Glancetron K700

USER's GUIDE

All-In-One POS Terminal

Rev.A

GLANCETRON

www.glancetron.com

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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 can not 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 be ing 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 can not 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:

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 manufacture’s instructions.

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.

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.

The test results show that this device meets the FCC rules. Those limits are set to protect residential areas from the devices with harmful emission. This device will produce, use and radiate radio frequency energy. In addition, failure to follow the user’s manual to install or use this device might produce harmful interference with radio communication. Not withstanding the foregoing, it does not guarantee that this type of harmful interference does not occur in some special installations. The interference caused by this device to the reception of radio or television signals may be verified by turning it on and off. Any changes or modifications to this TFT LCD would void the user’s authority to operate this device.

Usage Notice

Warning - To prevent the risk of fire or shock hazards, do not expose this product to rain or moisture.

Warning - Please do not open or disassemble the product as this may cause electric shock.

Precautions

Follow all warnings, precautions and maintenance as recommended in this user's manual to maximize the life of your unit.

Do:

- Turn off the product before cleaning.
- Touch screen surface may be cleaned using a soft clean cloth moistened with mild window glass commercial cleaners or 50/50 mixture of water and isopropyl alcohol.
- Use a soft cloth moistened with mild detergent to clean the display housing.
- Use only high quality and safety approved DC adapter.

Don't:

- Do not touch the LCD display screen surface with sharp or hard objects.
- Do not use abrasive cleaners, waxes or solvents for your cleaning.
- Do not operate the product under the following conditions:
  - Extremely hot, cold or humid environment.
  - Areas susceptible to excessive dust and dirt.
  - Near any appliance generating a strong magnetic field.
  - In direct sunlight.

Table of Contents

Introduction

About Glancetron K700

Features include:

- A choice of stylish apple white or elegant charcoal grey are available to compliment the decor of the working environment.
- Intel Atom D2550 1.86GHz dual core CPU with embedded options available
- Supports optical multi-touch display activated by a finger or gloved hand
- Fanless design for long life span
- Scratch-proof with 7H degree hardness surface (optical touch screen)
- IP64 water & dust-proof front panel protection
- Versatile mounting solution (panel mount) to fit your decor
- Robust polymer housing design provides excellent impact resistance and facilitates a modern appearance.
- Easy to access storage for installation and maintenance
- Optional built-in i-Button and MIFARE RFID reader
- Optional peripherals including MSR, VFD and fingerprint reader
- Optional built-in 2D barcode reader

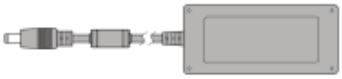
Display

- 5-wire resistive touch
- 15-inch TFT Active Matrix Display
- Max. resolution: 1024 x 768
- Driver: Linux/ Windows CE/ Windows XP/ Windows Embedded Standard/ Windows 7/ Windows Embedded POSReady 7

1. Packing List

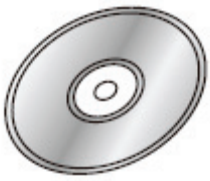
1-1 Standard Accessories

System (with stand)



Power Adapter

Power Cord



Driver Bank

M3 Screw x2

1-2 Optional Accessories (Field installable)

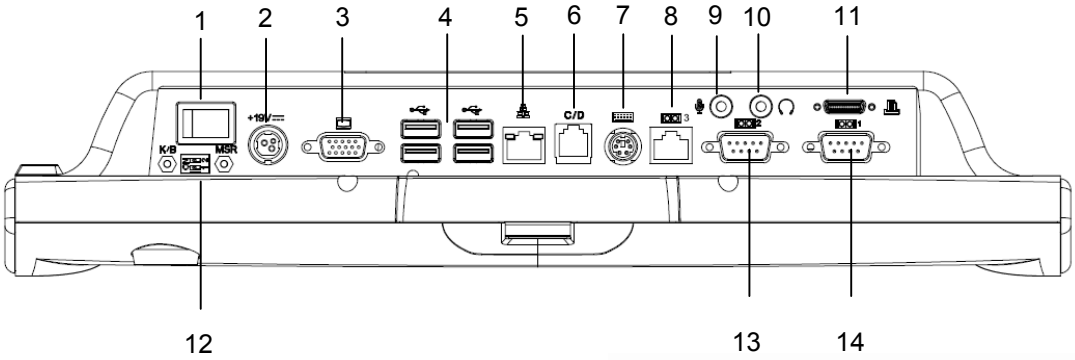
Single MSR

3 IN 1 MSR

Screw x2

2. System View

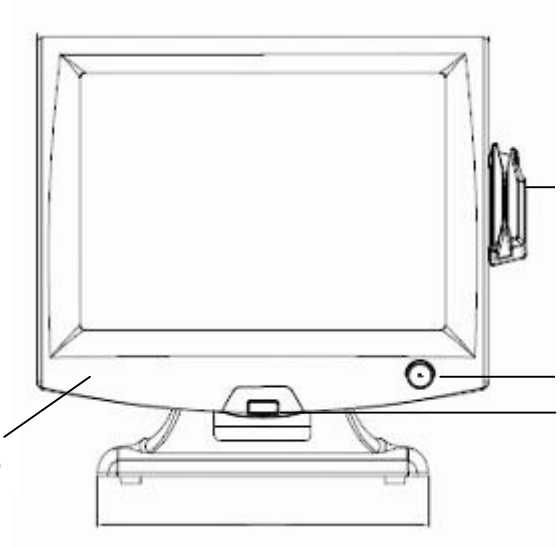
2-1 Rear View

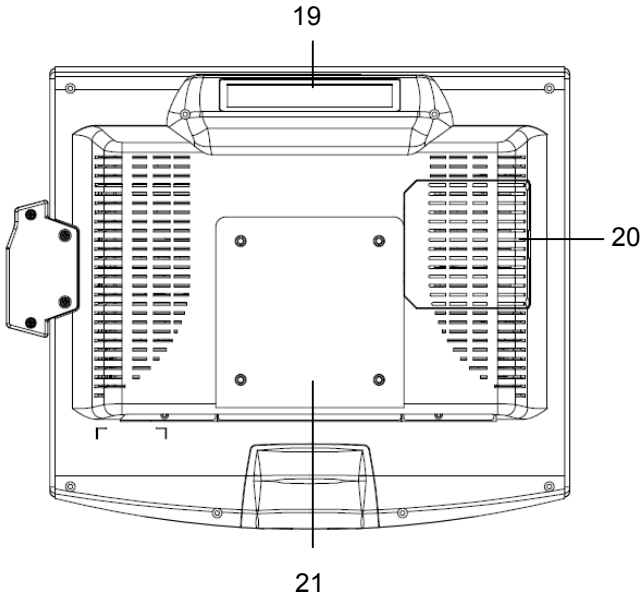


Item

1. Power Switch
2. 19V DC-in lock connector
3. VGA
4. USB x4
5. RJ45(LAN)
6. RJ11 for cash drawer
7. PS/2
8. RJ45(COM3 for External VFD)
9. Mic-in
10. Line-out
11. LPT(Option)
12. PS/2 MSR Switch Gear(Option)
13. COM2
14. COM1
15. MSR(Option)
16. iButton(Option)
17. 1D/2D Barcode Scanner(Option)
18. RFID(Option)
19. LCM/VFD(Option)
20. HDD / CFast
21. VESA Mount

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





2. System View

2-2 Specification

Processor	Intel Atom D2550 1.86GHZ
Chipsets: North Bridge/South Bridge	Intel NM10
Memory	SO-DIMM socket supports DDR3 up to 4GB
Audio	Line-out/Mic-in
Network	RJ45 10/100/1000 Base-T
USB	4*USB 2.0
Storage	CFast card / 2.5” SATA HDD / SSD
BIOS	AMI UEFI BIOS Support
Power	DC 19V 90/65W Adaptor
Thermal Solution	Fan-less
Dimension	37.54(W) x 37.23(H) x 26.89 (D) cm
Operating Temperature	0°C ~ 40°C
Storage Temperature	-20°C ~ 60°C
Storage Humidity	-20% ~ 80%, non-condensing

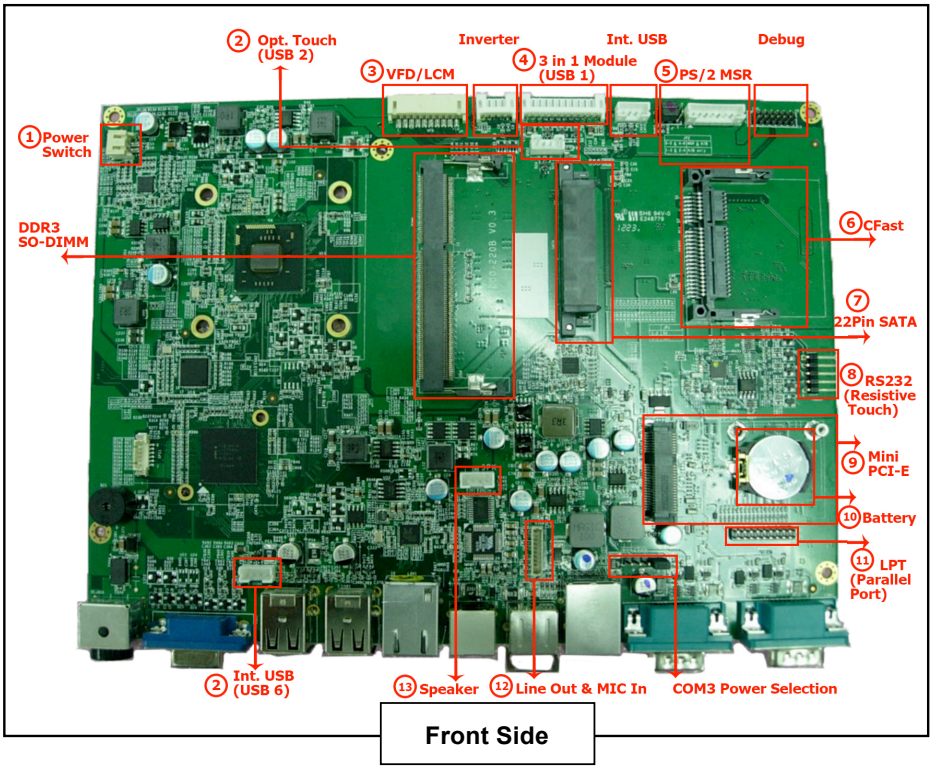
Display	
LCD Panel Size	15-inch TFT Active Matrix Display
Resolution	1024*768 Pixels
Backlight	CCFL
Brightness	250 cd/m2
Touch Panel	5-Wire Analog Resistive Type

Note:

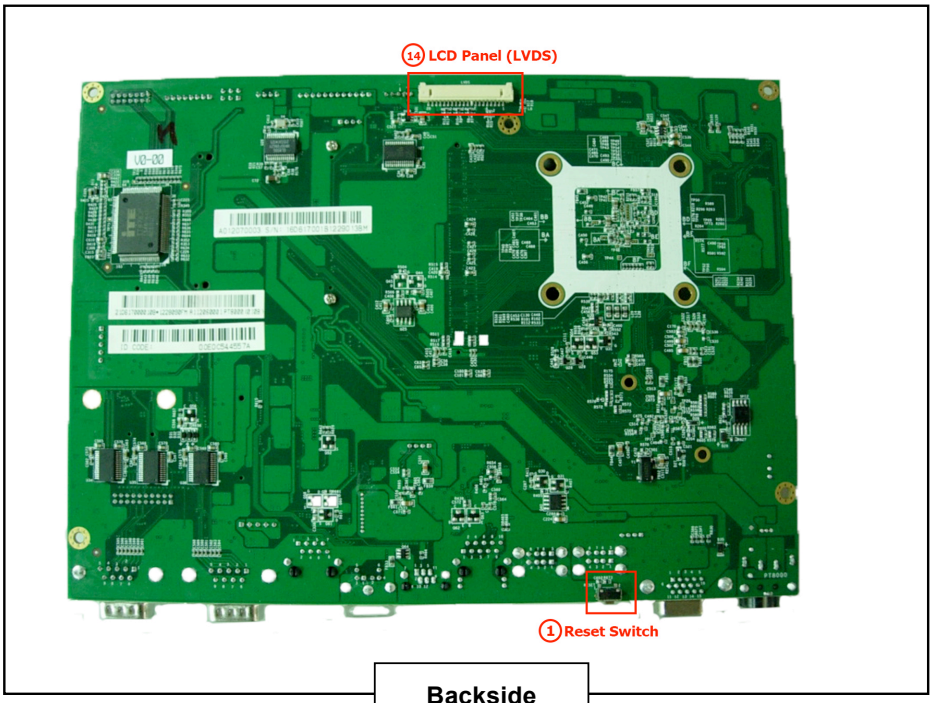
- Intel™ Cedarview CPU does not support 64-bit OS, therefore 64-bit Microsoft Windows® Embedded POSReady 7 and 64-bit Microsoft Windows® 7 are not supported on K700.
- Current Intel™ XP Pro / POSReady 2009 graphics driver for Cedarview platform does not support dual display.
- Please avoid excessive shock during HDD operating.

