User Manual

Version V1.0 Nov. 2018

VariPOS™ 250

Contents

Notices

The information contained in this document is subject to change without notice.
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Safety information

IMPORTANT SAFETY INSTRUCTIONS

1) Carefully read and follow these instructions. Pay attention to the danger and caution labels displayed on the product.

2) Only operate the product based on the type of power indicated on the label. Consult your dealer or local power company if unsure of the type of power available.

3) Make sure the power cord is placed safely where it would not be walked on. Do not rest anything on the power cord.

4) In disconnecting the machine from the electrical power supply, first switch off the power button, and then remove the power plug from the wall socket.

5) This product must not be placed on an unstable platform such as a stand or table for its fall may cause serious damage to the product.

6) Slots and openings are there to provide proper ventilation, prevent overheating and ensure reliable operation of the product, thus must not be blocked or covered. Do not place the product on a bed, sofa, rug or the like so as to avoid blocking the openings. Unless proper ventilation is provided, never place the product over or near a radiator, heat register or a built-in installation.

7) Never insert any kind of objects through the openings/slots to avoid touching dangerous voltage points which could cause electric shock or fire.

8) If there is smoke or strange smell, unplug the power cord from the power outlet immediately and request repair from your dealer or POINDUS.

CE

This device complies with the requirements of the VariPOS™ directive 2004/108/EC with regard to "Electromagnetic compatibility".

FCC

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.

(2) This device must accept any interference received, including interference that may cause undesired operation

CE

VERIFICATION OF COMPLIANCE

This Verification of Compliance is hereby issued to the below named company and for below described product, based on

Technical Standard : EMC DIRECTIVE 2014/30/EU (EN 55032 / EN 55024)

General Information

Applicant : Poindus Systems Corp.
Address of Applicant : 5F, No.59, Ln. 77, Xing-Ai Rd., Neihu District, Taipei City 114, Taiwan

Product Description

Product Name : VariPOS 250
Brand Name : Poindus
Model Number : VariPOS 250; VariPOS 250XXX (X=A-Z, a-z, 0-9, "-" or blank, any character)

Measurement Standard

EN 55032: 2015 / AC: 2016
CISPR 32: 2015 (Ed 2.0) / C1: 2016
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 55024: 2010 + A1: 2015
(IEC 61000-4-2: 2008; IEC 61000-4-3: 2006 + A1: 2007 + A2: 2010; IEC 61000-4-4: 2012; IEC 61000-4-5: 2014; IEC 61000-4-6: 2013; IEC 61000-4-8: 2009; IEC 61000-4-11: 2004)

Measurement Facilities

Company Name : **Compliance Certification Services Inc.**
Test Laboratory : Xindian Lab.
Address of Test Lab. : No.163-1, Jhongsheng Rd., Xindian Dist.,New Taipei City, 23151 Taiwan.

This device has been tested and found to be in compliance with the measurement procedures specified in the Standards & Specifications listed above and as indicated in the measurement report with the number: T180426D03-B-E

The test results shown in this report are applicable only to the investigated sample identified in this report.

Sam Hu

Sam Hu / Assistant Manager
Date: June 26, 2018

CCSRF
程智科技股份有限公司
Compliance Certification Services Inc.

VERIFICATION OF COMPLIANCE

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Technical Standard : FCC 47 CFR Part 15 Subpart B
ANSI C63.4: 2014
ISED ICES-003 (Issue 6)

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Sam Hu / Assistant Manager
Date: June 26, 2018

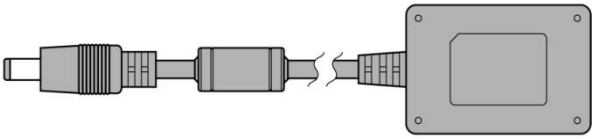
CCSRF
程智科技股份有限公司
Compliance Certification Services Inc.

Welcome

Congratulations on your purchase of VariPOS250. The following illustration displays the package contents of your new product. If any of the following items is damaged or missing, please contact Poindus.

