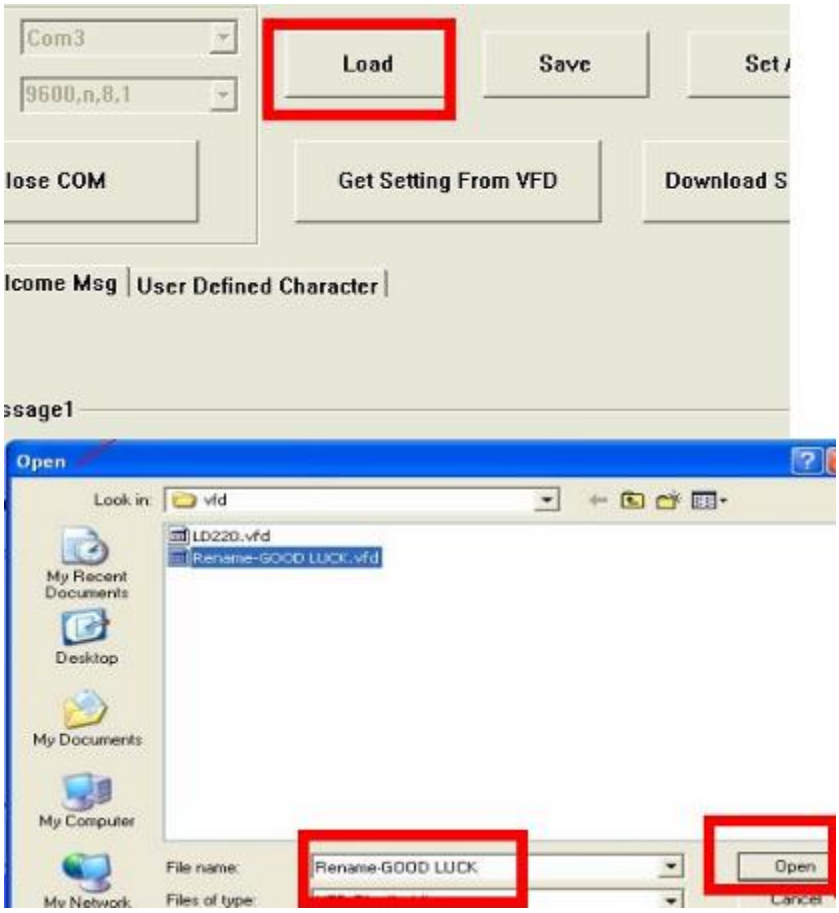
9. Click “Save” button

To save user’s setting in file; for example, below picture to save file name as “GOODLUCK” file set for Welcome Message.


Com3
9600,n,8,1
Load
Save
lose COM
Get Setting From VFD
Download
Income Msg
User Defined Character
ssage1
Save in:
vfd
My Recent Documents
Desktop
My Documents
My Computer
My Network Places
File name:
Save as type:
VFD Files(*.bin)
Save

10. Click “Load” button

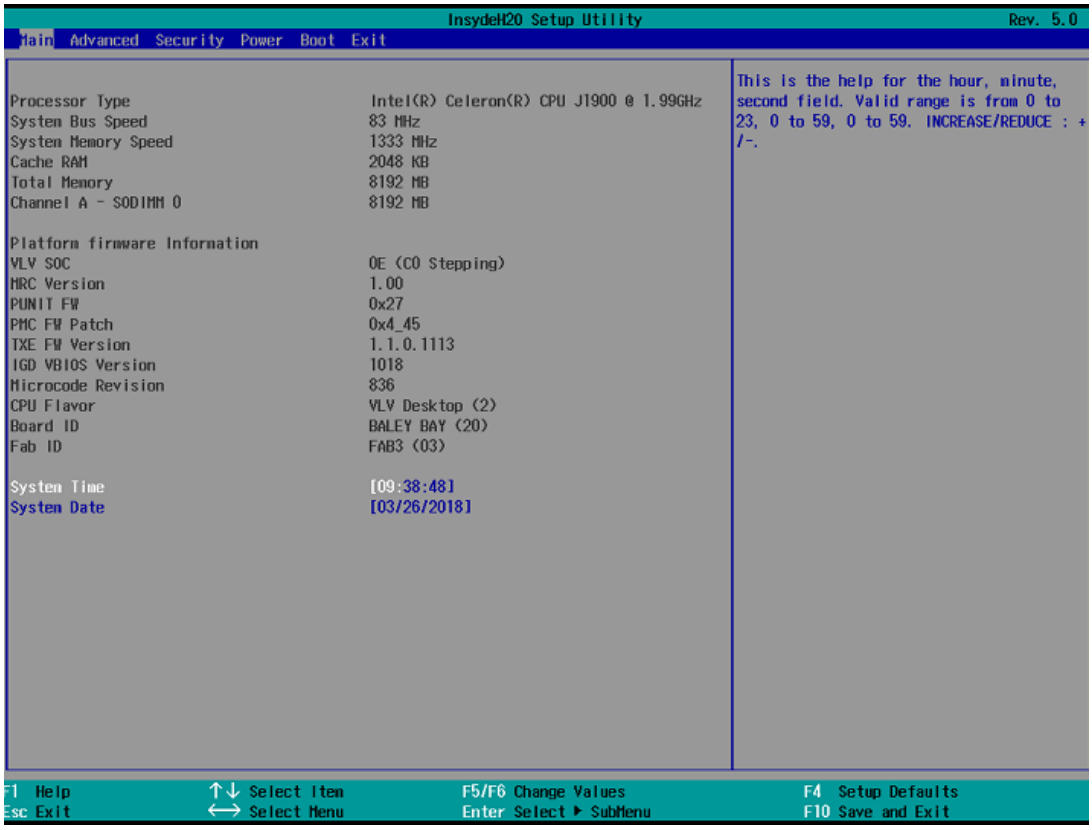
After saving, you must restart the utility here. Then load your setting rename-GOODLUCK.vfd.