2. System View

2-3 Internal Layout



Front Side



Backside

3. Pin Definition

1. Power Switch (CN1)

Power switch (CN1)	
Pin	Signal
1	PWRBTN_N
2	GND

2. Internal connector fo USB6

Pin	Signal
1	5V
2	D-
3	D+
4	GND

- **USB 6 is connected to one hub, and it is for iButton, RFID and barcode scanner.**

3. VFD (COM4)

Pin	Signal	Pin	Signal
1	5V	6	CTS
2	DSR	7	TXD
3	Ground	8	RXD
4	DTR	9	Ground
5	RTS	10	12V

4. Internal connector for 3 in 1 module (USB 1)

Pin	Signal	Pin	Signal	Pin	Signal
1	5V	5	HUB_P1_DP	9	HUB_P3_DP
2	5V	6	HUB_P2_DN	10	GND
3	GND	7	HUB_P2_DP	11	3.3V
4	HUB_P1_DN	8	HUB_P3_DN	12	3.3V

5. PS/2 MSR (CN9)

Pin	Signal	Pin	Signal	Pin	Signal
1	5V	4	GND	7	K/B Clock
2	K/B Data	5	NC	8	MSR K/B Clock
3	MSR K/B Data	6	GND		

3. Pin Definition

Jumper setting JP2					
Pin	Signal	Pin	Signal	Pin	Signal
1	K/B Data	3	MSR K/B Data	5	NC
2	K/B Clock	4	MSR K/B Clock	6	NC

6. CFast connector

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	GND	7	GND	13	NC	19	NC
2	TX	8	CDI	14	GND	20	V3.3
3	TX#	9	GND	15	NC	21	V3.3
4	GND	10	NC	16	NC	22	GND
5	RX#	11	NC	17	NC	23	GND
6	RX	12	NC	18	NC	24	CDO

7. 22Pin SATA connector

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	GND	7	GND	13	GND	19	GND
2	TX	8	V3.3	14	V5	20	V12
3	TX#	9	V3.3	15	V5	21	V12
4	GND	10	V3.3	16	V5	22	V12
5	RX#	11	GND	17	GND		
6	RX	12	GND	18	ACT-/SPIN		

8. RS232 type COM(For Resistive Touch)

Pin	Signal
1	UR
2	LR
3	SG
4	UL
5	LL

3. Pin Definition

Mini PCI-E

Pin	Signal	Pin	Signal
1	Wake#	9	GND
2	+3.3V	10	RSVD
3	RSVD	11	REFCLK-
4	GND	12	RSVD
5	RSVD	13	REFCLK+
6	1.5V	14	RSVD
7	CLKREQ#	15	GND
8	RSVD	16	RSVD

Key			
Pin	Signal	Pin	Signal
17	RSVD	35	GND
18	GND	36	USB D-
19	RSVD	37	RSVD
20	W_Disable#	38	USB D+
21	GND	39	RSVD
22	PERST#	40	GND
23	PER_ND	41	RSVD
24	+3.3V_AUX	42	LED_WWAN#
25	PER_PD	43	RSVD
26	GND	44	LED_WLAN#
27	GND	45	RSVD
28	1.5V	46	LED_WPAN#
29	GND	47	RSVD
30	SMB_CLK	48	1.5V
31	PET_ND	49	RSVD
32	SMB_DATA	50	GND
33	PET_PD	51	RSVD
34	GND	52	3.3V

9. Battery

Pin	Signal	Pin	Signal
1	VRTC	2	GND

10. LPT (J7)

Pin	Signal	Pin	Signal	Pin	Signal
1	STB#	8	SLIN#	15	PD6
2	AFD#	9	PD3	16	GND
3	PD0	10	BUSY	17	PD7
4	ERR#	11	PD4	18	GND
5	PD1	12	PE	19	ACK#
6	INIT#	13	PD5	20	GND
7	PD2	14	SLCT		

3. Pin Definition

11. Line Out & Mic In (Audio CN8)

Pin	Signal	Pin	Signal
1	GND	6	Line_Out L
2	MIC_Th_L	7	AMP-L
3	MIC_Th_R	8	AMP-R
4	GND	9	Line_Out R
5	GND	10	GND

12. Speaker (CN5)

Pin	Signal
1	L+
2	L-
3	R+
4	R-

13. LCD Panel (LVDS)

LVDS connector			
Pin	Signal	Pin	Signal
1	GND	11	GND
2	GND	12	LVDS_TX1_DP
3	NC	13	LVDS_TX1_DN
4	NC	14	GND
5	GND	15	LVDS_TX0_DP
6	LVDS_CLK_DP	16	LVDS_TX0_DN
7	LVDS_CLK_DN	17	GND
8	GND	18	GND
9	LVDS_TX2_DP	19	LCD_VDD
10	LVDS_TX2_DN	20	LCD_VDD

Back light(Inverter)	
Pin	Signal
1	12V
2	Ground
3	No connect
4	Back light control
5	Back light enable

4. Rear I/O Interface

1. COM Port

Pin	Signal	Pin	Signal	Pin	Signal
1	DCD	4	DTR	7	RTS
2	RXD	5	Ground	8	CTS
3	TXD	6	DSR	9	5V/12V/Ring
**COM1 and COM2 Pin9 function selection by BIOS Item					

2. Cash Drawer(COM 6)

Pin	Signal	Pin	Signal	Pin	Signal
1	Ground	3	Open/close detection switch on drawer	5	NC
2	Drawer kick-out driver signal	4	+12VDC for drawer kick-out supplied	6	Ground

Example DOS COMMAND for Cash Drawer:

1. Create the file: TEST.TXT
2. Input below contents in TEST.TXT
   CONTEXT-"000.0"
   MODE COM6:300
3. Run COMMAND under DOS mode
   COPY TEST.TXT COM6

3. VGA

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	Red	5	GND	9	5V	13	HSYNC
2	Green	6	GND	10	GND	14	VSYNC
3	Blue	7	GND	11	NC	15	DDC_CLK
4	NC	8	GND	12	DDC_DAT		

4. PS/2

Pin	Signal	Pin	Signal
1	K/B Data	4	VCC
2	Mouse Data	5	K/B Clock
3	GND	6	Mouse Clock

5. DC Jack

Pin	Signal
1	19V
2	GND
3	19V

6. 2 layer USB Port

Pin	Signal	Pin	Signal
1	5V	3	D+
2	D-	4	GND

4. Rear I/O Interface

7. Giga LAN

Pin	Signal	Pin	Signal	Pin	Signal
1	VCC	6	MDI2+	L1	LED1(Green +, Orange -)
2	MDI0+	7	MDI2-	L2	LED1(Green -, Orange +)
3	MDI0-	8	MDI3+	L3	LED2(Yellow +)
4	MDI1+	9	MDI3-	L4	LED2(Yellow -)
5	MDI1-	10	GND		

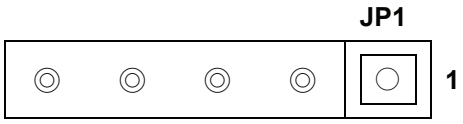
** LED1 : Link signal ** LED2 : Action signal

8. RJ45 type COM3

Pin	Signal	Pin	Signal
1	5V/12V	5	RTS
2	DSR	6	CTS
3	Ground	7	TXD
4	DTR	8	RXD

5V/12V Jumper selection (JP1)	
Pin	Signal
1	5V
2	NRI#A
3	NC
4	NRI#A
5	12V

Jumper for COM3 Voltage setting



	JP1
1-2	5V
4-5	12V

Notice:

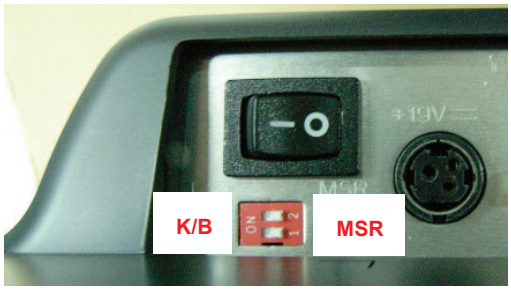
- COM 3 port. Warning!! COM3 (RJ45 Connector) for external VFD use only. Never use on network device. If you are using on the network device will cause the device damaged.
- COM 3 port will be inactive if POS has internal VFD. (Alternative of COM 3 or internal VFD).

9. PS/2 MSR Switch

- **Sliding both buttons toward the same side.**

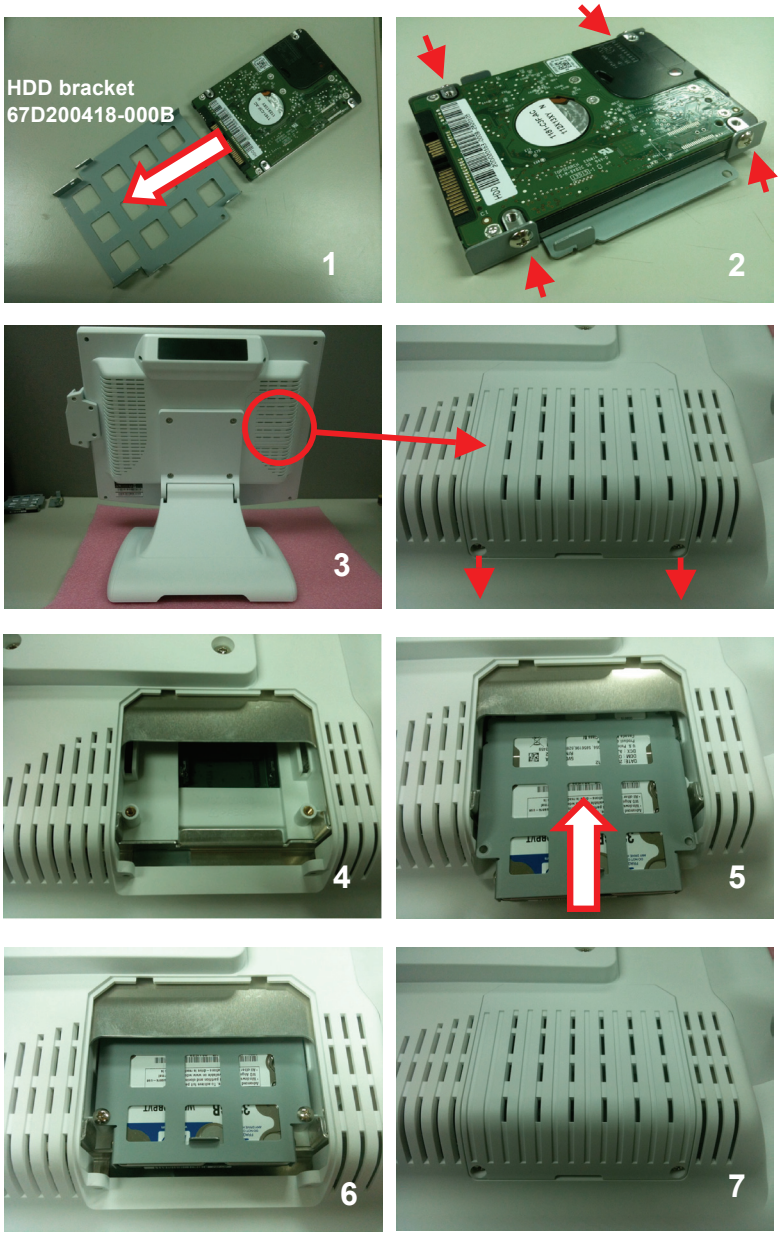
	ON	12
Only K/B	V	X
Only MSR	X	V
K/B + MSR	X	V

V: Function
X: Forbidden



5. System Assembly & Disassembly

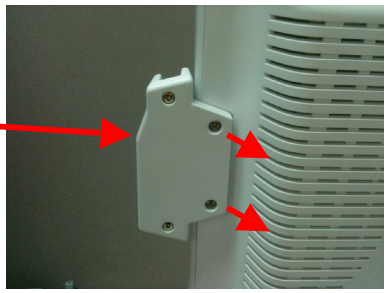
5-1 HDD

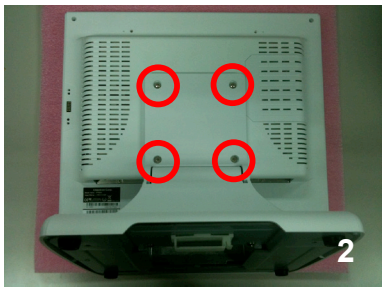


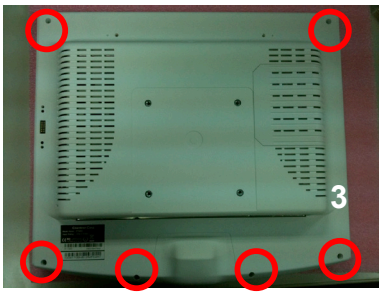
1. Put the HDD on the HDD bracket (67D200418-000B).
2. Fasten the 4 M3 screws (64D030044-100B).
3. Unscrew 2 M3 screws (64D030060-200T).
4. Unscrew the HDD cover.
5. Fabricate HDD W/bracket in HDD holder.
6. Fasten the 2 M3 screws (64D030044-100B).
7. Fasten the 2 M3 screws.