Package contents

【 VariPOS 250™ 】

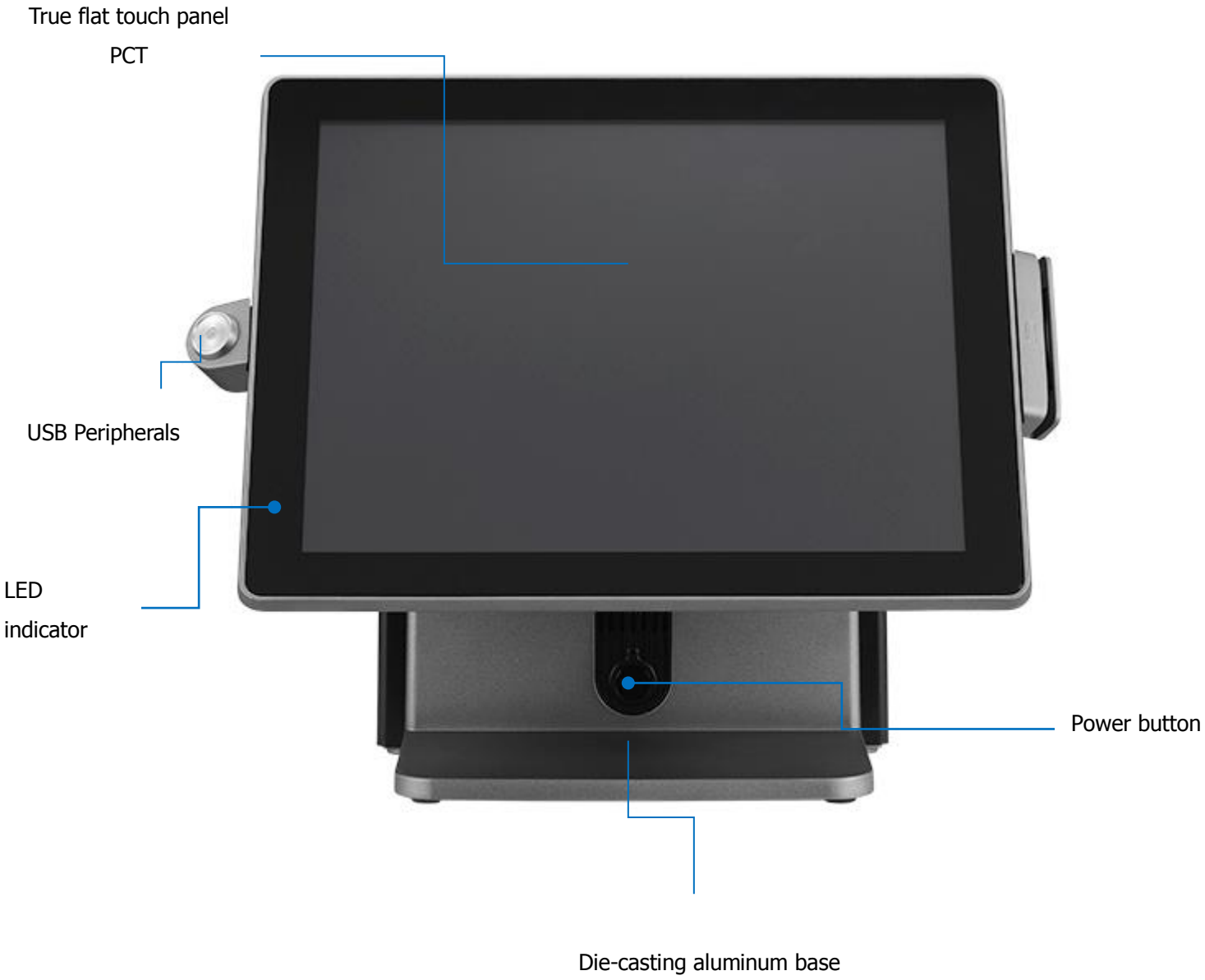
	
VariPOS250	Power adapter
	
Power cord	

Accessory items

	Description	Q'ty
1	SCREW PACK	1
	Screw driver	1
2	RJ-48 Cable	1

Getting to know your VariPOS250

Front view



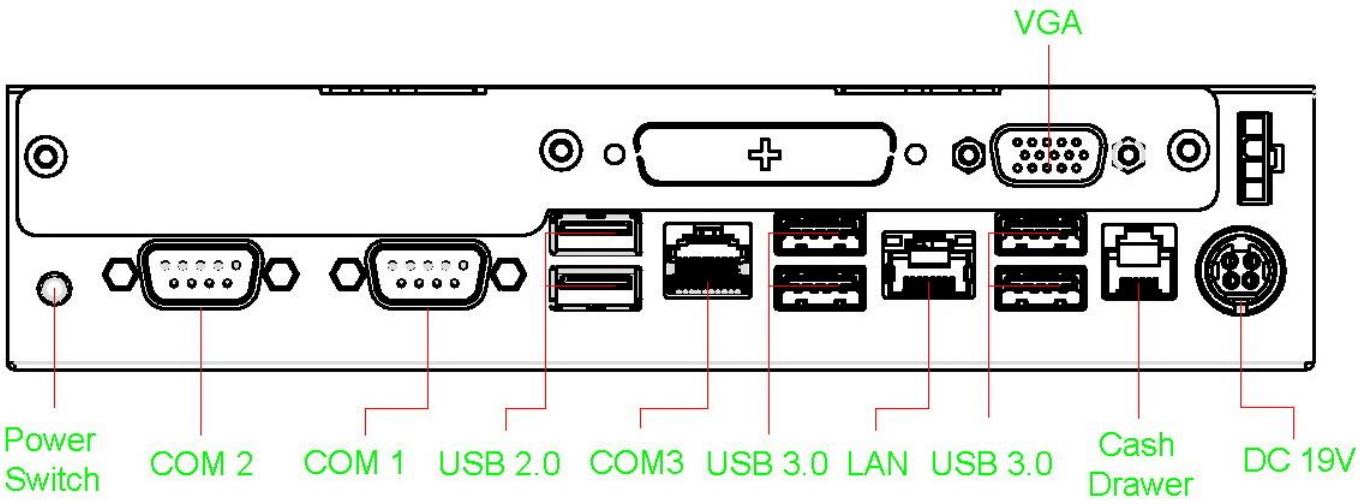
*all peripherals are depends on customer's demand

Rear view

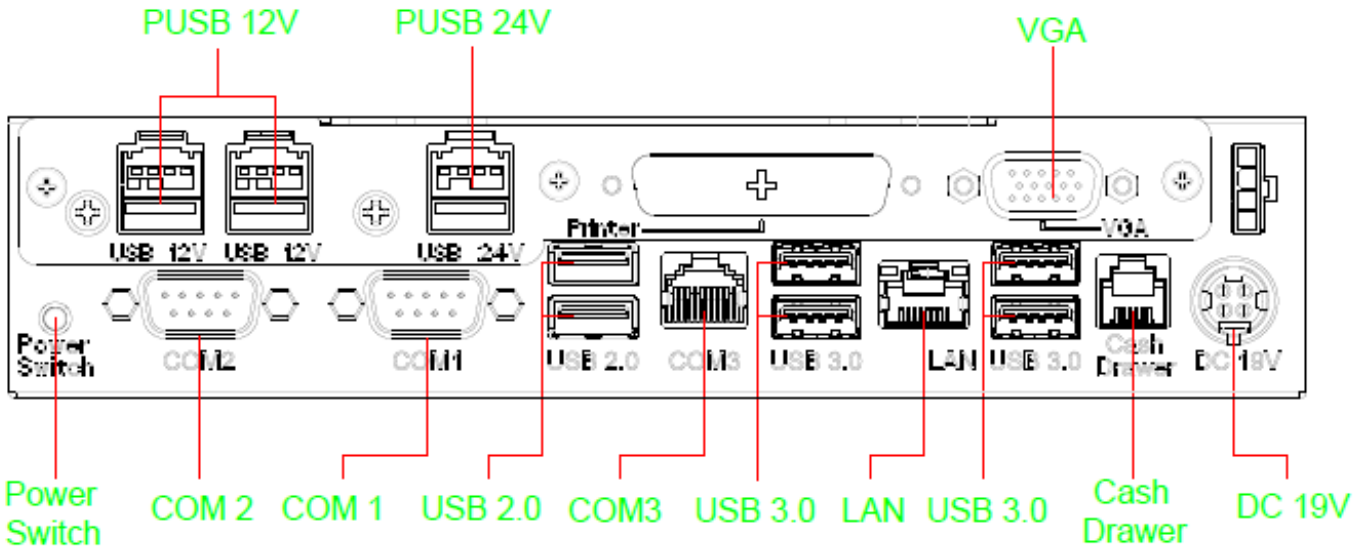
*all peripherals are depends on customer's demand

I/O interface

【VariPOS250 (PE20)】



【VariPOS250 (PE21)】



Specification

Model	**VariPOS250**		
Motherboard	**PE20**	**PE21**	
CPU	Intel® Celeron® Processor J1900 (2M Cache, up to 2.42 GHz)	Intel® Skylake Core™ i5-6500TE Processor (6M Cache, up to 3.30 GHz) 35W Intel® Skylake Core™ i3-6100TE Processor (4M Cache, 2.70 GHz) 35W Intel® Skylake Celeron® Processor G3900TE (2M Cache, 2.30 GHz) 35W	
Chipset	CPU Integrated	Intel® H110	Intel®Q170
TPM	N/A	Intel F/W	
AMT	N/A	N/A	YES (i5 only)
System Memory	1 x SO-DIMM DDR3L, up to 8GB	1 x SO-DIMM DDR4, up to 16GB	
Display			
TFT LCD	15" HD 4:3 TFT LCD (LED backlight)		
Brightness	400nits		
Resolution	1024 x 768 (4:3)		
Touch Screen	True Flat Projected Capacitive Technology		
Storage			
HDD/SSD	1 x SATA II (2.5")	1x SATA III (2.5")	2 x SATA III (2.5")
RAID function	N/A	N/A	Support RAID 0/1.
I/O Ports (Bottom)			
DC Input	1 x Mini Din 4P (DC 19V only)		
Cash Drawer	1 x RJ-11 (Support DC +12V or +24V (default)) port supports 2 cash drawers		
Network (LAN)	1 x Gigabit Ethernet by RJ-45		
USB Port	4 x USB 3.0 2 x USB 2.0		
Powered USB Port	N/A	2 x DC+12v Powered USB, max. 1.5A (Option) 1 x DC+24v Powered USB, max. 2A (Option)	
Serial Port	3 x RS-232(COM1/2:DB-9, COM3:RJ-48) w/ RI/5V/12V Selectable by BIOS (default is RI)		
LPT port	N/A		
VGA port	1 x DB-15 w/DC-12V Enable Power by BIOS (default is Disable)		
Bus Expansion	1 x Mini-PCI-E Slot		
Speaker	HD Audio, 2W Speaker x 2		
I/O Ports (Front side)			
Power Switch	1 x power on/off switch button		
System Management			
OS Support	Win10 2016 (32/64bit), Win8.1 (32/64bit), Win7/POS Ready 7 (32/64bit)	Win10 2016 (64bit), Win8.1 (64bit), Win7/POS Ready 7 (32/64bit)	