7 BIOS/Utility setup

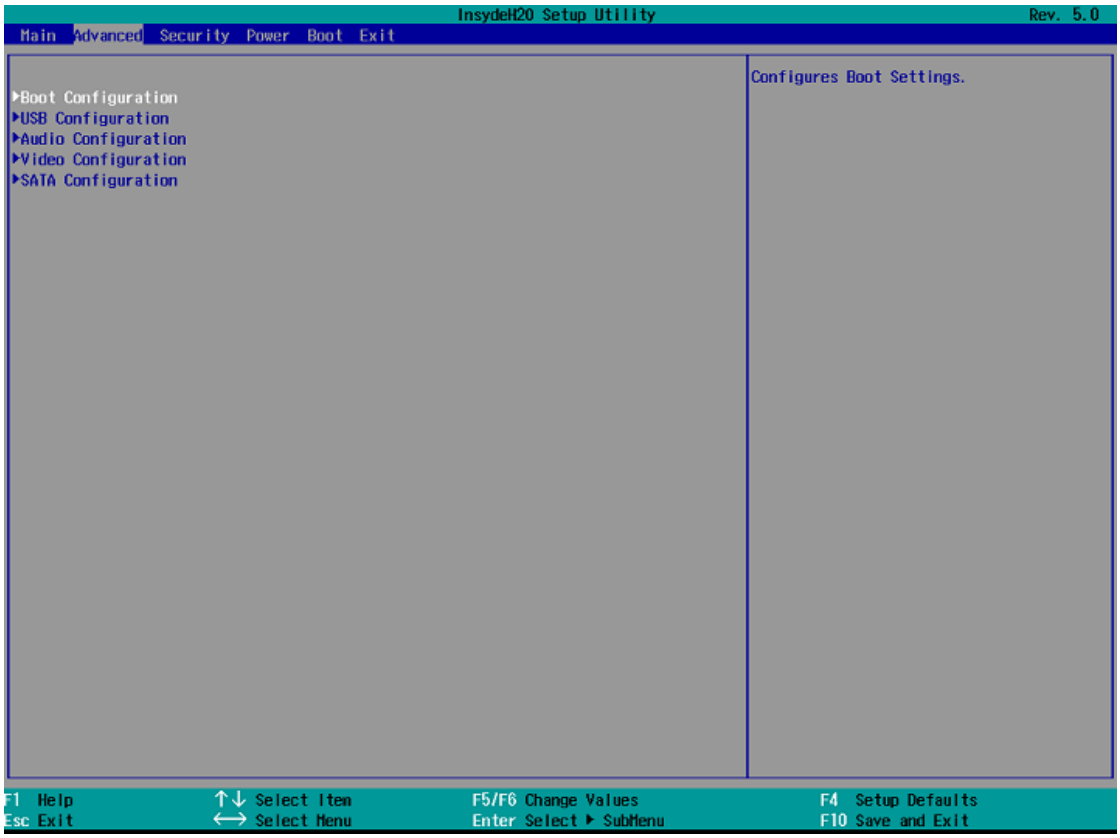
1. Press <DEL > key to enter SETUP CMOS UTILITY when system boot up.