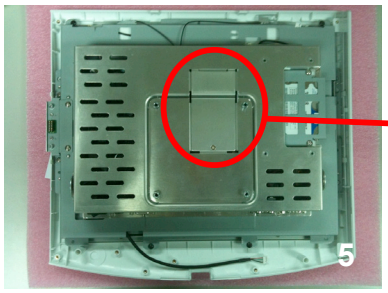
5. System Assembly & Disassembly

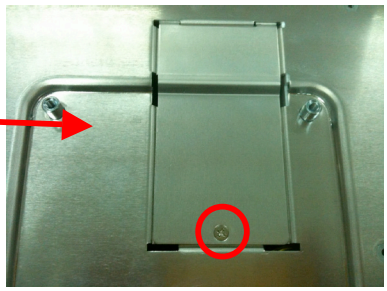
5-2 RAM







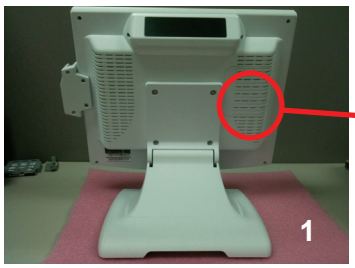




1. Unscrew 2 M3 screws (64DA30104-100B) and remove MSR.
2. Unscrew 4 M4 screws (64D040081-100B) and remove the stand.
3. Unscrew 6 M4 screws (64D030060-200T) and remove the panel back.
4. Remove the scanner cable.
5. Unscrew 1 M3 screws (64D730041-100B).
6. Remove RAM door and install the RAM.
7. Put the RAM door back.

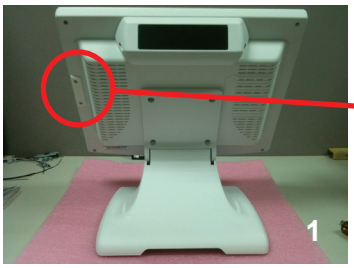
5. System Assembly & Disassembly

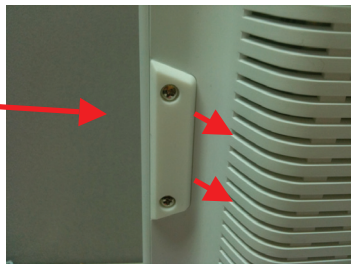
5-3 CFAST

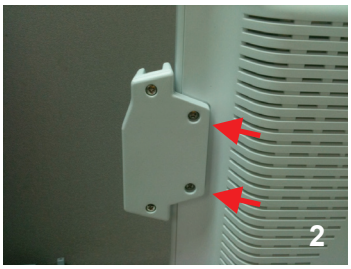


1. Unscrew 2 M3 screws (64D030060-200T) and remove the HDD cover.
2. Insert CFAST card.
3. Reinstall the HDD cover and secure it with screws.

5-4 MSR



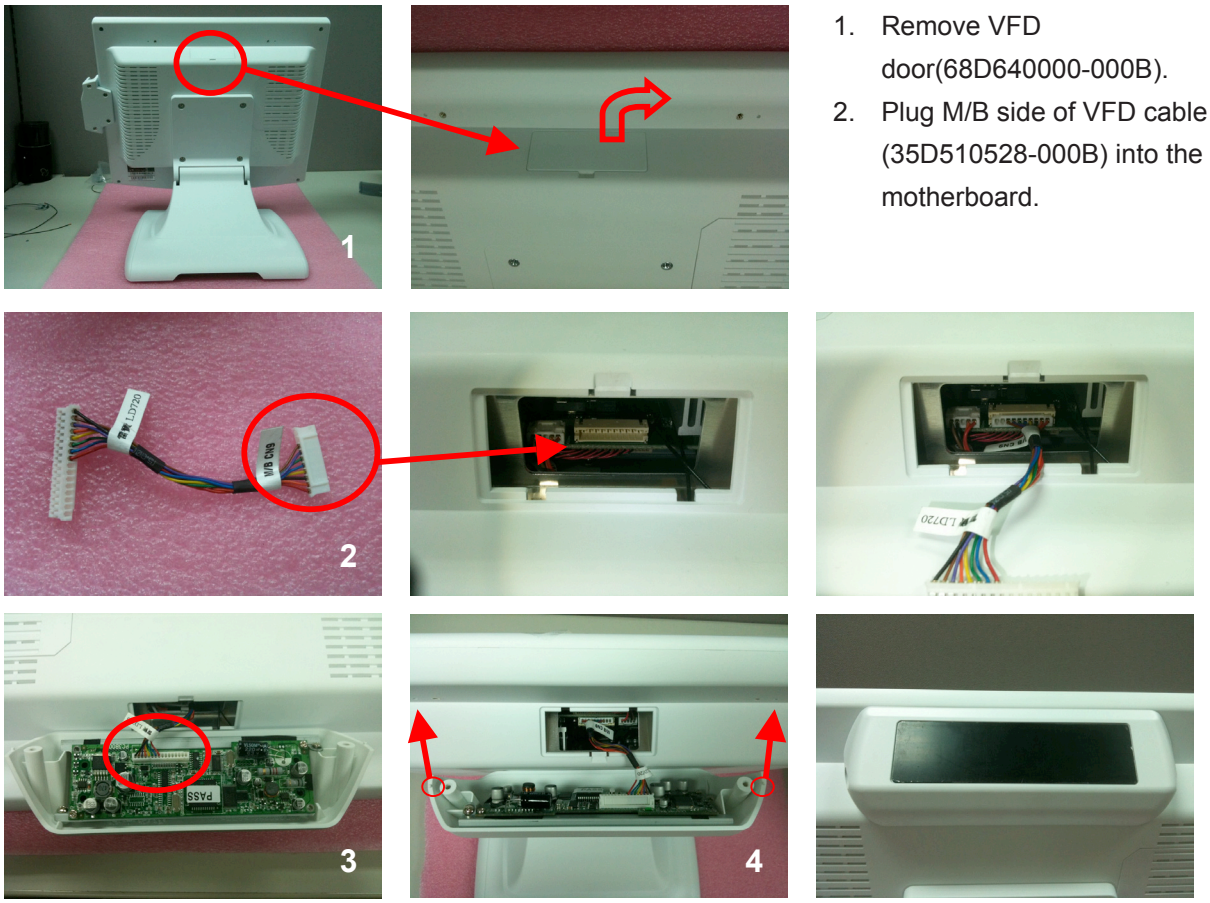




1. Unscrew 2 M3 screws (64D030060-200T).
2. Install MSR with screws.

5. System Assembly & Disassembly

5-4 Internal VFD



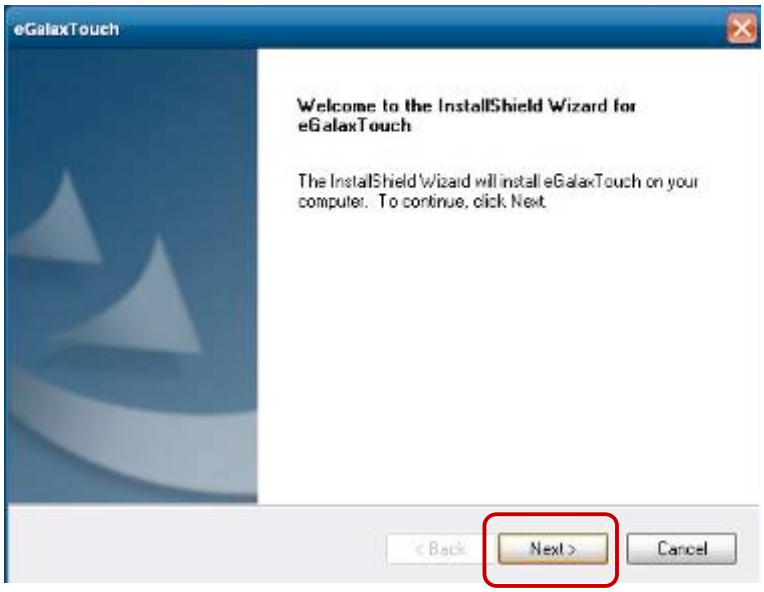
1. Remove VFD door(68D640000-000B).
2. Plug M/B side of VFD cable (35D510528-000B) into the motherboard.

1. Plug the VFD cable (35D510528-000B) into the VFD device.
2. Install VFD with screws.

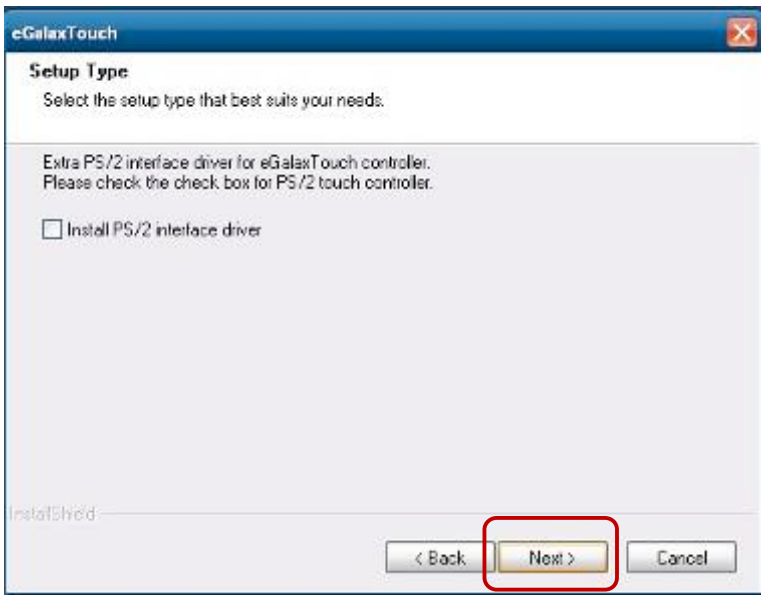
6. Device Driver Installation

6-1 Resistive Type Touch Panel

1. Click “**Next**”.

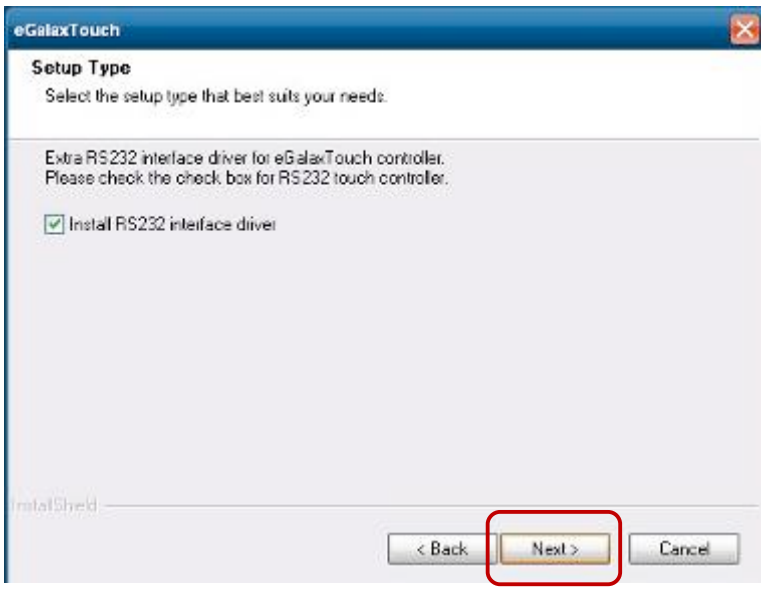


2. Click “**Next**”.

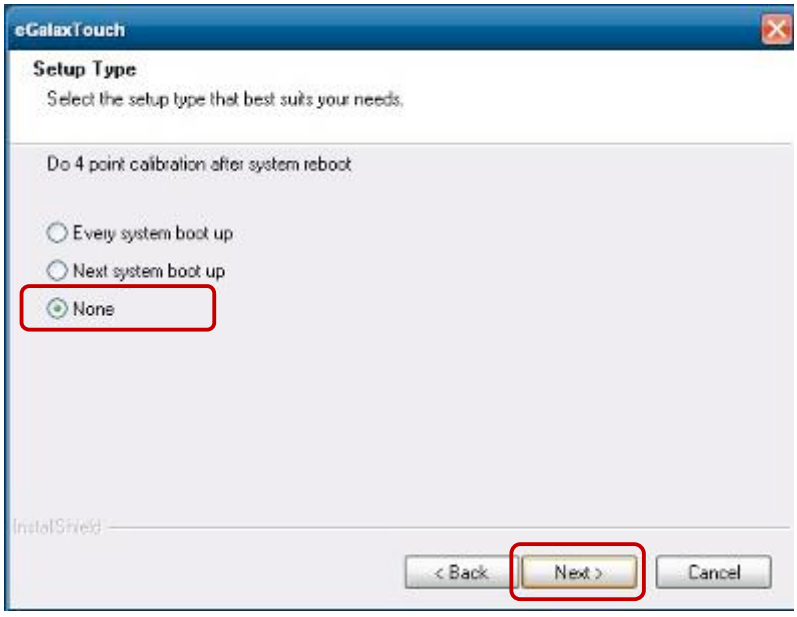


6. Device Driver Installation

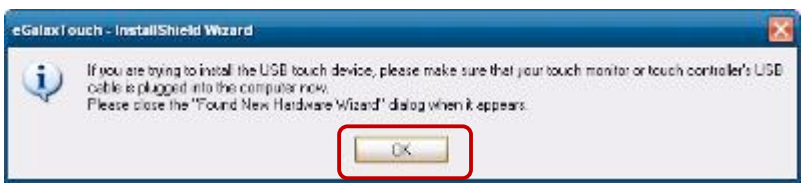
3. Click “**Next**”.