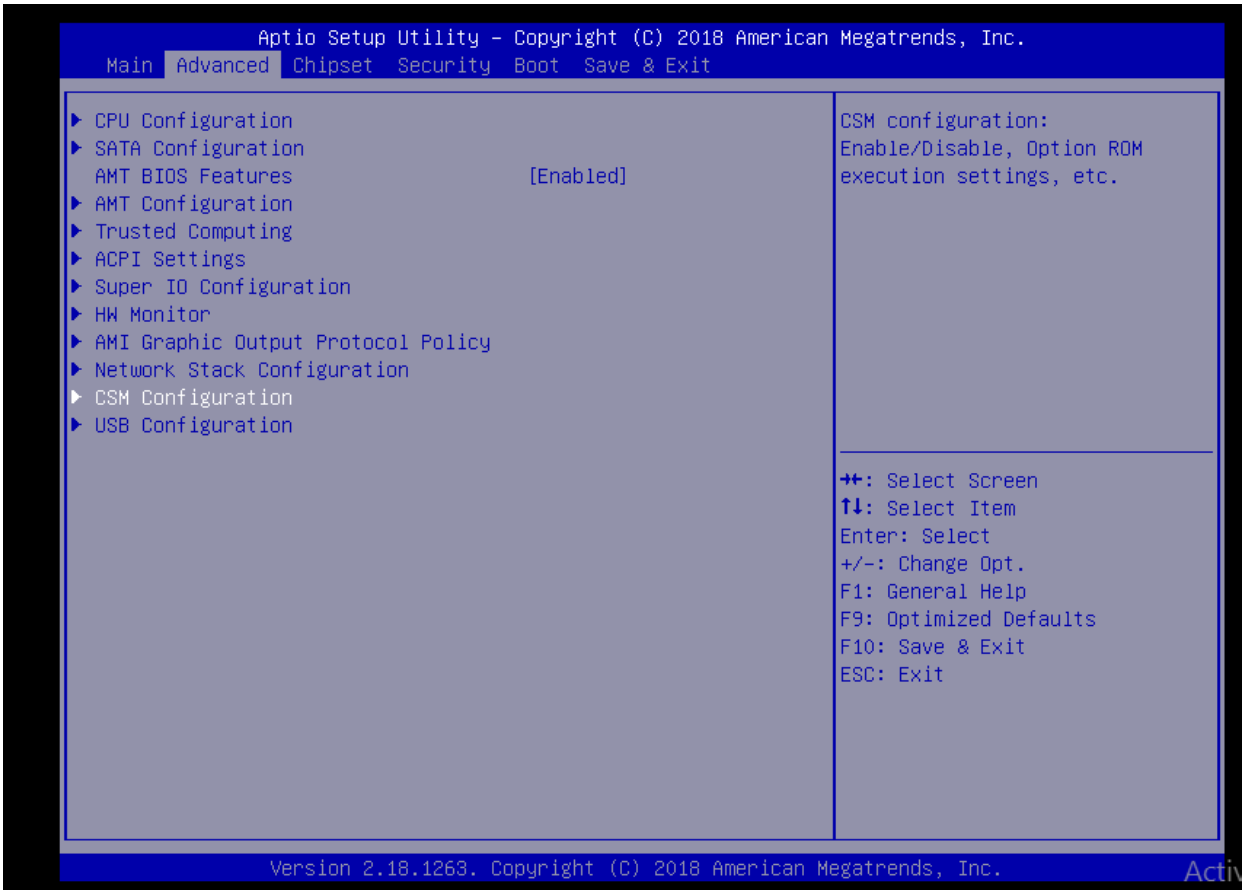
Power Supply	External adapter, DC Model : 65 Watts, Voltage:+19VDC 3.42 Amax	90 Watts, Voltage:+19VDC 4.74 Amax 180Watts, Voltage:+19VDC 9.47 Amax (Power USB)
Material	Main Unit: Die-casting aluminum ; Other Cover: Plastic	
Certifications	CE, FCC, LVD, RoHS	
Dimension(W x H x D)	365.89 x 354.48 x 196.55 mm	
Weight	6.37Kg	
Operating Temperature	0ºC ~ 40ºC, 10% ~ 90% RH, non-condensing	
Storage Temperature	-20ºC ~ 60ºC, 10% ~ 90% RH, non-condensing	
Optional Accessories	2nd display	10.1" Resolution 1280x800 (16:10 wide screen), USB type
	Customer display (LCM)	2x20 LCM, USB type
	MSR	ISO 3-Tracks Slim MSR, USB type
	iButton	Dallas Key reader, USB type
	RFID	13.56Mhz, USB type
	Fingerprint	DigitalPersona, USB type
	Scanner	2D Barcode Scanner, USB Type

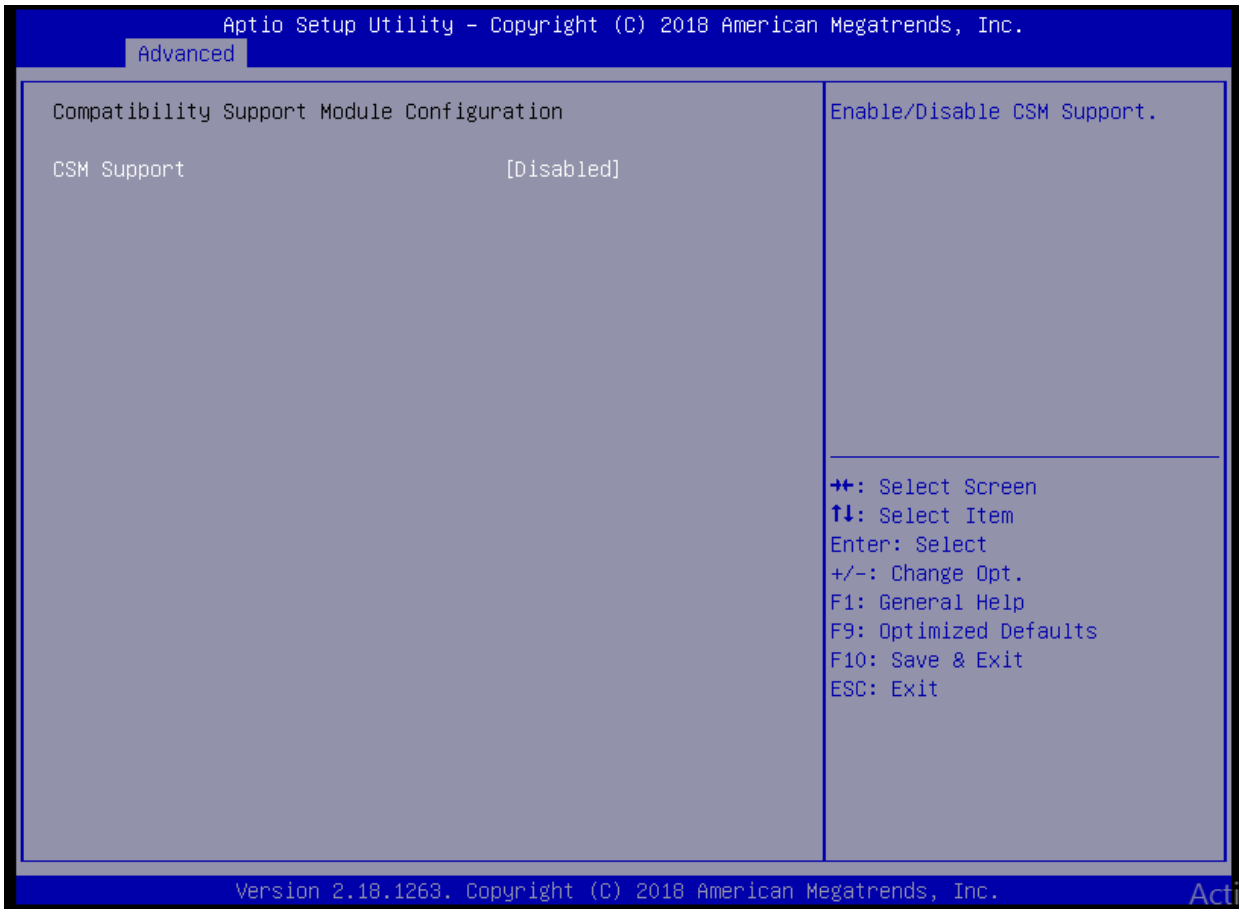
1. PE21 : TPM feature only available for UEFI BIOS (Standard BIOS). If user select Legacy BIOS (Optional) this feature will be disabled.