2. Press <ENTER >over SCU button to enter the utility.



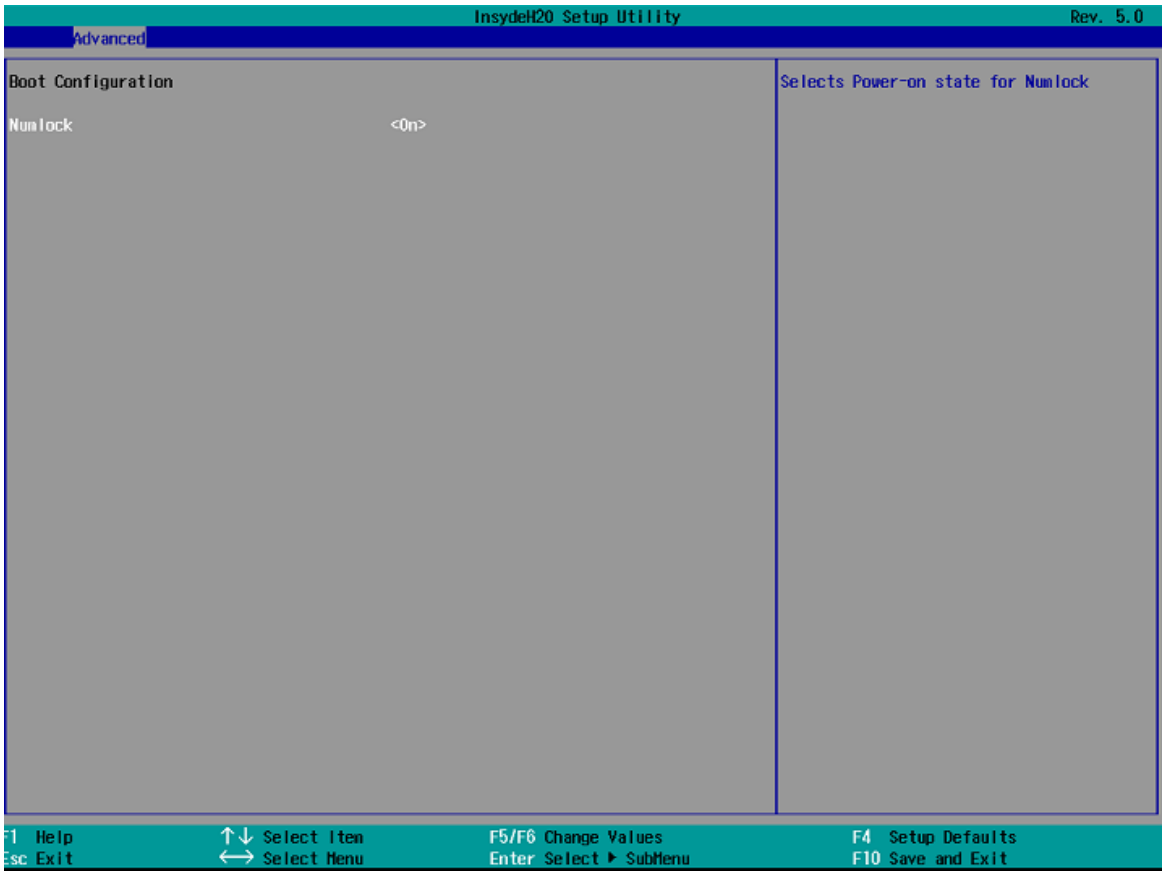
7-1. Advanced

Use the Advanced menu to configure the system for basic operation through the following sub-menus:



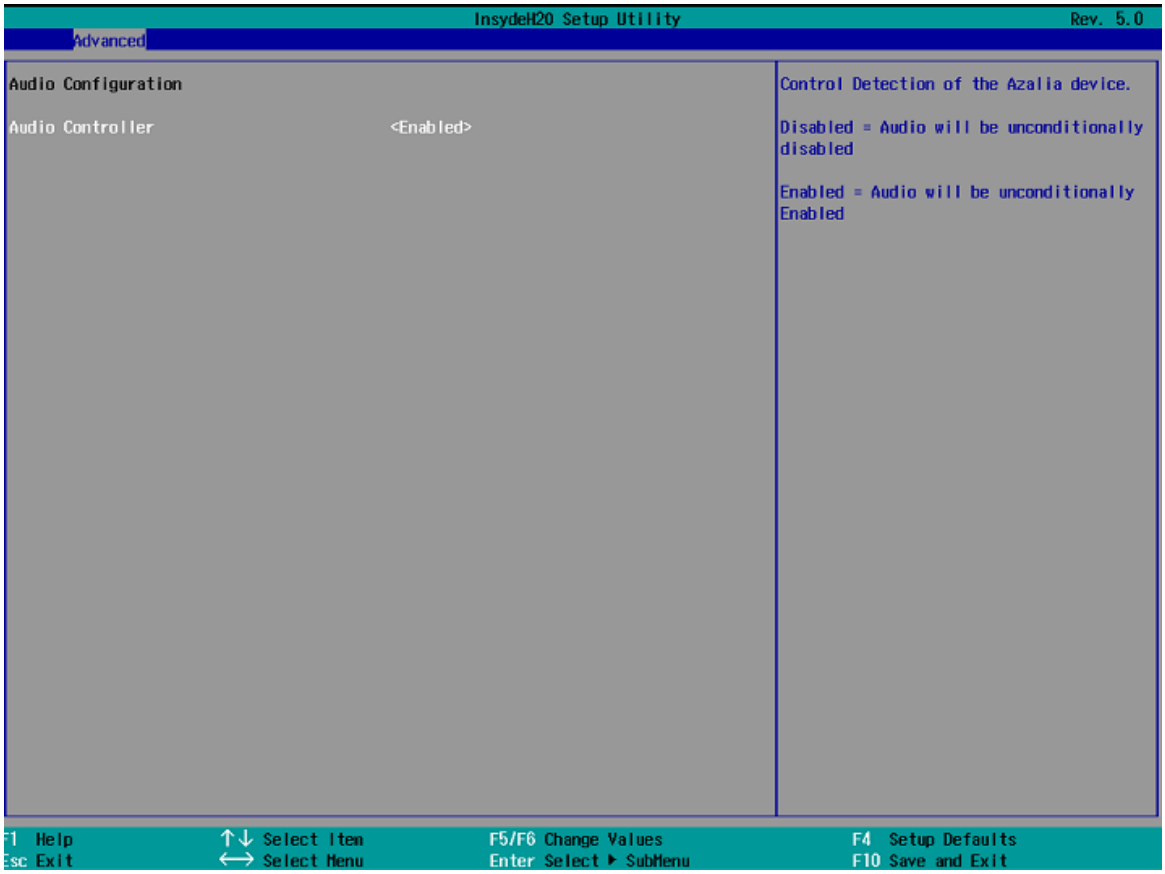
7-1-1. Boot Configuration

Use the Boot Configuration menu to select power-on state for Numlock.



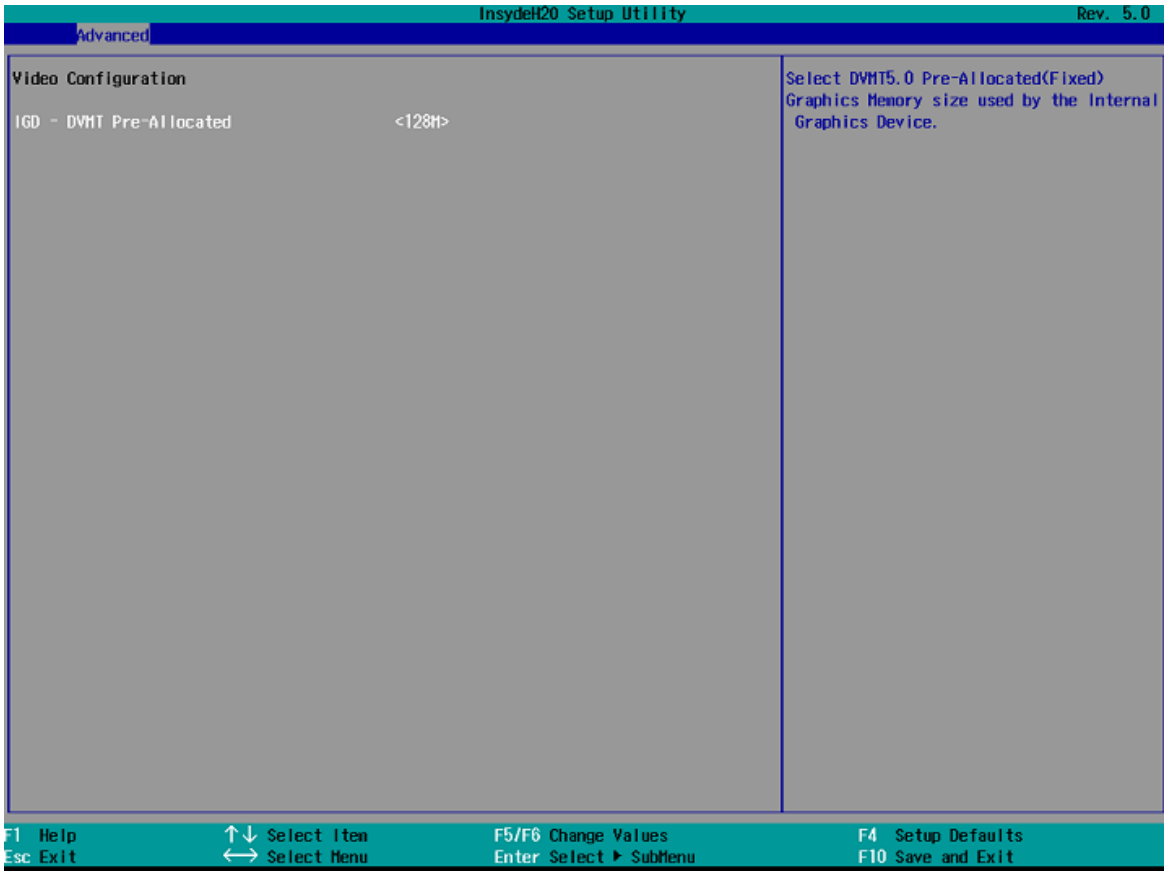
7-1-2. Audio Configuration

Use the Audio Configuration menu to read Audio configuration information and configure the Audio settings