4. Select **“None**”, Click **“Next”**.

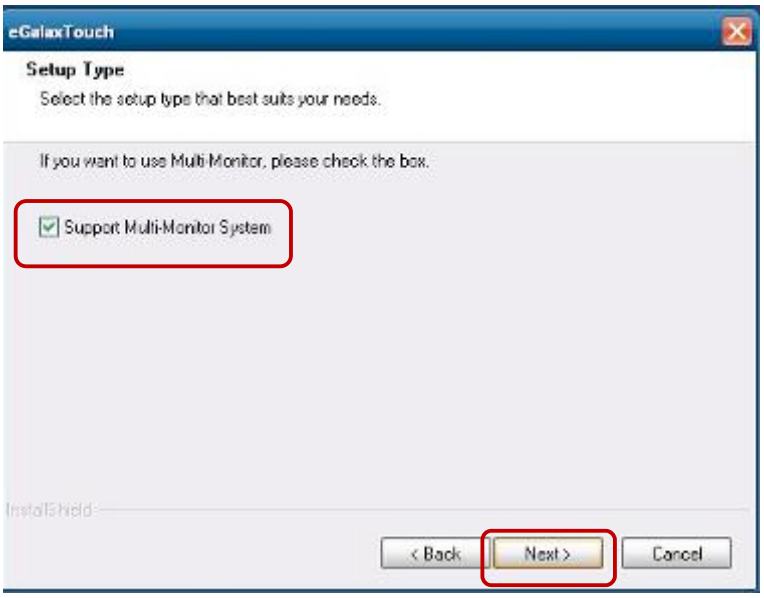


5. Click **“OK**”.

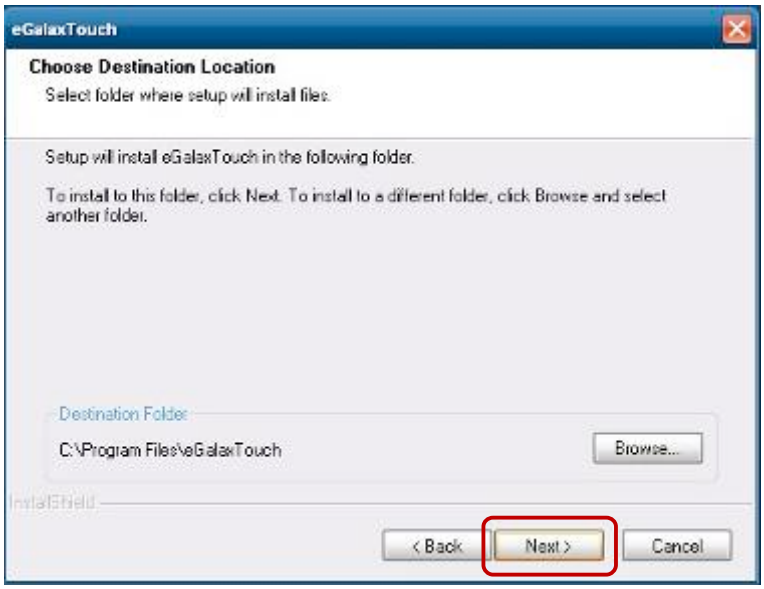


6. Device Driver Installation

6. Select “**Support Multi-Monitor System**”, Click “**Next**”.

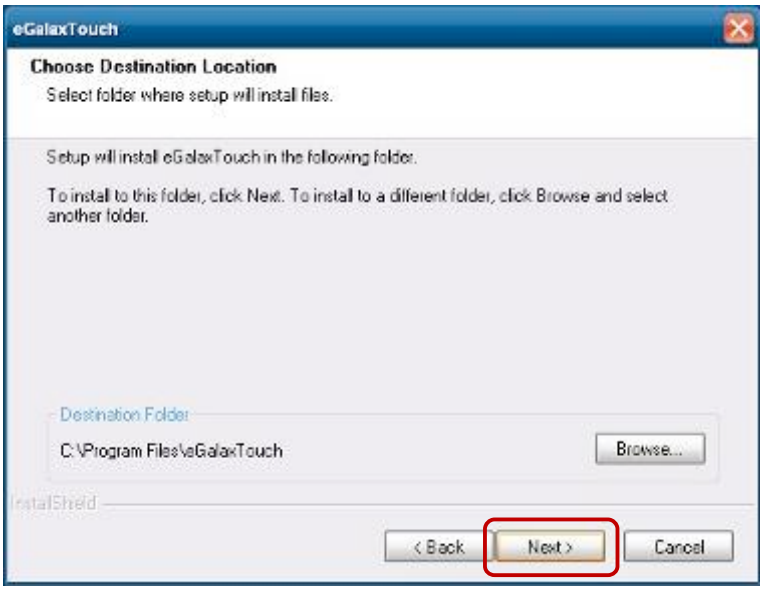


7. Click **“Next”**.

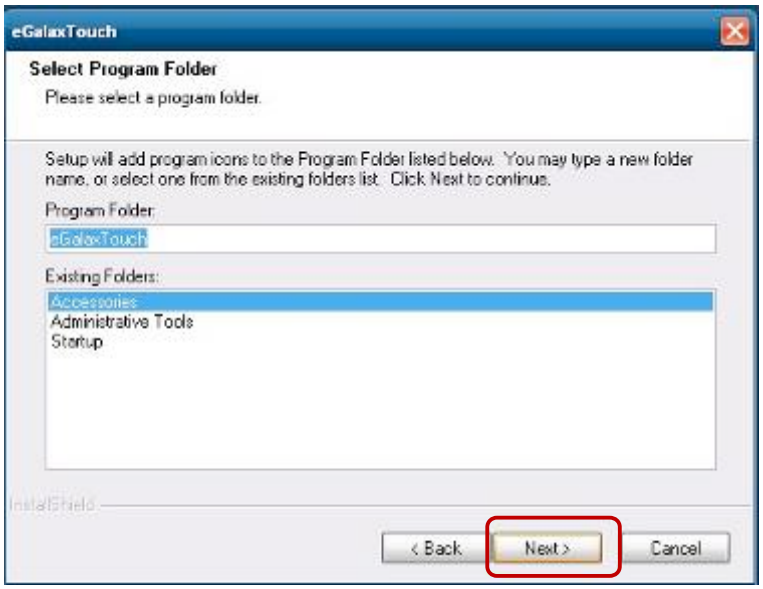


6. Device Driver Installation

8. Click **“Next”**.

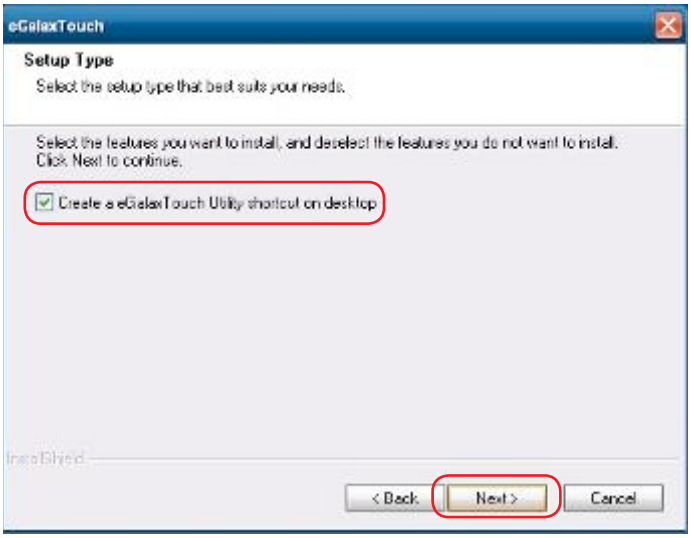


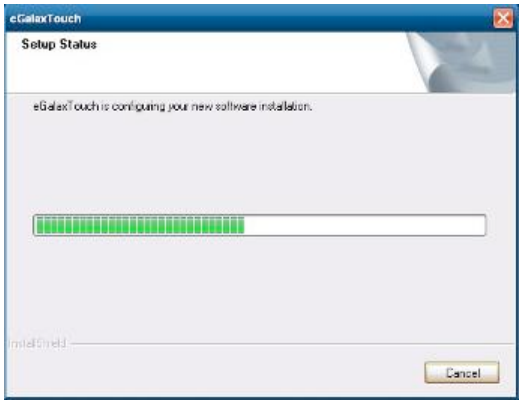
9. Click **“Next”**.

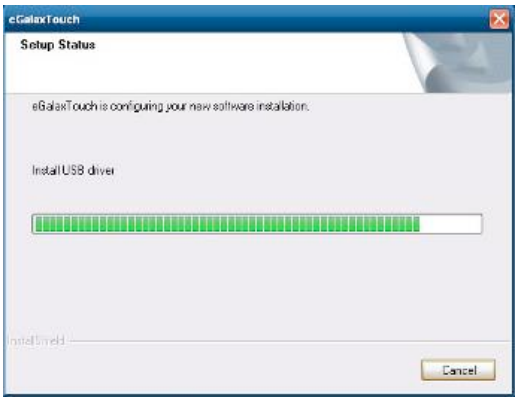


6. Device Driver Installation

10. Select “**Create a eGalaxTouch Utility shortcut on desktop**”, Click “**Next**”.

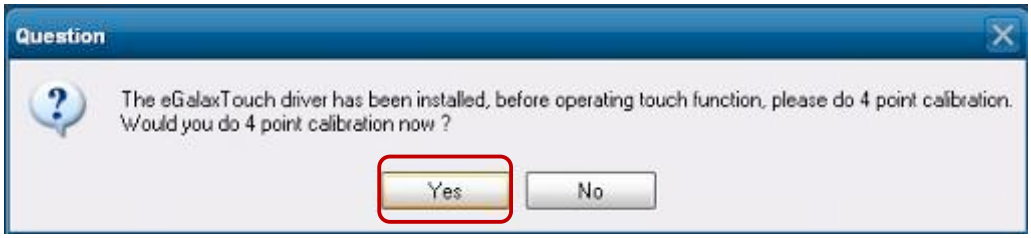




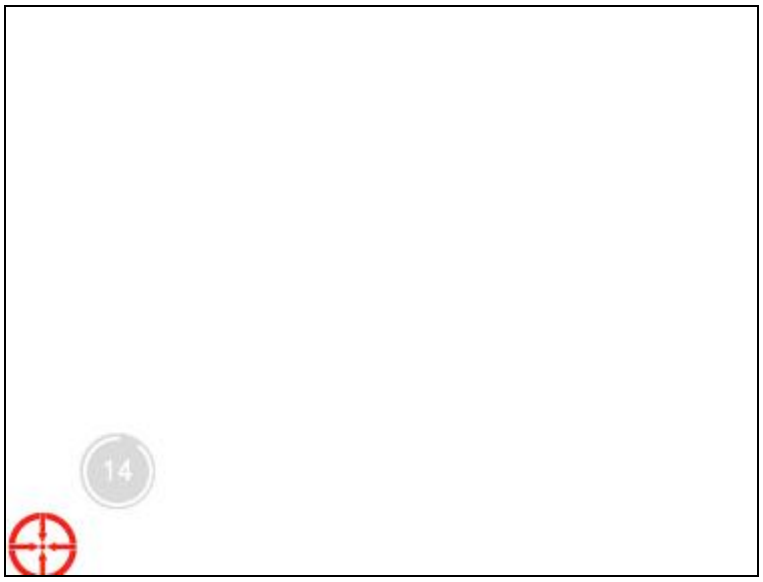


6. Device Driver Installation

11. Would you do 4 point calibration now? Click “**Yes**”.



12. Do 4 points alignment to match display.



13. **Calibration utility**.

6. Device Driver Installation

6-2 MagStripe Card Reader Configuration Utility

The MagStripe Card Reader Configuration Utility is used to set up the output format of HID MSR.

Installation

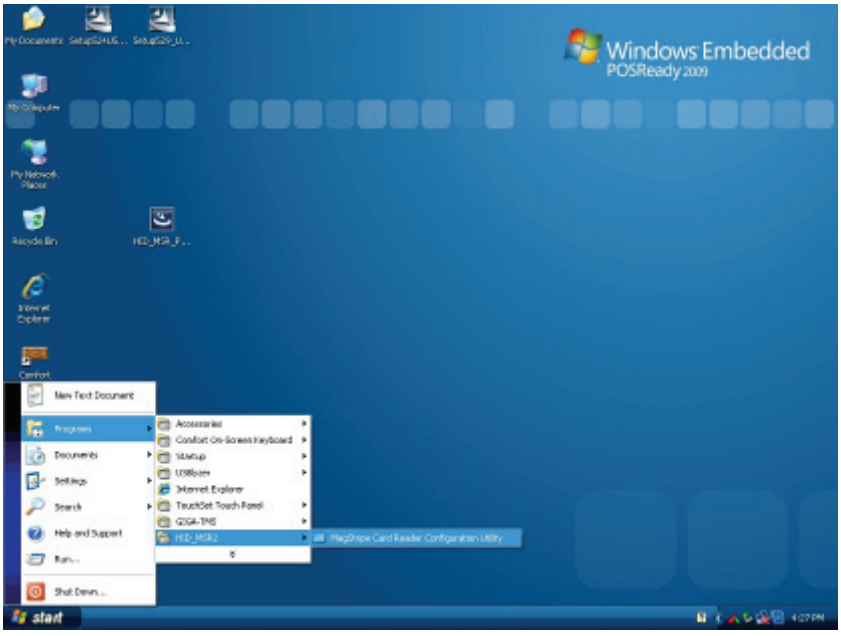
Below steps guide you how to install the Utility program:

- Insert the setup CD.
- Run the HID_MSR_PSW00003_V2_0_0.exe setup file that is located in the Software folder of CD.
- Follow the wizard to complete the installation.

