Atlas All-in-one User Manual

Version:0.3



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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.
- 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:

- 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.



Packing List

1-1 Standard Accessories

1

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

2

System View

2-1 I/O View



m A Please make sure 19V DC plug in the right direction before plugging in DC jack.

2-2 Back View



2-4 Specification

Display Size			15" TFT LCD		
Dianlay	Resolution		1024 X 768		
Brightness / Color		olor	300 cd/㎡,16.7M colors		
	Backlight		LED		
Touch Panel	Туре		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)		
	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)		
I/O Connectors	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		
	Operation		32° to 95° F (0° to 40° C)		
Environment	Temperature	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



1. LVDS connector

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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

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

North Contraction		
1 1		
Sec. 4	COM1	J2
· · · ·	+V5	1-3
	Ring/Default	3-5
C206	+12V	7-9

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

You can change the com port voltage by jumper

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

6. RJ11 (Cash Drawer) connector Pin Definition

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)

System Assembly & Disassembly

5-1. HDD

5





- 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

6-1. VFD

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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.

VFDSet1.5		-	
Interface Setting 1 Com Port Select Buad Rate 2 9600,n,0,1	Load	Save	Set All Default
3 Open COM	Get Setling From	1 VFD	Download Setting To VFD
Command Setting Welcome Msg User	Defined Character		
Character Typ Command Mo BaudRate Sel Passihru Mod	e USA/EUFIPOPE(Detault) de EPSON(Default) ect 9600, n.8, 1 (Default) le None(Default)	•	

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".

Character Tune	
Character Type	USA/EURPOPE[Default]
	USA/EURPOPE(Default)
Command Mode	France
	Germany
	U.K
BaudRate Select	Denmark I
	Sweden 😒
Command Mode	EPSON(Default)
	EPSON(Default)
BaudBate Select	UTC/S
	UTC/P
	AEDEX
R	· · · · · · · · · · · · · · · · · · ·
BaudRate Select	9600,n,8,1(Default)
	9600.n.8.1(Default)
Dacethru Mode	19200.n.8.1
Fassura Mouc	moneperiority

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

Walcome Ma	oo aa al					
C ASCII	n	5	10	15	20	
@ Hex	24 24	2A 20 56 46 44	20 44 49 53 50	40 41 59 20 20	2A 2A 2A	Clear
Welcome Me	ssage2					
	0	5	10	15	20	
C ASCII	2A 2A	48 41 56 45 20	41 20 4E 49 43	45 20 44 41 59	20 41 4E	
	21	25	30	35	40	

You can type the character by keyboard ($0x20h \sim 0x7Fh$), 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 to $0xFFh^{-}$ 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	S
lose COM		Get Setting Fr	om VFD	Download
lcome Msg ssage1	User Define	d Character		
we As				[7]
Save in:	😂 vild		• ÷ 🖪	er 🖬 -
Hy Findant Documents Desktop Desktop	2 LDI2D, wid			
My Computer	File name: Save as type:	UTD Files" bird		• Save

10. Click "Load" button

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

9600,n,8,1	<u> </u>	Load	Save	Set /
se COM		Get Setting F	rom VFD	Download S
me Msg User	Defined Cl	haracter		
ige1				
			• 4- [
Look in: 🔁	vid		and the second s	
Look in:) vid LD220.v i d	-		
Look in:) vid LD220.vfd Reneme GOO	D LUCK vfd		
Look in Documents	i víd LD220. vřd Renemalistické	D LUCK.vfd		
Look in My Recent Documents Desktop	i vfd LD220. vfd Referencesoool	o Luce of d		
Look in My Recent Documents Desktop	i vid LD220. vid Reference	o war sfd	_	
Look in My Recent Documents Desktop My Documents	i vid LD220.vřd	o Luceard		
Look in Control Look in Contro	i vid LD220.vid Renemente	o wor vfd		

BIOS/Utility setup

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



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

		InsydeH20 Setup Utility	Rev. 5.0
Main Advanced Securit	y Power Boot	Exit	
Processor Type Systen Bus Speed Systen Memory Speed Cache RAM Total Memory Channel A - SODIMM 0		Intel(R) Celeron(R) CPU J1900 @ 1.99GHz 83 MHz 1333 MHz 2048 KB 8192 MB 8192 MB	This is the help for the hour, minute, second field. Valid range is from 0 to 23, 0 to 59, 0 to 59. INCREASE/REDUCE : + /
Platforn firmware Inform VLV SOC HRC Version PUNIT FW PMC FW Patch TXE FW Version IGD VBIOS Version Hicrocode Revision CPU Flavor Board ID Fab ID	ation	OE (CO Stepping) 1.00 0x27 0x4_45 1.1.0.1113 1018 836 VLV Desktop (2) BALEY BAY (20) FAB3 (03)	
Systen Time Systen Date		[09:38:48] [03/26/2018]	
F1 Help 1 Esc Exit <	\↓ Select Iten → Select Henu	F5/F6 Change Values Enter Select ► SubMenu	- F4 Setup Defaults F10 Save and Exit