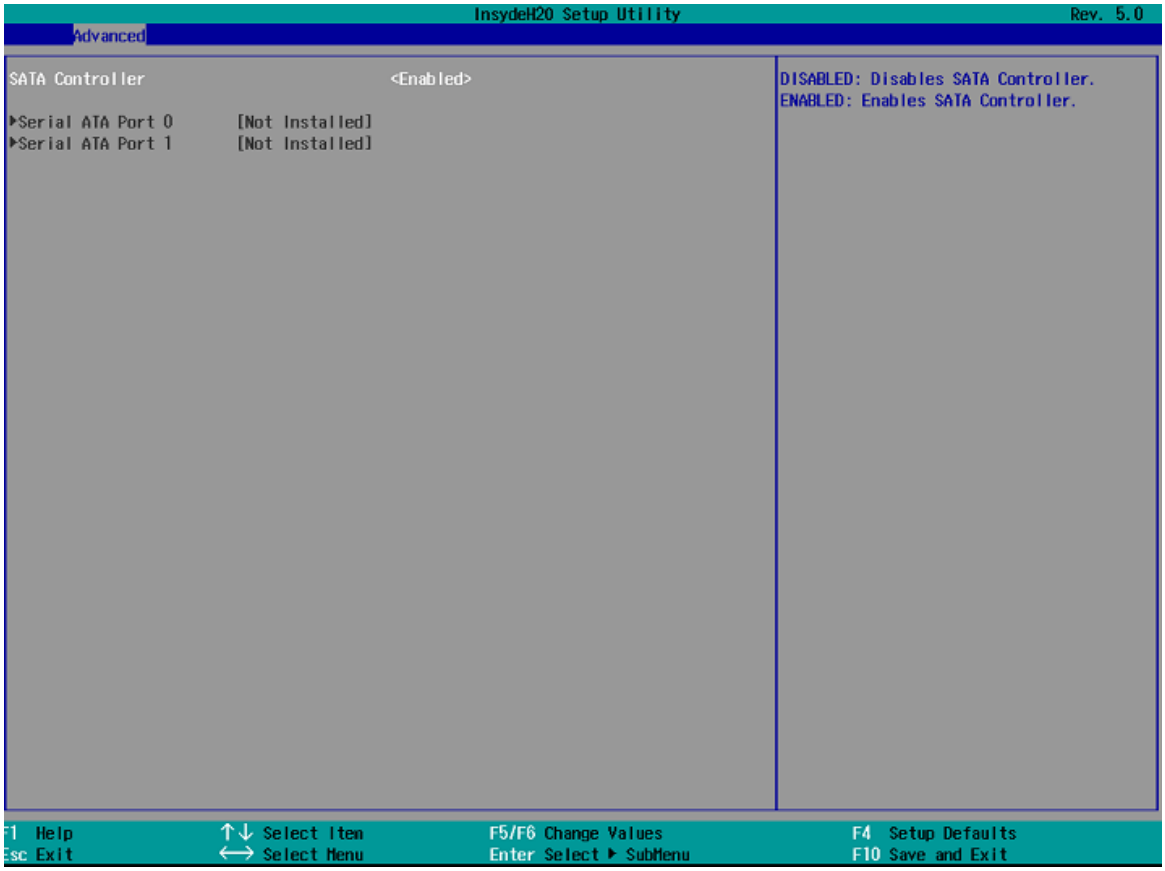
7-1-3. Video Configuration

Use the Video Configuration menu to read Video configuration information and configure the Video settings