Launching Program

Below steps guide you how to load the Utility program:

- From Start/Programs, click HID_MSR2 folder.
- Click MagStripe Card Reader Configuration Utility to launch the program.

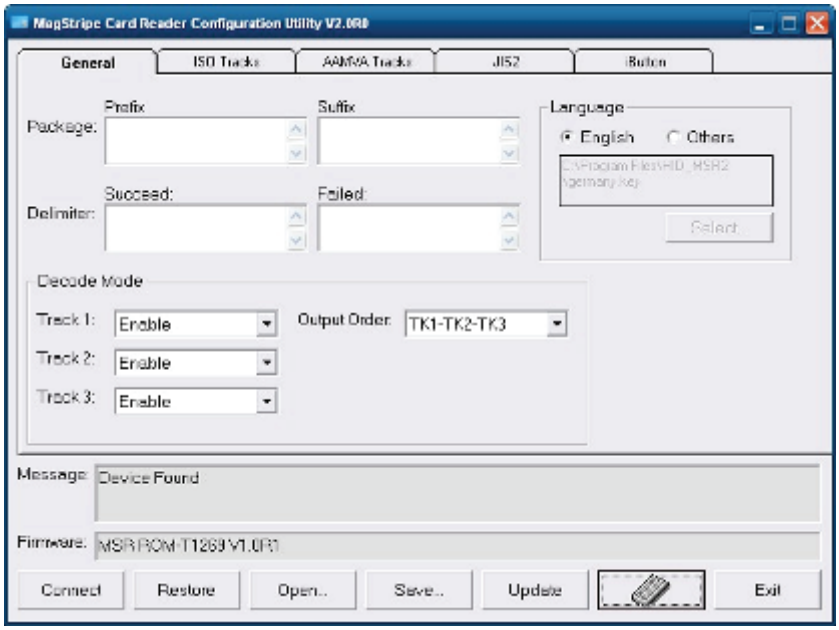


6. Device Driver Installation

- The utility program will detect the connected reader. If detected, all the input text boxes will be enabled.
- If the reader has not been connected to PC yet, please connect the reader and then click Refresh to get connected.

Configuration

Below is the main window of Utility program.



For the settings, there are:

- **Language**: The language defines the code positions of the keyboard. Each language should use its own settings. Wrong language selected will cause the wrong character displayed.
- **Prefix/Suffix**: Defines the data string which you would like to append in front or end of the MSR data string.
- **Error Message**: Indicates which track number cause the error.
- **Delimiter**: Indicates the swipe result.

6. Device Driver Installation

- **ISO**: Define start and end sentinel character.
- **Decode Mode**: Determines the way of outputting the three tracks data.

Shown below is the data structure of the output string for MSR.

PP	PR1	SS1	**TK1**	ES1	SU1	PR2	SS2	**TK2**	E S 2
SU2	PR3	SS3	**TK3**	ES3	SU3	SU	DM		

- **PP**: Prefix for package.
- **PR1**: Prefix for track 1.
- **SS1**: Start sentinel for track 1.
- **TK1**: Data for track 1, if error happens, using Error Message instead.
- **ES1**: End sentinel for track 1.
- **SU1**: Suffix for track 1.
- **PR2**: Prefix for track 2.
- **SS2**: Start sentinel for track 2.
- **TK2**: Data for track 2, if error happens, using Error Message instead.
- **ES2**: End sentinel for track 2.
- **SU2**: Suffix for track 2.
- **PR3**: Prefix for track 3.
- **SS3**: Start sentinel for track 3.
- **TK3**: Data for track 3, if error happens, using Error Message instead..
- **ES3**: End sentinel for track 3.
- **SU3**: Suffix for track 3.
- **SU**: Suffix for package.
- **DM**: Delimiter for the swipe result.

Prefix/Suffix

In default, the prefix and suffix settings are all keep blank. There are 4 kinds of prefix and suffix to be defined, which are:

- **Package**: For the prefix string, it is appended in the front of the whole MSR data. For the suffix, it is appended in the end of the whole MSR data. In most case, the suffix for package is always to be the “Enter” or “Tab” character. The max data length of the prefix and suffix for the package can be up to 127.

6. Device Driver Installation

- **TK1**: For the prefix string, it is appended in the front of the start sentinel of track 2. For the suffix, it is appended in the end of the end sentinel of track 2. The max data length of the prefix and suffix for the TK1 can be up to 127.
- **TK2**: For the prefix string, it is appended in the front of the start sentinel of track 2. For the suffix, it is appended in the end of the end sentinel of track 2. The max data length of the prefix and suffix for the TK1 can be up to 127.
- **TK3**: For the prefix string, it is appended in the front of the start sentinel of track 3. For the suffix, it is appended in the end of the end sentinel of track 3. The max data length of the prefix and suffix for the TK1 can be up to 127.

ISO

This group defines the start and end sentinel for each track. The sentinel is always used to extract the track data from the whole MSR data string. The data length for each sentinel is fixed to one character. Because there is ISO standard that defining the start and end sentinel for the three tracks. For the compatible reason, please do not modify the default value if possible.

Decode Mode

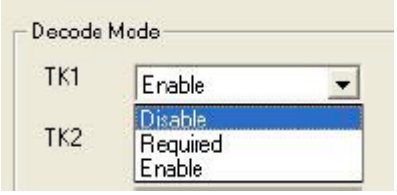
For this group, it contains two kinds of settings, which are:

- **Track Data Filtering**: Determine which track to be, not to be output or needed to be output.
- **Switch Output Order**: Change the output order of track 1 ~ 3.

6. Device Driver Installation

Track Data Filtering

Shown below is the filter setting for track 1. This provides a fool-proofing method in case of receiving unwanted or uncompleted track data.

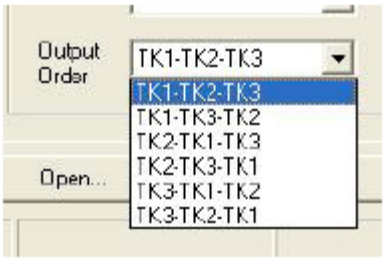


These three filter settings are:

- **Enable**: If selected, the data of specified track will be packaged in the MSR data string. If the specified track data is not decoded, it will leave blank in the MSR data string.
- **Required**: If selected, which means the output MSR data string must contain the specified track data. If the specified track data is not decoded, even MSR data string contains other track data, it will still not to be output.
- **Disable**: If selected, the data of specified track will not be packaged in the MSR data string. No matter it is decoded or not.

Switch Output Order

Show below is the selection of the three track data output order (sequence). The default order is Track 1–Track 2–Track 3.



There 6 orders allow to be selected. Please select one to fit your application needs.

6. Device Driver Installation

Update Settings

Once complete the settings, click Update to update the settings to connected HID MSR reader.

Save Settings

To save the settings to a file, click Save; specify the file name and location to be saved.

Open Settings

To load pre-saved settings, click Open, specify the settings file, and then click OK to load into program.

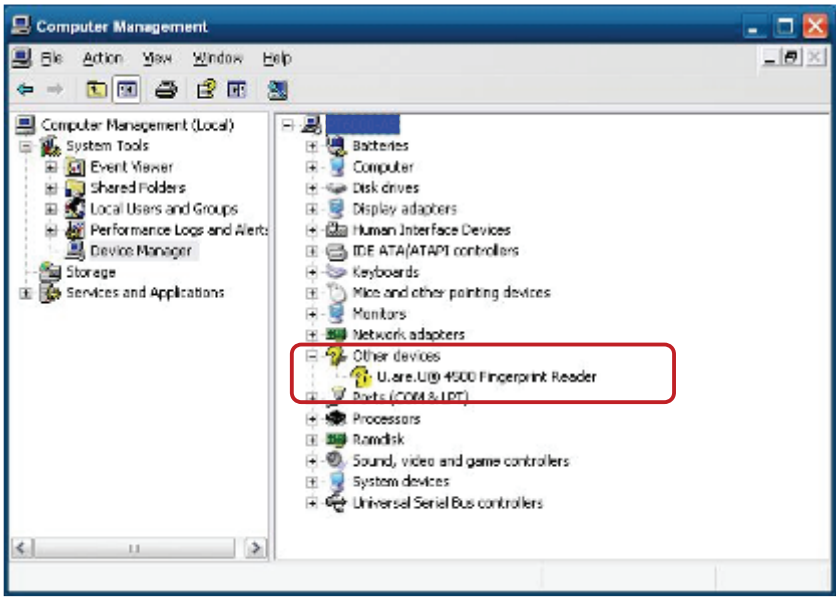
Restore MSR Reader Settings

To load restore settings of connected MSR reader, click Restore ES2: End sentinel for track.

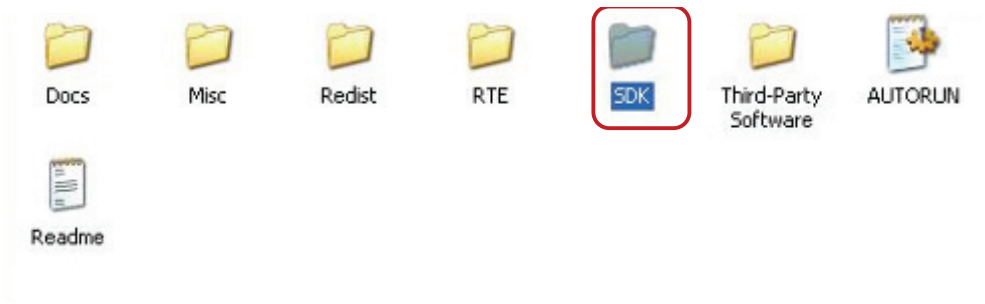
6. Device Driver Installation

6-3 Fingerprint Reader

1. Check Fingerprint reader be detected by “Device manager “.



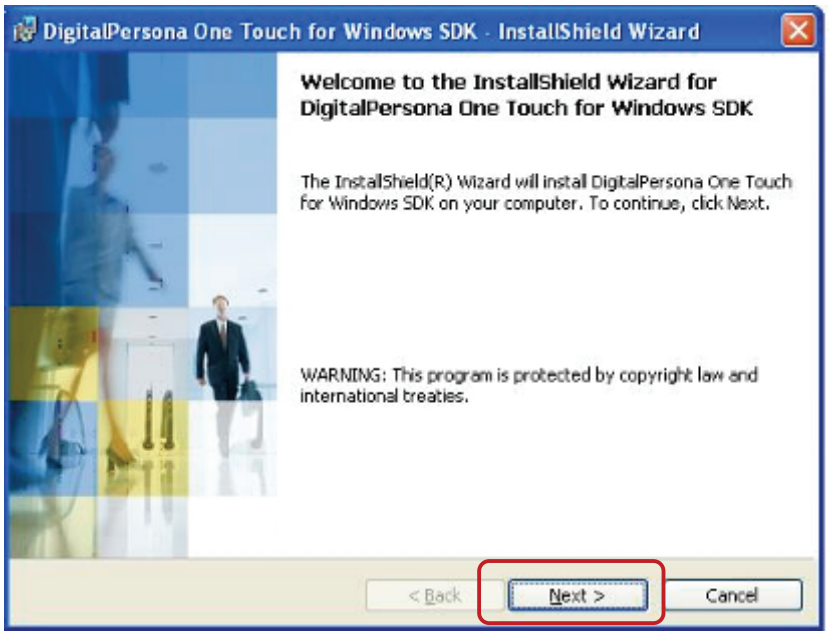
2. Select SDK folder.



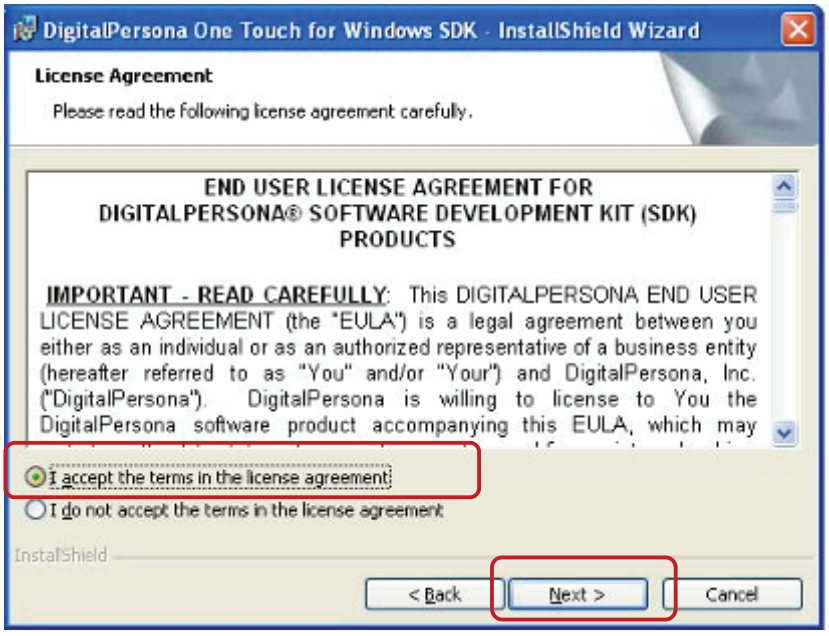
3. Run **Setup.exe**.