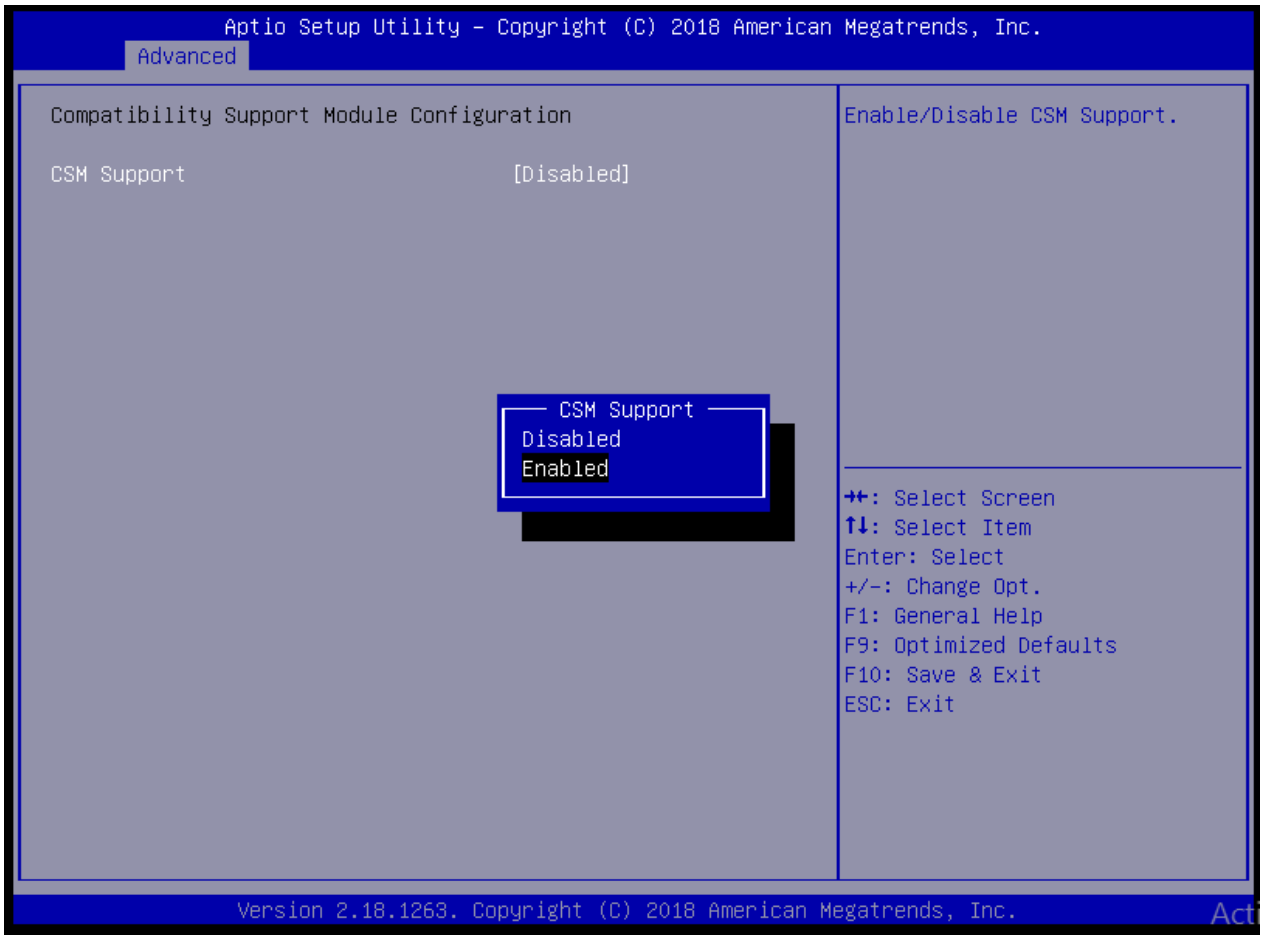
2. PE21 : Win10 64bit and Win8.1 64ibt will use UEFI BIOS and Legacy BIOS is for Win7 (32/64bit) only.

*Poindus reserves the right to change the specification without prior notice.

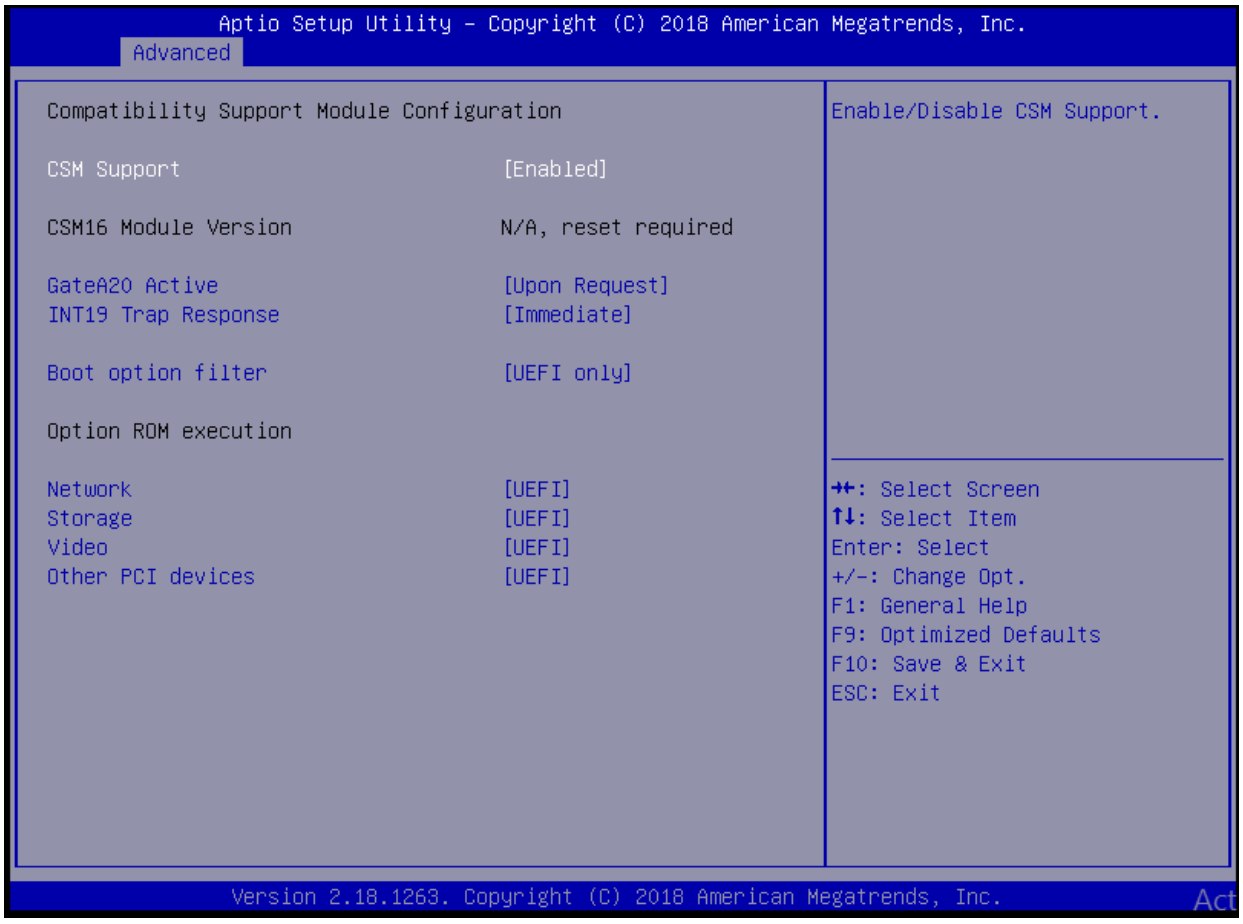
UEFI BIOS and Legacy BIOS settings (PE21)







UEFI BIOS



Legacy BIOS

Advanced --> Trusted Computing --> Security Device Support --> Disable

UEFI and Legacy both BIOS version for PE21 are available.

Intel notice for Win7 Installation

Windows 7 installation media doesn't include native driver support for USB 3.0. When installing Windows 7, on the screen to select your preferred language, a keyboard or mouse connected to a USB 3.0 port doesn't respond.

Any Intel NUC that has only USB 3.0 ports is affected.