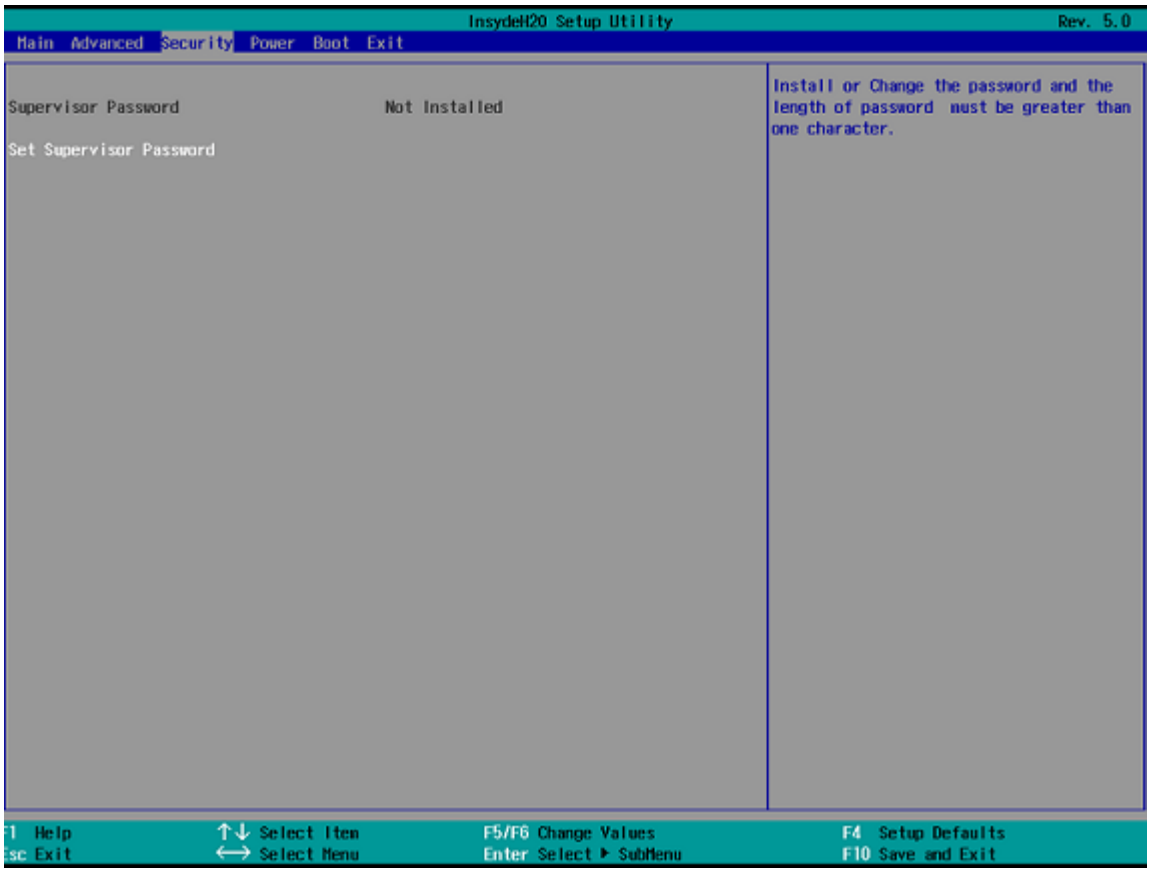
7-1-4. SATA Configuration

Use the SATA Configuration menu to read SATA configuration information and configure the SATA settings