6. Device Driver Installation

4.Click “**Next**”.

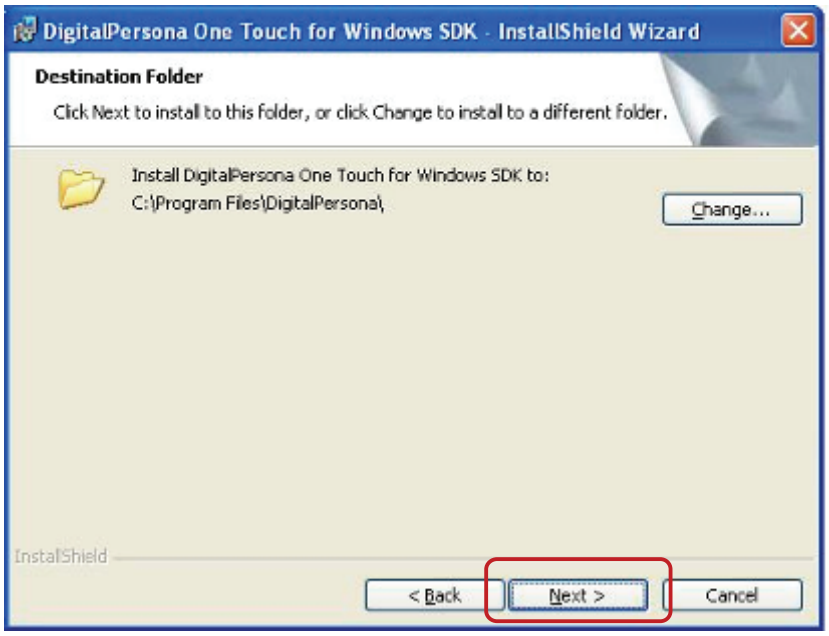


5. Select “**I accept the terms in the license agreement**” and click “**Next**”.

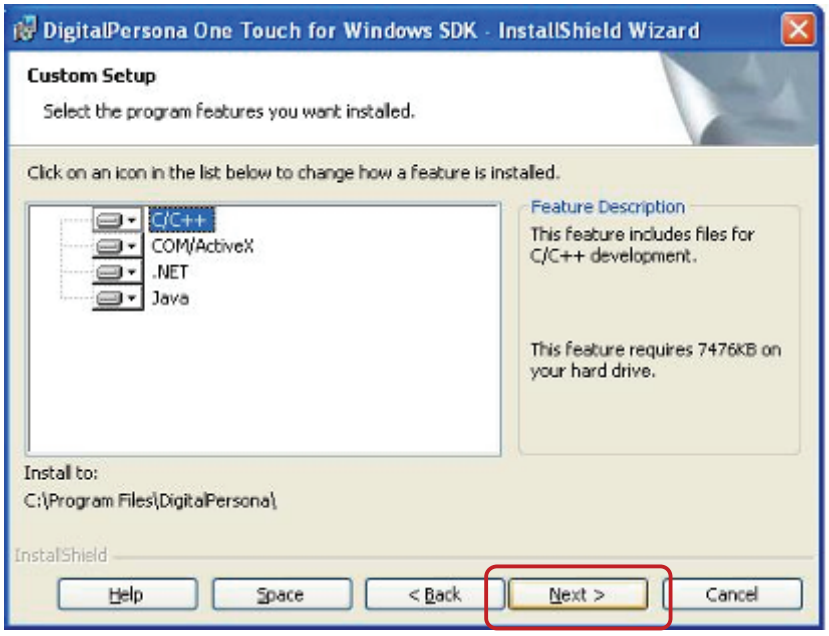


6. Device Driver Installation

6. Click “**Next**”.

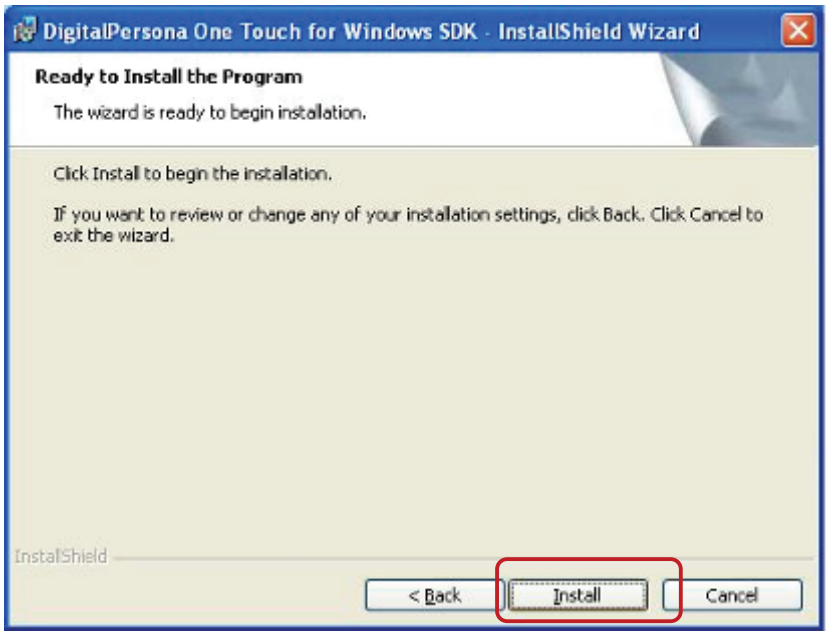


7. Click “**Next**”.



6. Device Driver Installation

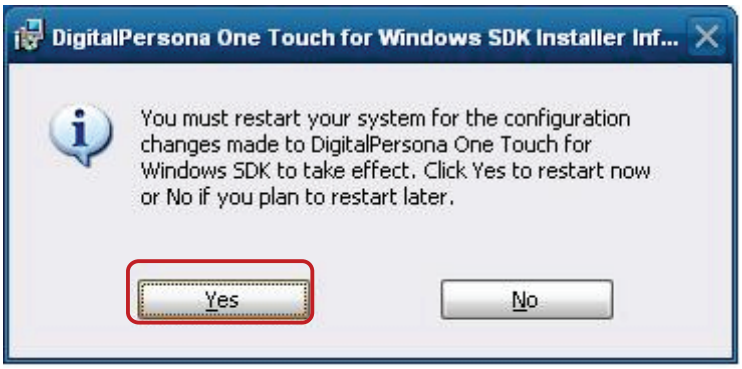
8. Click “**Install**”.



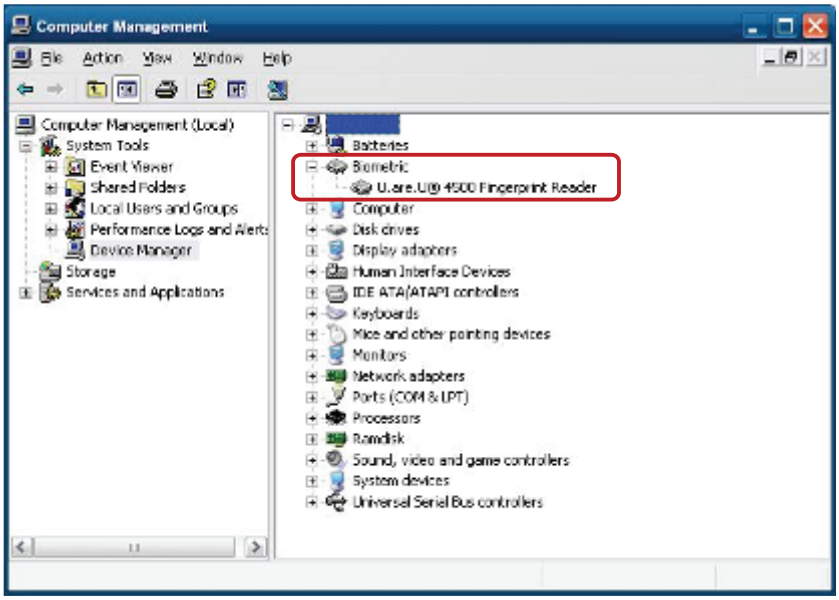
9. Click “**Finish**”.