Below link provided two methods to resolve this problem.

https://www.intel.com/content/dam/support/us/en/documents/mini-pcs/nuc-kits/Install-Win7-to-USB3_0-Computers.pdf

RAID function configuration

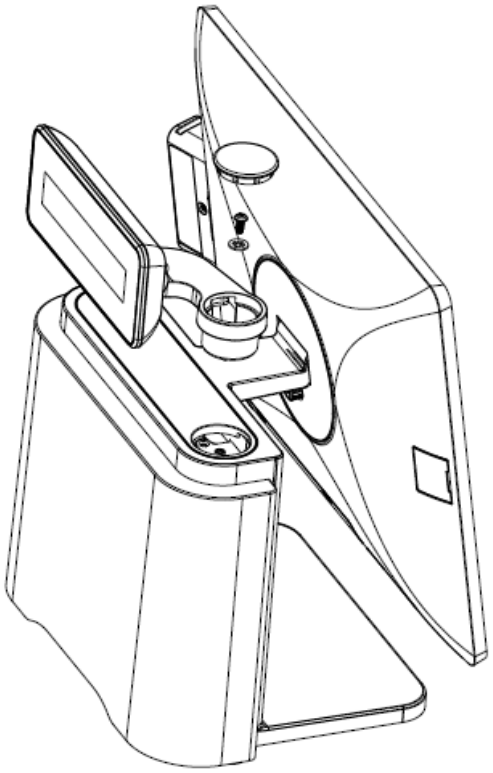
Below video is let you know how to access RAID configuration and how to setup RAID function as you needed.

If anything is not clear please feel free to contact the Poindus sales who is in charge of your country.

https://www.youtube.com/watch?v=u-yaf79bmf8&t=0s&list=PLltl9eK0fn_N0WPrgL7Tk9TCXoUGoGAEW&index=12

Peripherals Assembly

Install a Customer Display

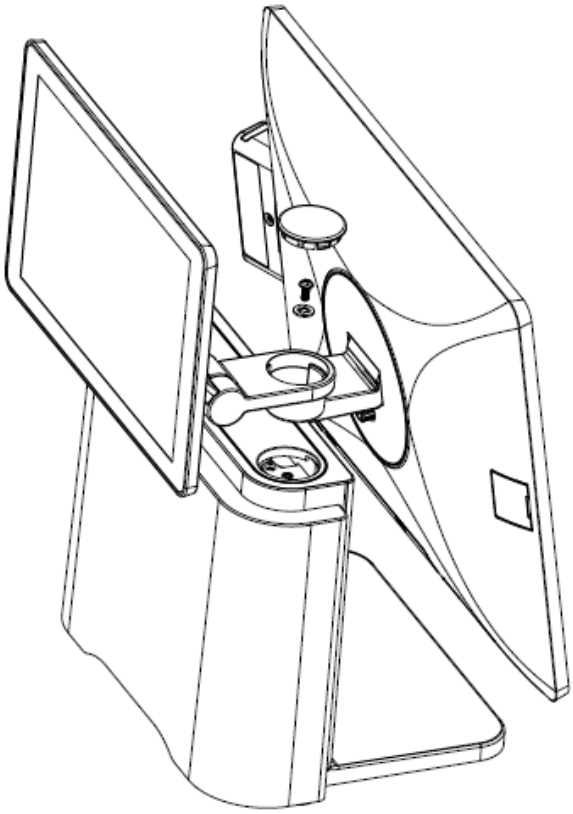


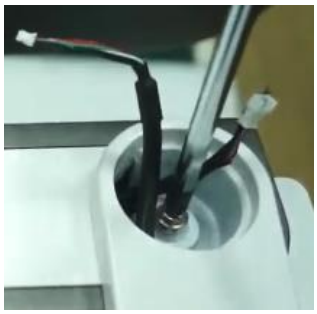
Let LCM in front of user	Fix screw first	Connect cable	Add tape to increase the strength of connection
			
Rotate LCM to check cable status	Rotate LCM to check cable status	Install cover	
			

Installation Video:

https://www.youtube.com/watch?v=G3IZ_ss3aLk&feature=youtu.be

Install a 2nd display

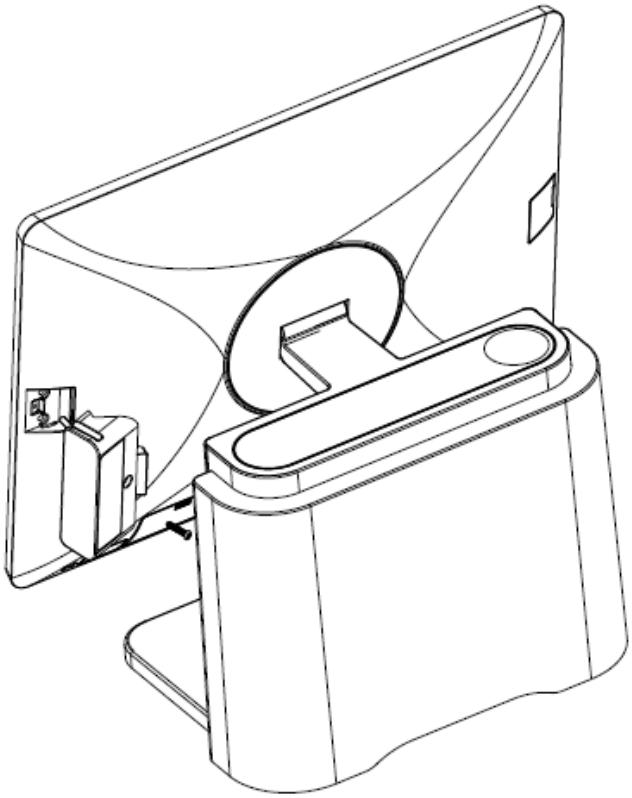


Let 2nd in front of user	Fix screw first	Connect cable	Add tape to increase the strength of connection
			
Rotate 2nd to check cable status	**Rotate 2nd to check cable status**	**Install cover**	
			

Installation video:

https://www.youtube.com/watch?v=6Hm5kuF3dao&feature=youtu.be

Install MSR module

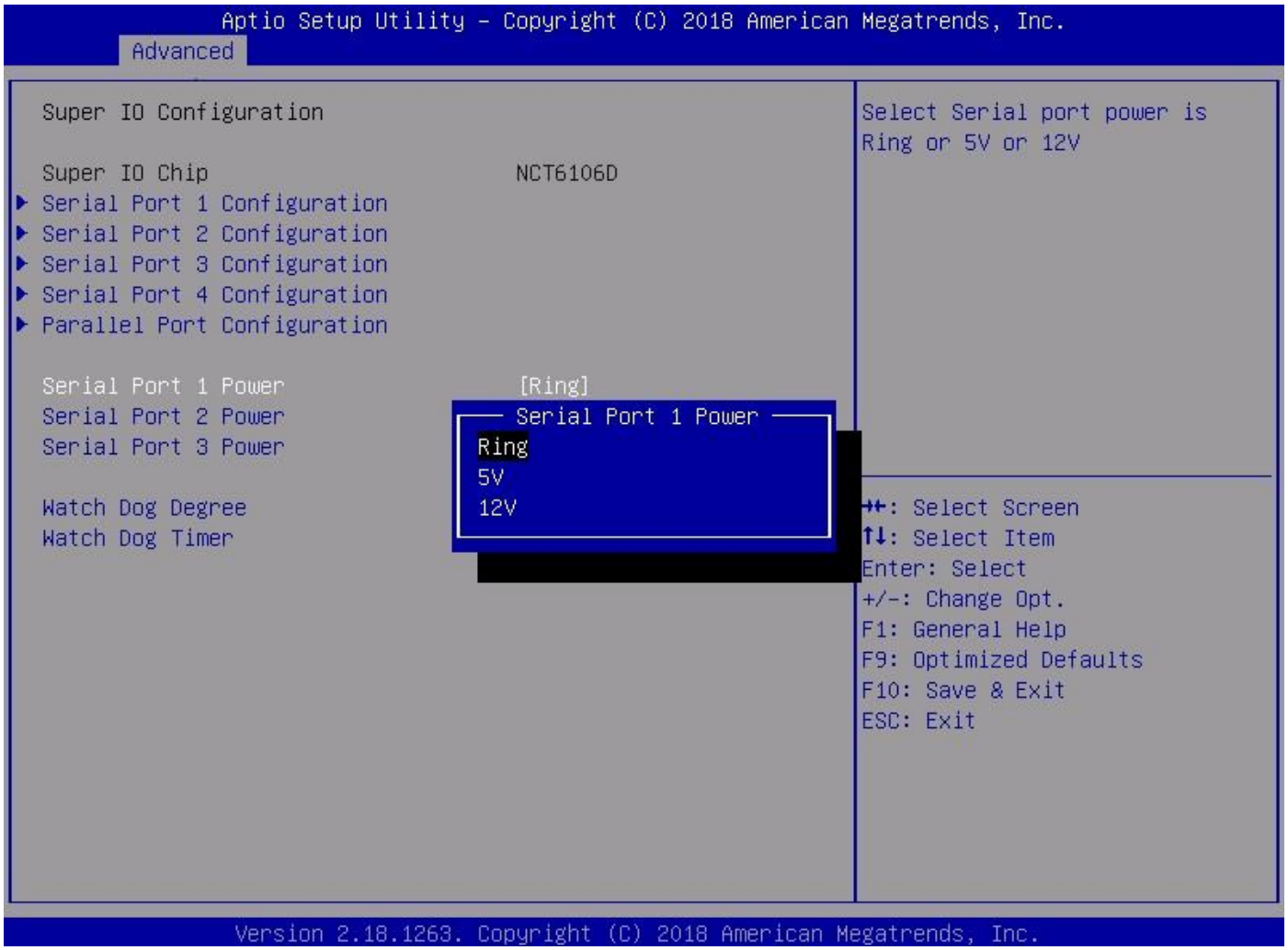


Connect USB cable	Adjust the cable smoothly	Add tape to increase the strength of connection	Tighten screw
			

Installation video

https://www.youtube.com/watch?v=BTWQTz8Ckno&t=0s&list=PLltl9eK0fn_OX8PB0DLraowi4hAlhPcgk&index=11

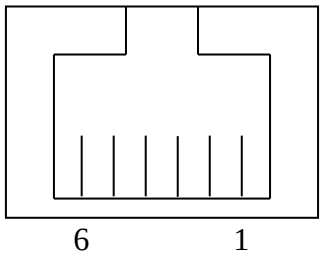
Power configuration for COM PORTS



Install a Cash Drawer

You can install a cash drawer through the cash drawer port. Please verify the pin assignment before installation.

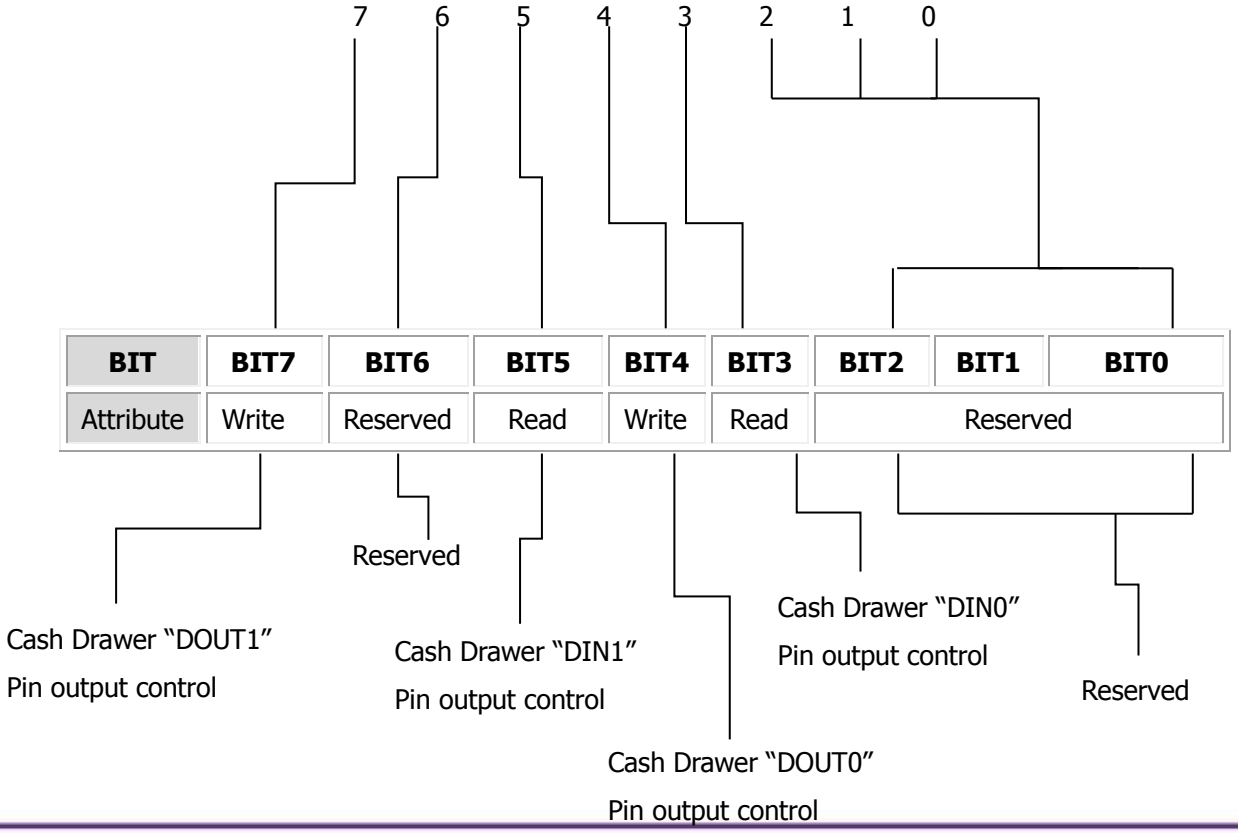
Cash Drawer Pin Assignment



Pin	6	5	4	3	2	1
Signal	GND	DOUT bit1	12V/19V	DIN bit0	DOUT bit0	GND

Cash Drawer Controller I/O Address

Register Location: 482h
Attribute: Read / Write
Size: 8bit



Cash drawer bit define should be follow DIN0/DOUT0 for cash drawer 1 DIN1/DOUT1 for cash drawer 2:

Bit 0: Reserved

Bit 1: Reserved

Bit 2: Reserved

Bit 3: Cash Drawer "DIN0" pin output control.

= 1: the Cash drawer closed or no Cash Drawer

= 0: the Cash Drawer opened

Bit 4: Cash Drawer "DOUT0" pin output control.

= 1: opening the cash drawer

= 0: allow close the cash drawer

Bit 5: Cash Drawer "DIN1" pin output control.

= 1: the Cash drawer closed or no Cash Drawer

= 0: the Cash Drawer opened

Bit 6: Reserved

Bit 7: Cash Drawer "DOUT1" pin output control.

= 1: opening the cash drawer

= 0: allow close the cash drawer

Note: Please follow the cash drawer control signal to control the cash drawer

Cash Drawer Control Command Example

Use Debug.EXE program under DOS

Command	**Cash Drawer**
O 482 10	Open cash drawer
O 482 00	Allow to close

- Set the I/O address 482h bit4 =1 (opening cash drawer by "DOUT bit0" pin control)
- Set the I/O address 482h bit4 =0 (allow to close cash drawer)