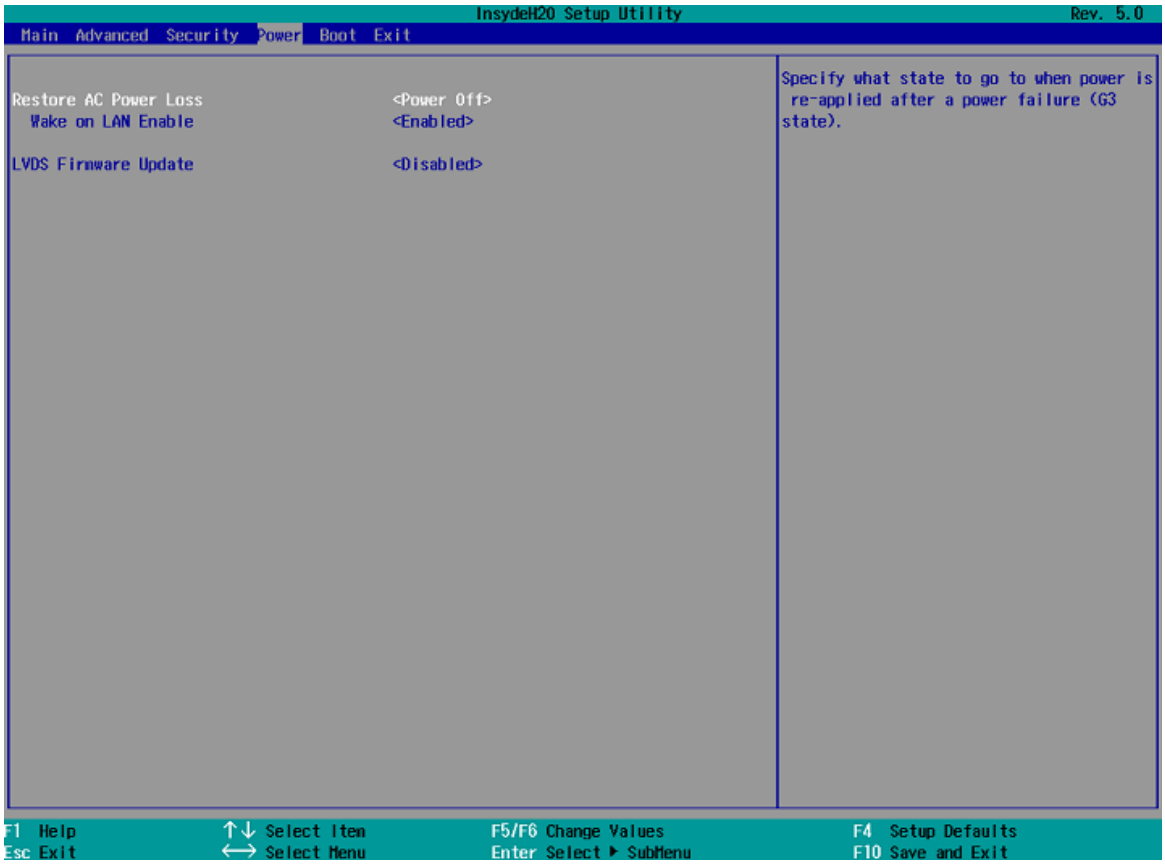
7-2. Security

Use the Security menu to install or change the password



7-3. Power

Use the power menu to install or change the power settings.



AC Loss Auto Restart

Enable or disable system power on automatically after AC power restored

Wake on LAN

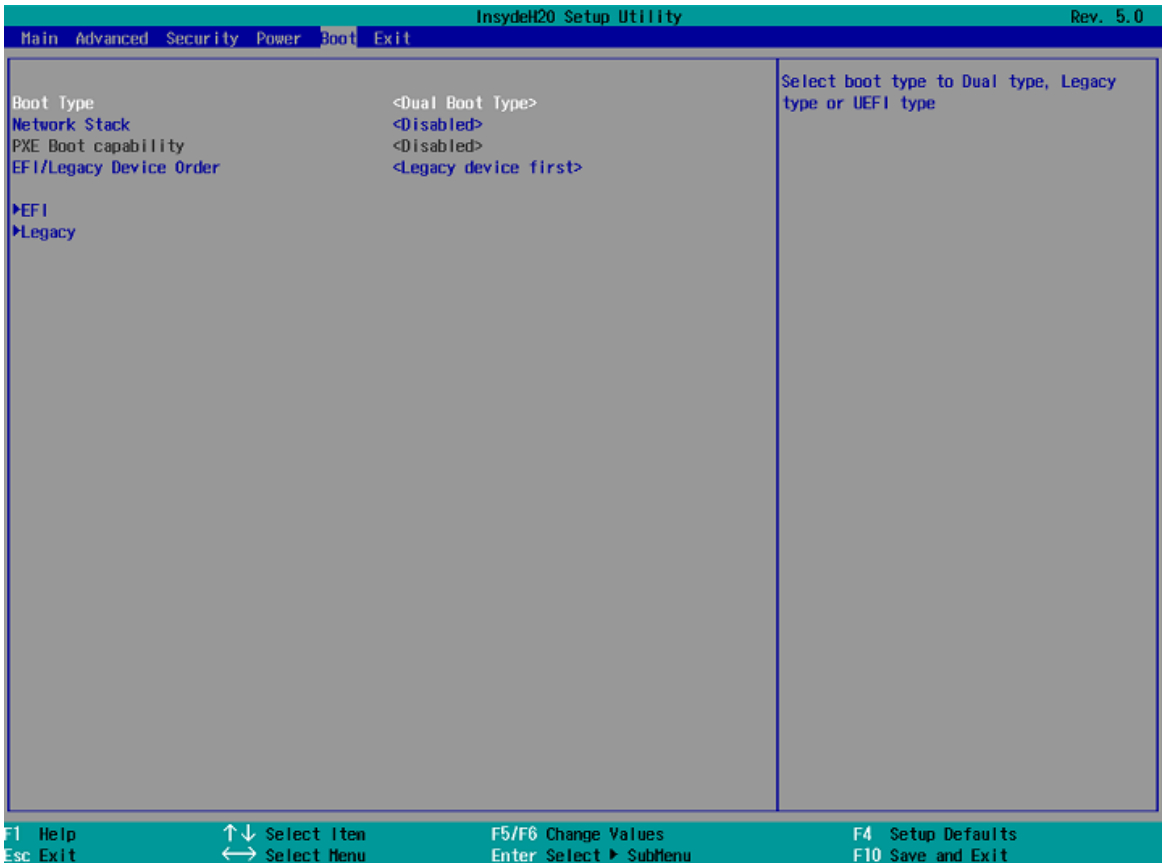
Enable or disable system wake by onboard LAN chip