6. Device Driver Installation

10. Restart systems.

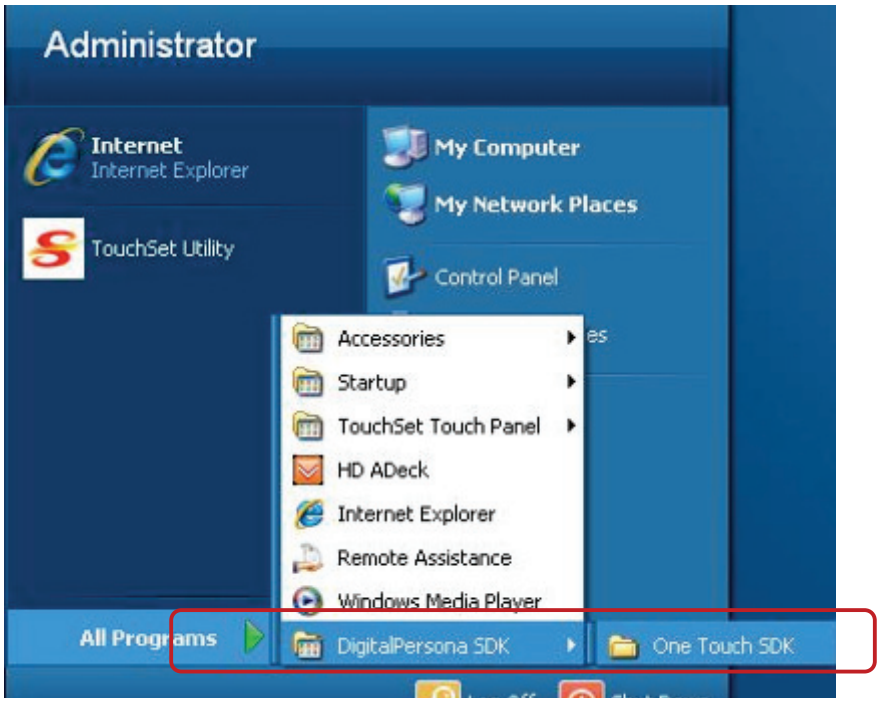


11. Check Fingerprint reader in Device Manager.

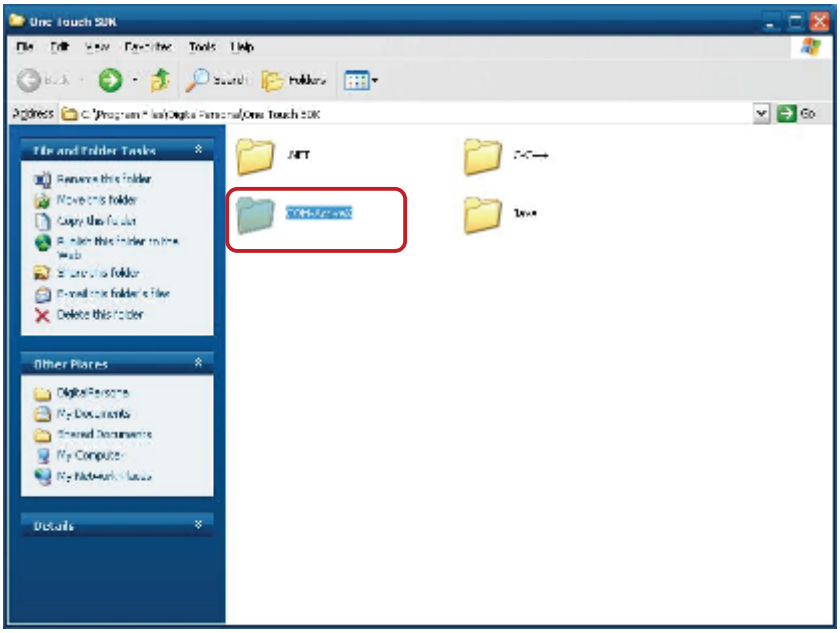


6. Device Driver Installation

12. Launch Fingerprint reader from start menu.

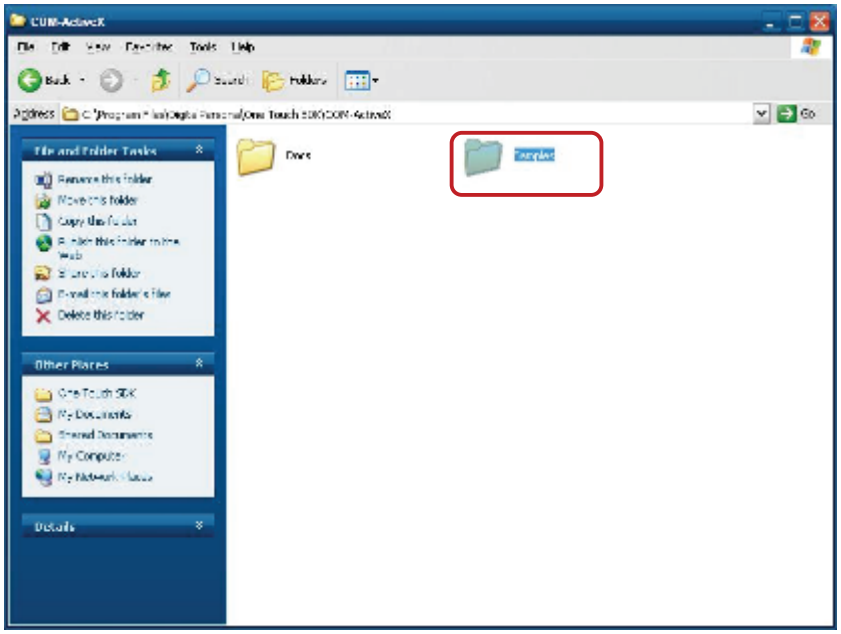


13. Select “COM-ActiveX”.

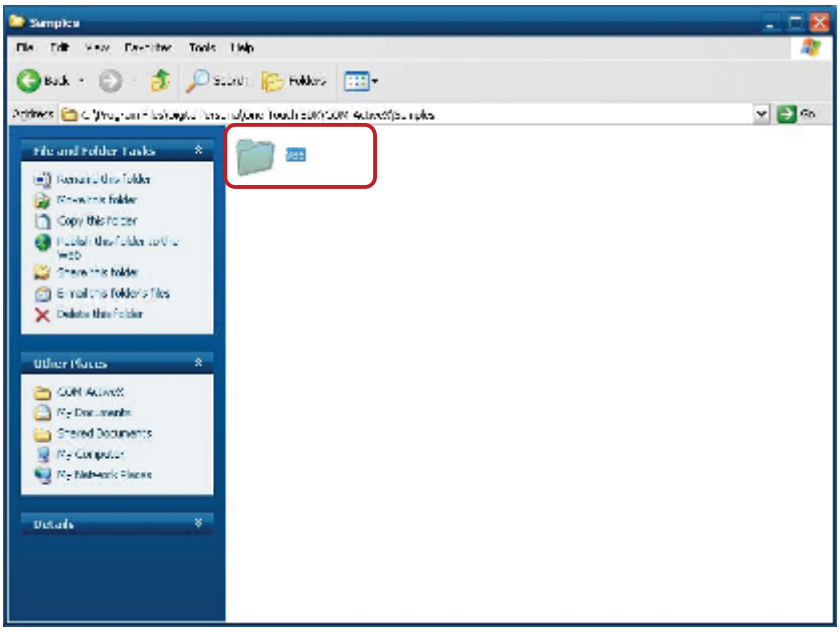


6. Device Driver Installation

14. Select “**Sample**” .

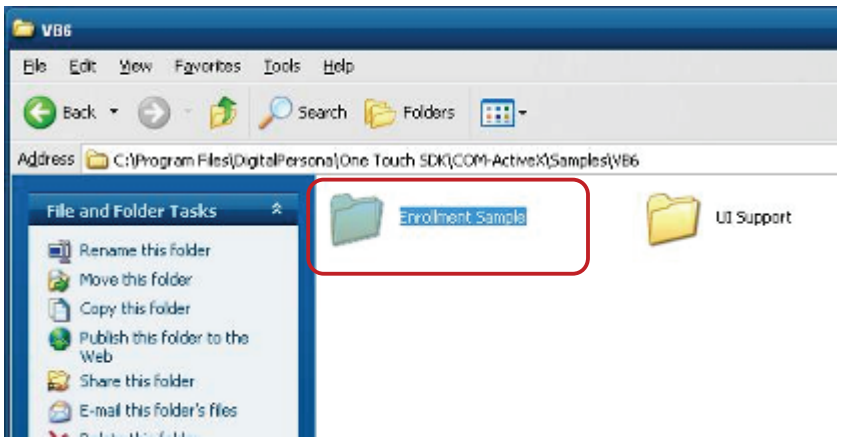


15. Select ”**VB6**’.

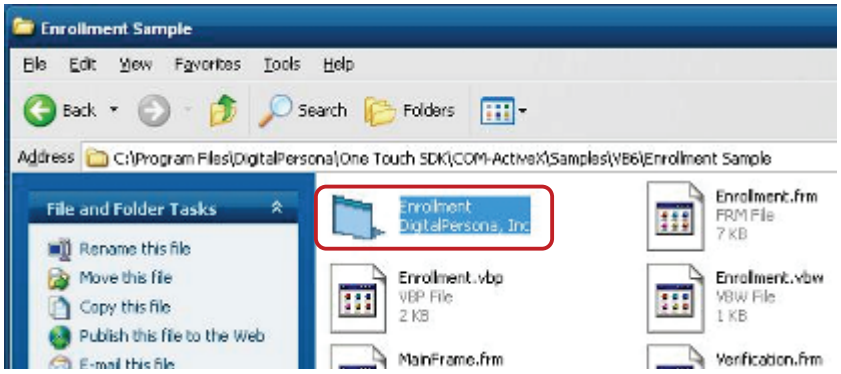


6. Device Driver Installation

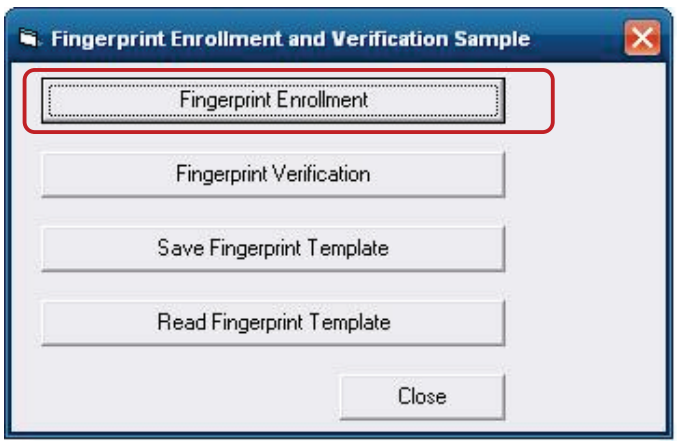
16. Select “**Enrollment Sample**”.



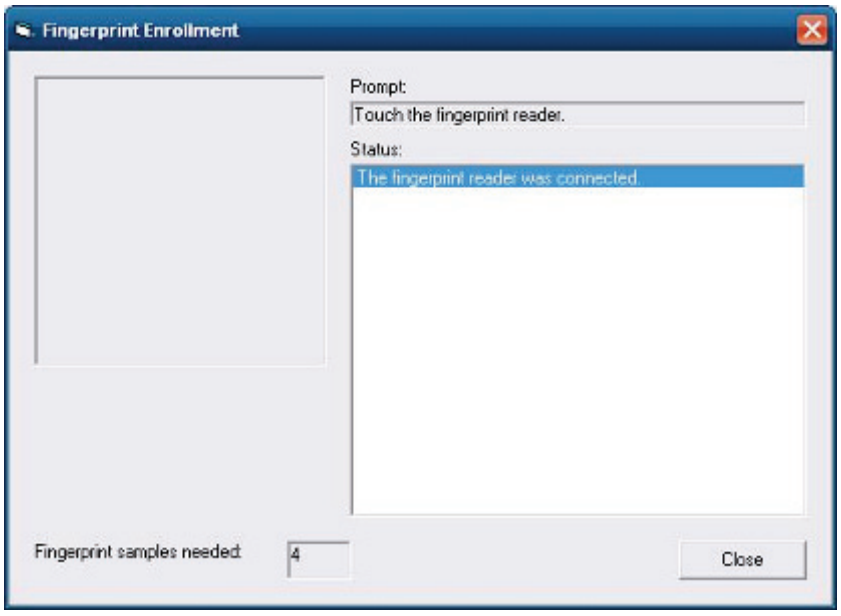
17. Enroll the fingerprint by the “**Enrollment**“ .



18. Select “**Fingerprint Enrollment**”.

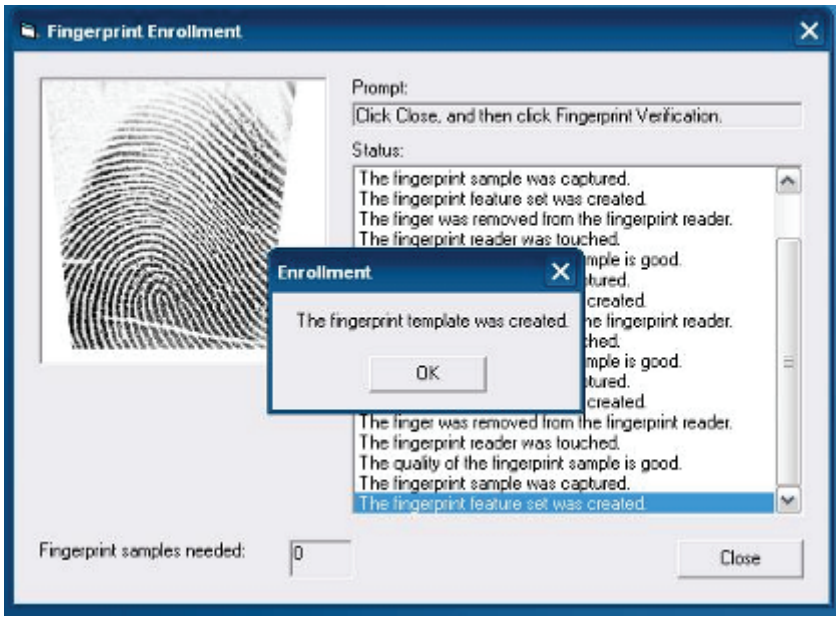


6. Device Driver Installation



19. Put your finger on fingerprint reader and follow the direction to enroller your fingerprint, it need scan your fingerprint 4 times.

20. After enroller finish it will popup a dialog box.

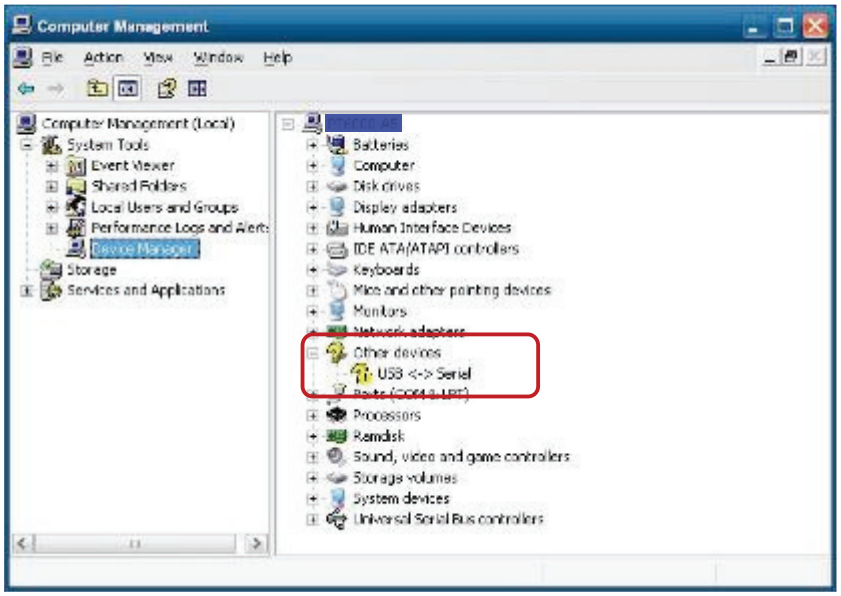


6. Device Driver Installation

6-4 RFID

1. Install (Operating System: Microsoft Windows POSReady 2009)

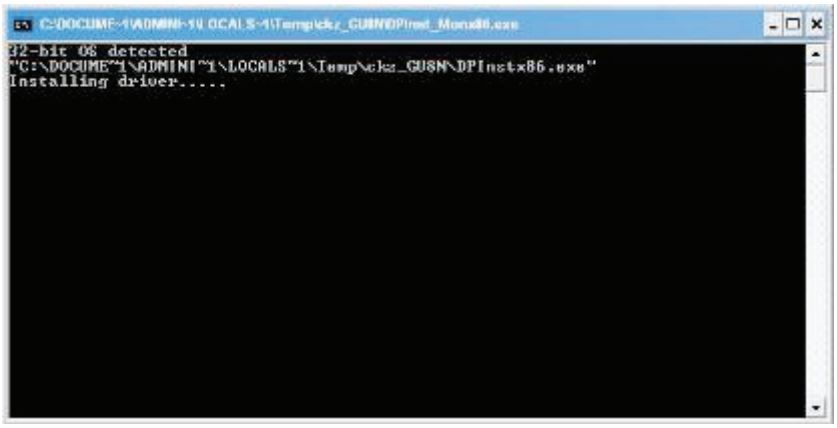
   1.1 Check the Device Manager to verify the status of RFID reader.
   Computer Management -> Device Manager -> Other devices
   (The device will show a question mark if the installation is not done properly.)