7-1. Advanced

Use the Advanced menu to configure the system for basic operation through the following submenus:



7-1-1. Boot Configuration

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

		InsydeH20 Setup Utility	Rev. 5.0
Advanced			
Boot Configuration			Selects Power-on state for Numlock
Nunlock	<0n>		
1 Vala	1 Colort Item	EF/ER Change Values	Ed. Satur Dafaulta
ee Evit		Enter Select E Sublenu	F4 Setup Defaults

7-1-2. Audio Configuration

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

		InsydeH20 Setup Utility	Rev. 5.0
	Advanced		
Audio	Configuration		Control Detection of the Azalia device.
Audio	Controller	<enabled></enabled>	Disabled = Audio will be unconditionally disabled Enabled = Audio will be unconditionally Enabled
ne ne			

7-1-3. Video Configuration

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

		InsydeH20 Se	tup Utility	Rev. 5.0
Advanced				
∀ideo Configurat	tion			Select DVMT5.0 Pre-Allocated(Fixed) Graphics Memory size used by the Internal
IGD - DVHT Pre-A	llocated	<128M>		Graphics Device.
F1 Help	↑↓ Select_Iten	F5/F6_Chan	qe Values	F4 Setup Defaults
Fee Evit	← Select Henu	Enter Sale	et E SubMenu	E10 Save and Evit

7-1-4. SATA Configuration

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

		InsydeH20 Setup Utility	Rev. 5.0
Advanced			
SATA Controller	<enat< td=""><td>led></td><td>DISABLED: Disables SATA Controller.</td></enat<>	led>	DISABLED: Disables SATA Controller.
▶Serial ATA Port 0 ▶Serial ATA Port 1	[Not Installed] [Not Installed]		ENABLED: Enables SATA Controller.
1 Help Esc Exit	↑↓ Select Iten ↔ Select Henu	F5/F6 Change Values Enter Select ► Subtlenu	F4 Setup Defaults F10 Save and Exit

7-2. Security

		InsydeH20 Setup Utility	Rev. 5.0
Hain Advanced Securi	ity Power Boot Exit		
Supervisor Password	Not Insta	lled	Install or Change the password and the length of password must be greater than one character.
Set Supervisor Password	l i i i i i i i i i i i i i i i i i i i		
1 Help	个J Select Iten	E5/E6 Change Values	E4 Setup Defaults
sc Exit	↔ Select Menu	Enter Select 🕨 Sublienu	F10 Save and Exit

Use the Security menu to install or change the password

7-3. Power

		nsydeH20 Setup Utility	Rev. 5.0
Main Advanced Security	Power Boot Exit		
Restore AC Power Loss Wake on LAN Enable	<power off<br=""><enabled></enabled></power>		Specify what state to go to when power is re-applied after a power failure (G3 state).
LVDS Firnware Update	<disabled></disabled>		
Fl Help	> Select Iten → Select Menu	F5/F6 Change Values Enter Select ► SubMenu	F4 Setup Defaults F10 Save and Exit

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.

	InsydeH20 Setup Util	lity	Rev. 5.0
Main Advanced Security Power	Boot Exit		
Main Advanced Security Power Boot Type Network Stack PXE Boot capability EFI/Legacy Device Order ▶EFI ⊁Legacy	Chail Boot Type> Olisabled> <disabled> <legacy device="" first=""></legacy></disabled>	Ity Select boot type to Dual type or UEFI type	Rev. 5.0
F1 Help ↑↓ Selec Esc Exit ↔ Selec	t iten F5/F6 Change Value t Henu Enter Select ► Sub	es F4 Setup Defaul Henu F10 Save and Exi	ts t

7-5. Exit

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

		InsydeH20 Setup Utility	Rev. 5.0
Main Advanced	Security Power Boot Exit		
Main Advanced Exit Saving Chang Save Change Witho Exit Discarding C Load Optimal Defa Load Custon Defau Save Custon Defau Discard Changes	Security Power Boot Rit	InsydeH20 Setup Utility	Exit system setup and save your changes.
F1 Help Fen Exit	↑↓ Select Iten ⇔ Select Henu	F5/F6 Change Values Enter Select ≽ Subdenu	F4 Setup Defaults F10 Save and Evit

1. How to clean the LCD surface properly?

10

- $\stackrel{\scriptstyle <}{\scriptstyle \sim}$ 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
- \therefore Vinegar (mixed with water)
- ☆ Isopropyl Alcohol

NOTICE: The following cleaners are unacceptable:

- ☆ Acetone
- ☆ Ethyl alcohol
- ☆ Ethyl acid
- 🖧 Ammonia
- ☆ Methyl chloride