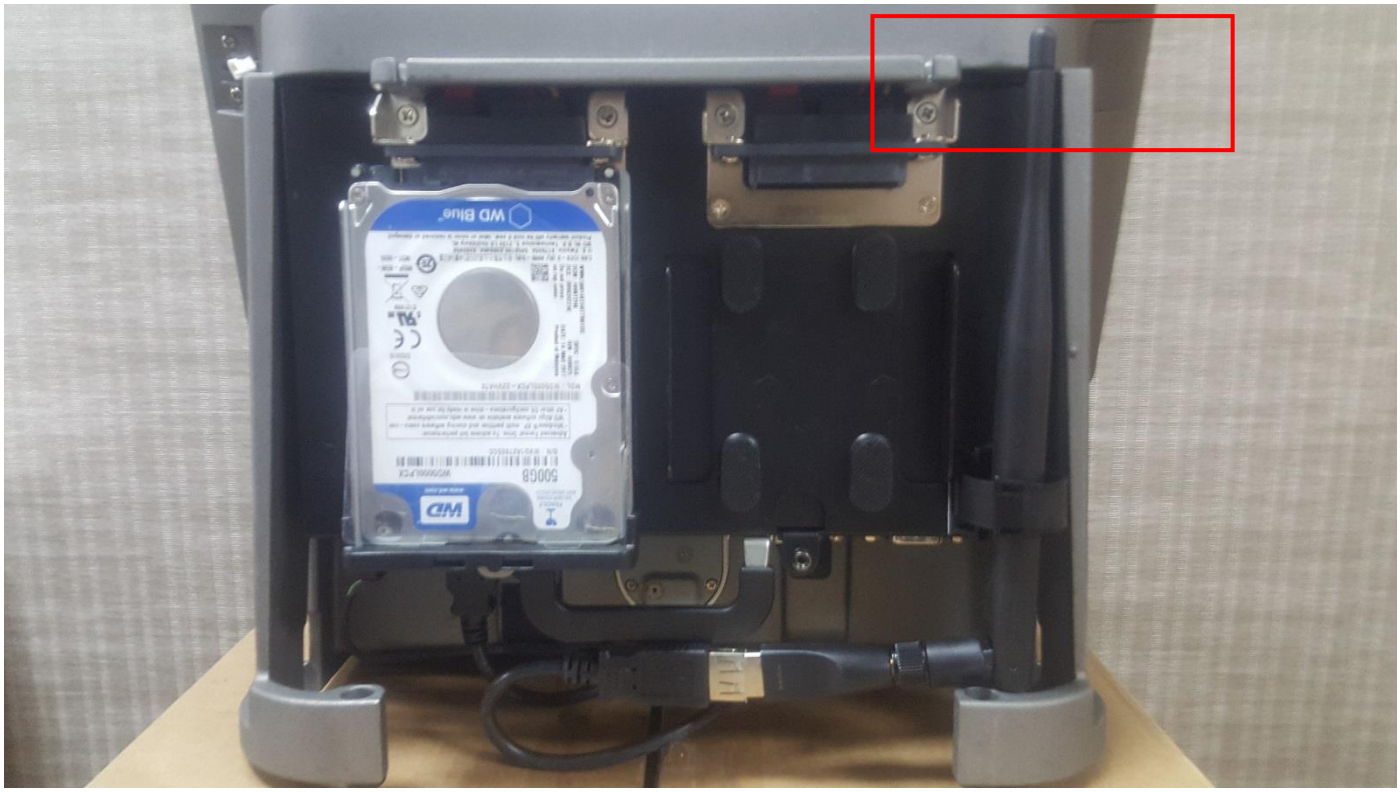
Command	**Cash Drawer**
I 482	The status of cash drawer

- The I/O address 482h bit3 =1 (Cash Drawer is opened or not exist)
- The I/O address 482h bit3 =0 (Cash Drawer is closed)

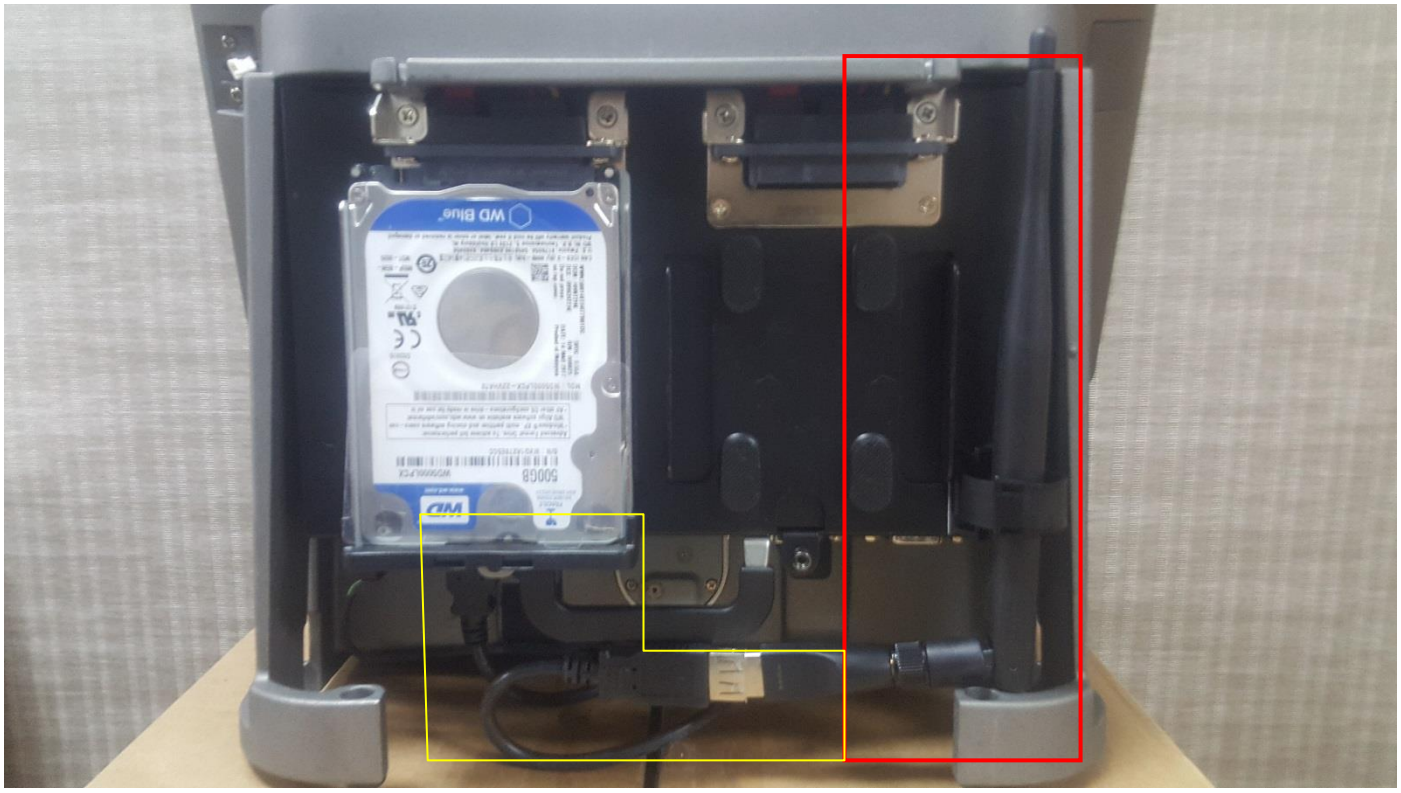
Install a WIFI dongle and antenna

Plug WIFI dongle on any one of USB ports then follow below instruction to install antenna.

Same height between housing and antenna are very important.