LVDS Firmware update

This item allows you to enable or disable LVDS Firmware update

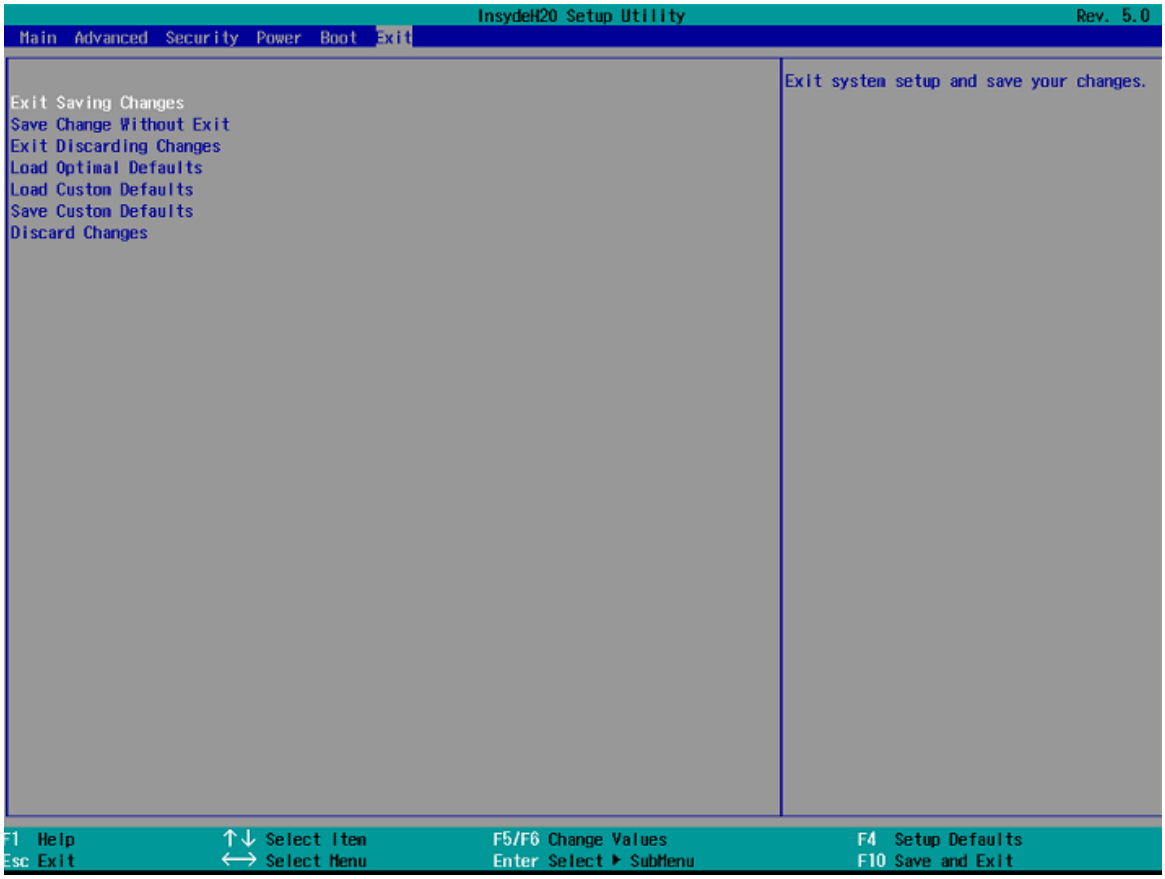
7-4. Boot

Use the Boot menu to select type to Dual type, Legacy type or UEFI type.



7-5. Exit

Use the Save & Exit menu to load default BIOS values, optimal failsafe values or to save configuration changes.



10 LCD surface cleaning

1. **How to clean the LCD surface properly?**

   ☆ Do not spray any liquids on the LCD screen directly, and do not use paper towels, this can cause the LCD screen to become scratched.

   ☆ Always apply the solution to your cloth first, not directly to the parts you are cleaning. You want to avoid dripping the solution directly into your computer or laptop.

   ☆ Stroke the cloth across the display in one direction, moving from the top of the display to the bottom.

2. **What are some of the basic supplies needed to clean an LCD screen?**

   ☆ A soft cotton cloth. When cleaning the LCD screen it is important to use a soft cotton cloth, rather than an old rag. Some materials, such as paper towels, could cause scratches and damage the LCD screen.

   ☆ Solution of water and isopropyl alcohol. This solution can be used along with the soft cotton cloth.

   ☆ Computer wipes. Only use these if they specifically state on the package they are designed for LCD laptop screens. Computer wipes can come in handy for fast clean-ups or when you want to avoid mixing up a cleaning solution yourself.

3. **What types of cleaners are acceptable?**

   ☆ Water

   ☆ Vinegar (mixed with water)

   ☆ Isopropyl Alcohol

   NOTICE: The following cleaners are unacceptable:

   ☆ Acetone

   ☆ Ethyl alcohol

   ☆ Ethyl acid

   ☆ Ammonia

   ☆ Methyl chloride