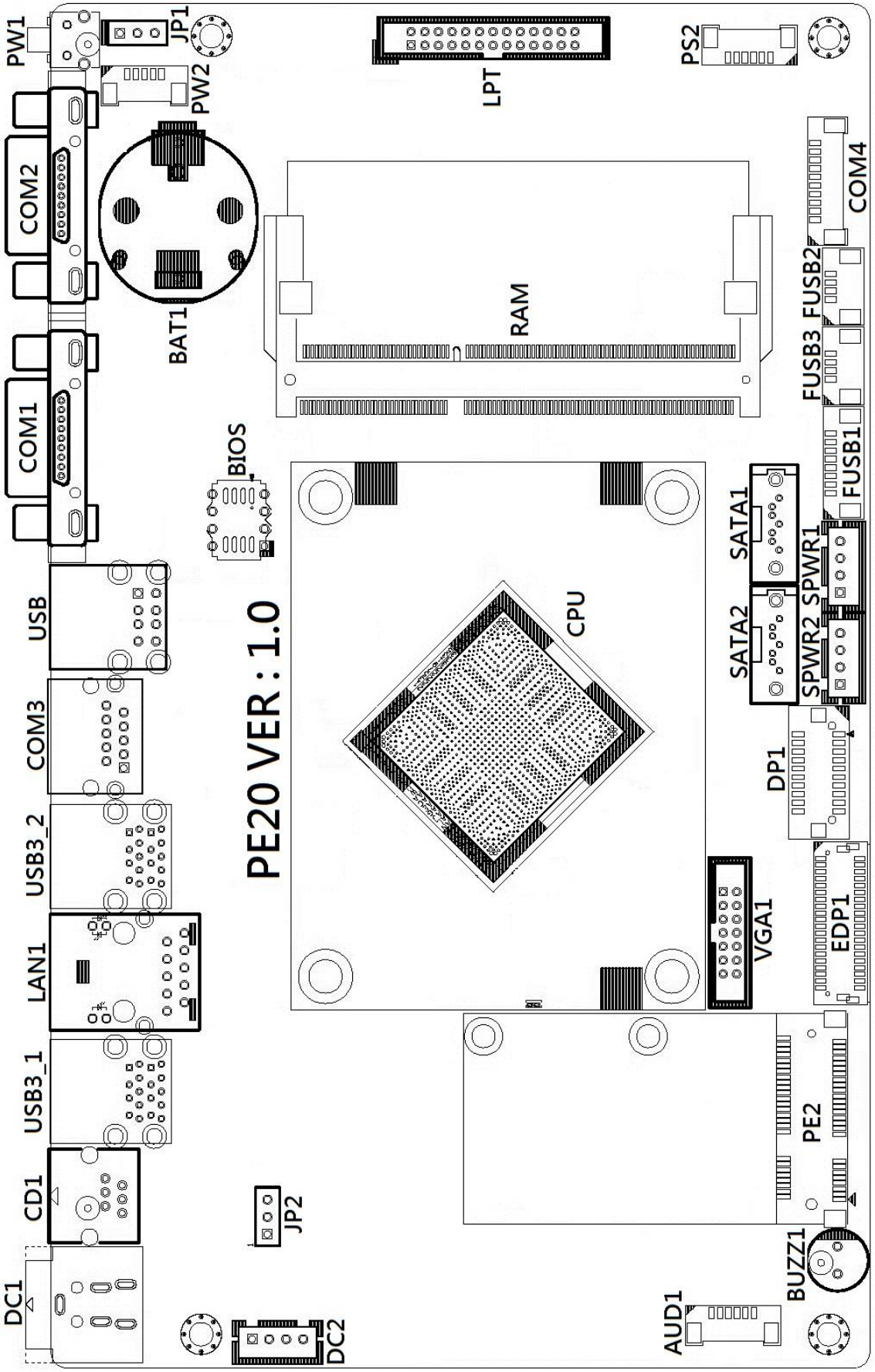


Install antenna and WIFI dongle like below two pictures shown.



Motherboard information

Motherboard Layout (PE20)



Connectors & Jumper Settings

COM3 : RJ48 for COM3 Port

PIN1	N/C	PIN2	DCD
PIN3	DSR	PIN4	RX
PIN5	RTS	PIN6	TX
PIN7	CTS	PIN8	DTR
PIN9	GND	PIN10	RI

COM4 : Pin Header for COM4 Port

PIN1	DCD	PIN2	RX
PIN3	TX	PIN4	DTR
PIN5	GND	PIN6	DSR
PIN7	RTS	PIN8	CTS
PIN9	RI	PIN10	+5V

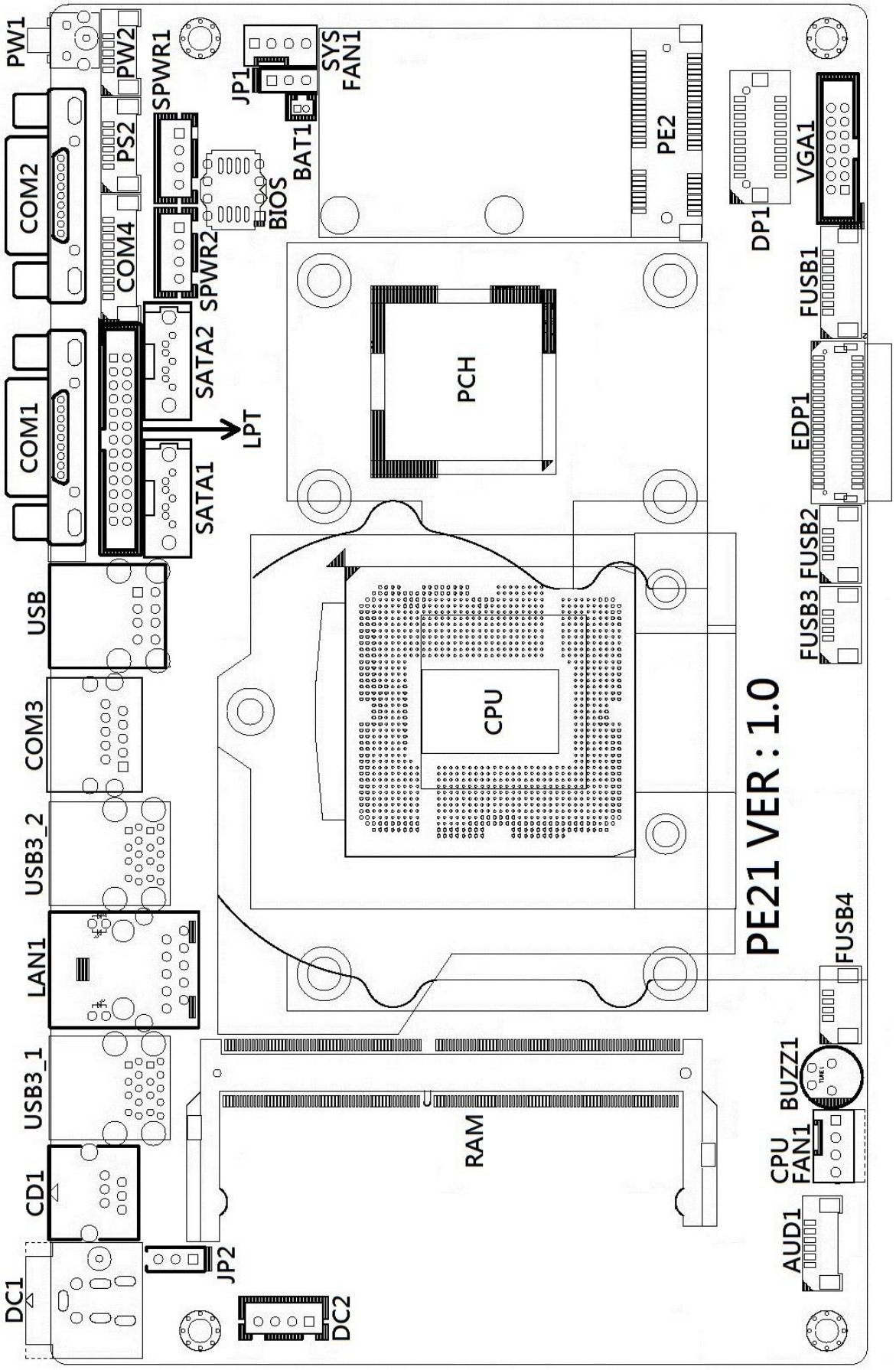
JP1 : Clear CMOS Setup

JP1	Description
1-2	Normal operation
2-3	Clear CMOS

JP2 : Cash Drawer Voltage Setup

JP2	Description
1-2	+19V
2-3	+12V

Motherboard Layout (PE21)



Connectors & Jumper Settings

COM3 : RJ48 for COM3 Port

PIN1	N/C	PIN2	DCD
PIN3	DSR	PIN4	RX
PIN5	RTS	PIN6	TX
PIN7	CTS	PIN8	DTR
PIN9	GND	PIN10	RI

COM4 : Pin Header for COM4 Port

PIN1	DCD	PIN2	RX
PIN3	TX	PIN4	DTR
PIN5	GND	PIN6	DSR
PIN7	RTS	PIN8	CTS
PIN9	RI	PIN10	+5V

JP1 : Clear CMOS Setup

JP1	Description
1-2	Normal operation
2-3	Clear CMOS

JP2 : Cash Drawer Voltage Setup

JP2	Description
1-2	+19V
2-3	+12V

Version Change History

Version	Change Date	Change Content
V1.0	Nov. 2018	1st release