1.2 Install RFID driver file name · XP2KxVista.exe

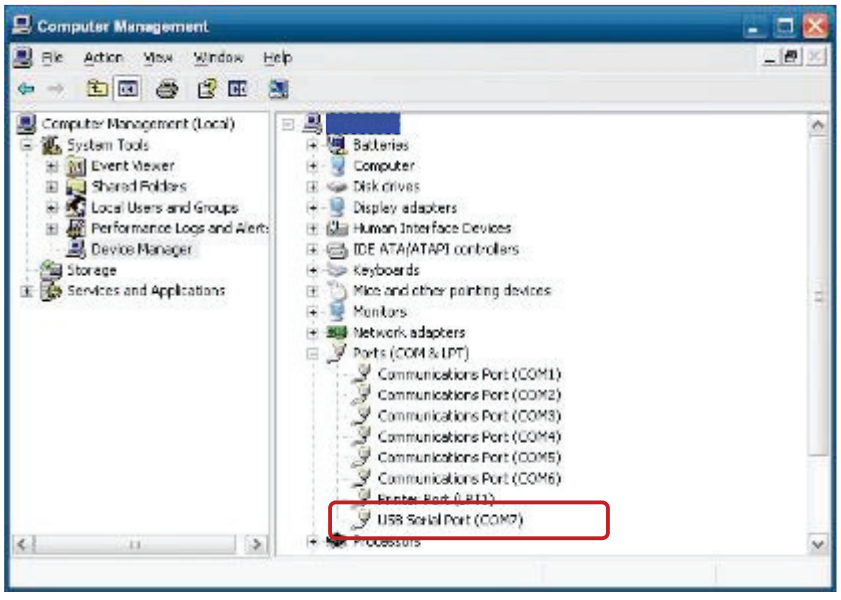
6. Device Driver Installation

1.2.1 After clicking Next, A pop up console window appears as below.



1.2.2 Check the Device Manager to verify the status of RFID reader.

Computer Management → Device Manager → Ports (COM & LPT)

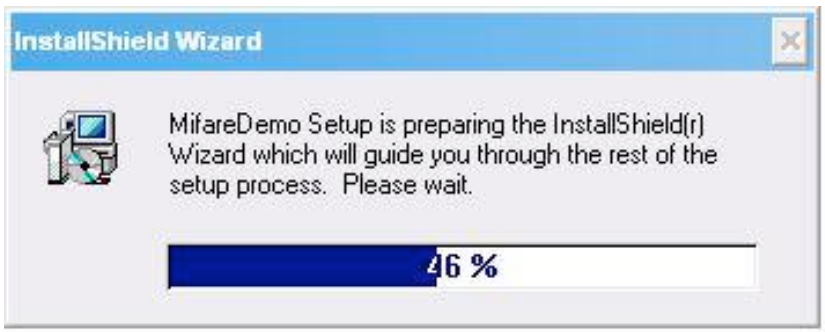


6. Device Driver Installation

1.3 Install RFID utility.

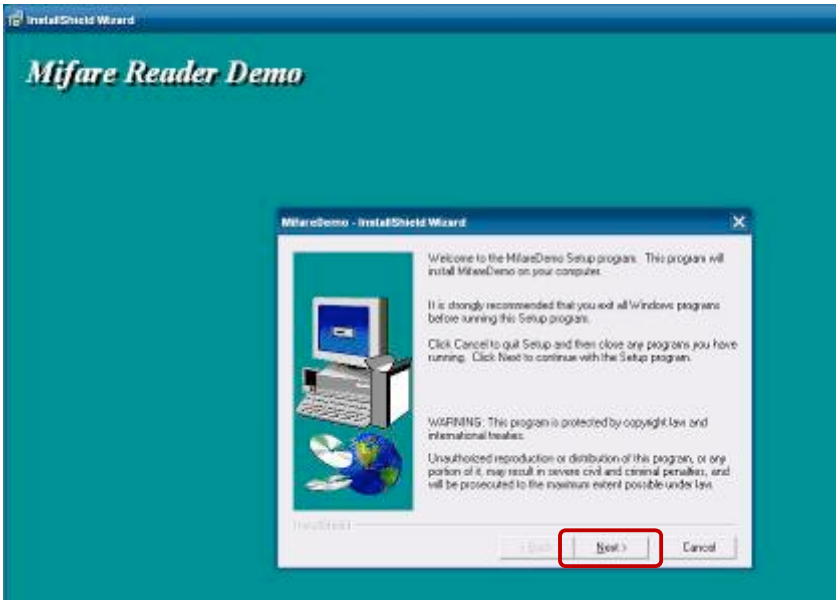
MifareDemoSetup_PSW00020.exe

1.3.1 InstallShield Wizard will be activated.

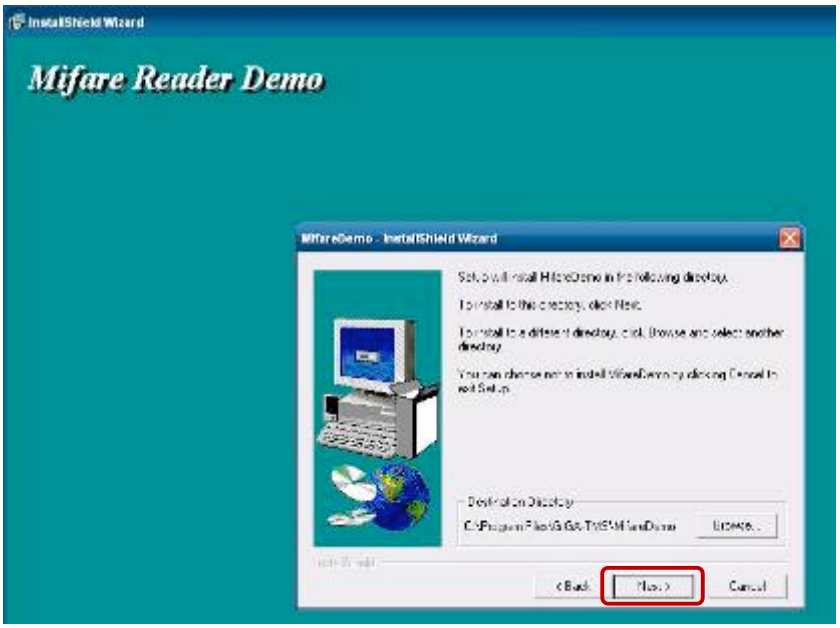


6. Device Driver Installation

1.3.2 Click “**Next**”.

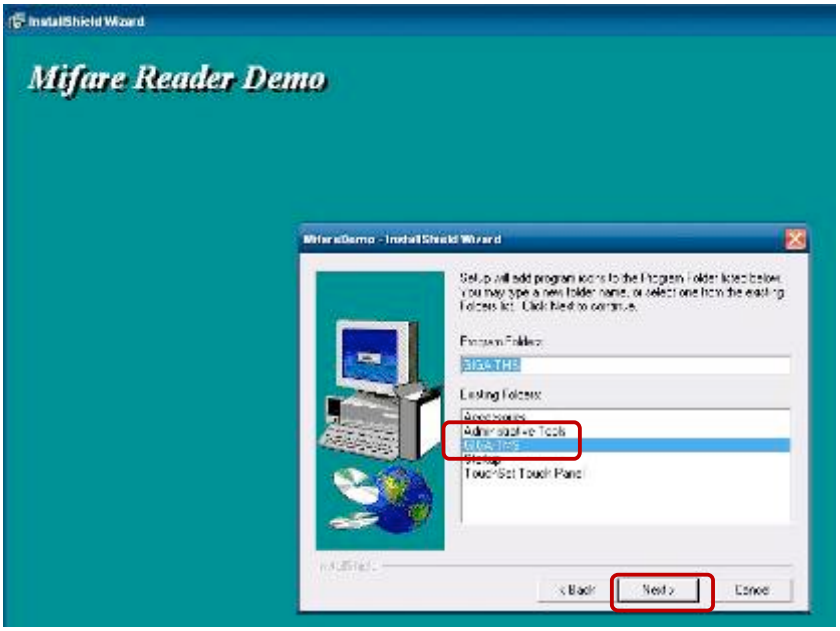


1.3.3 Click “**Next**”.

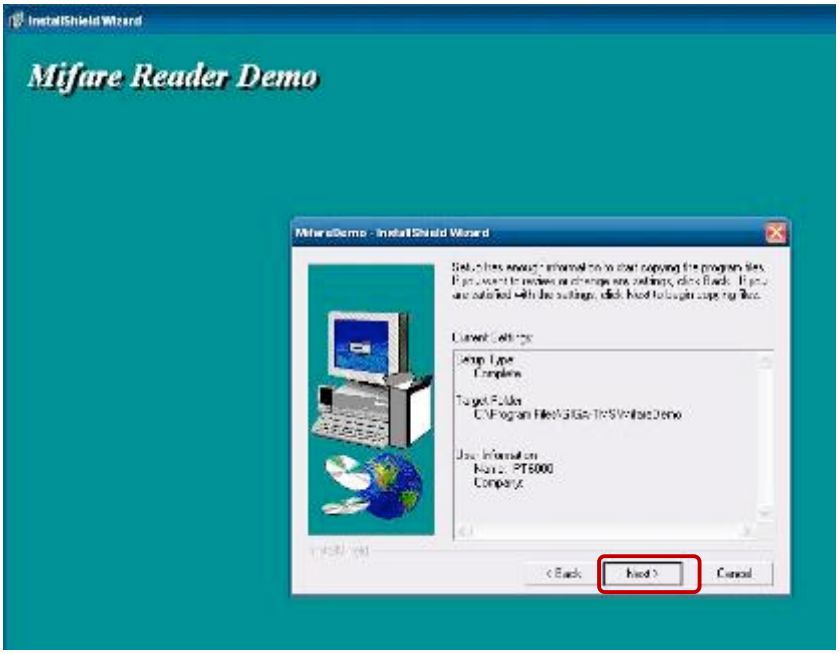


6. Device Driver Installation

1.3.4 Click “**Giga-TMS” & “Next**”.

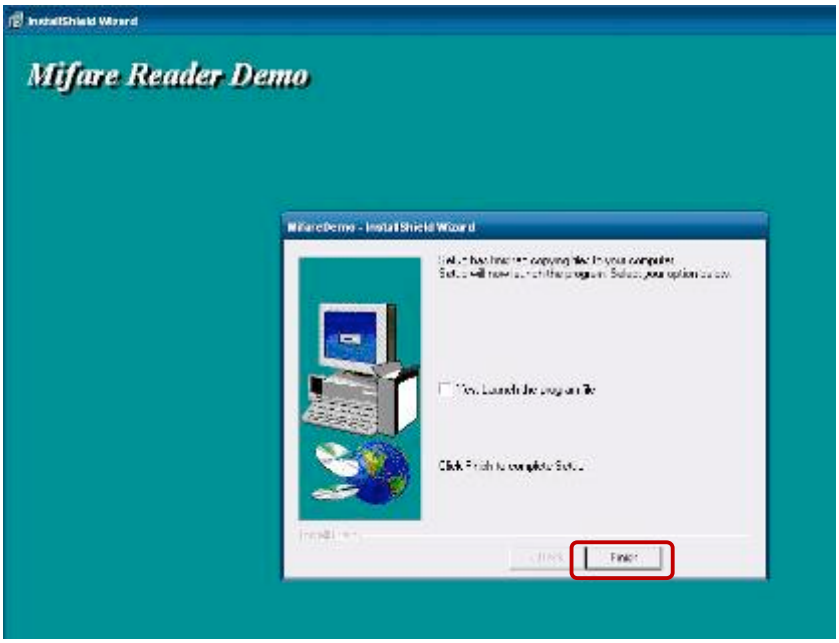


1.3.5 Click “**Next**”.

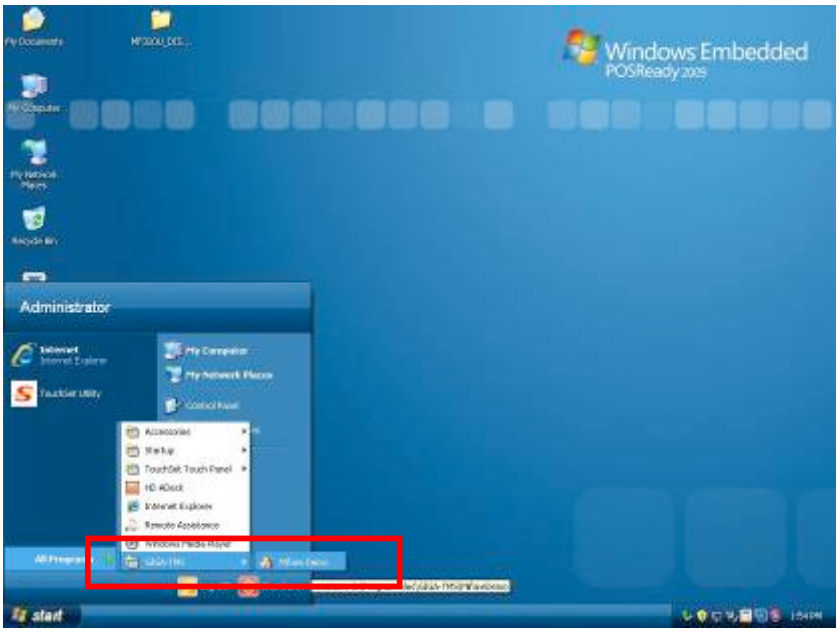


6. Device Driver Installation

1.3.6 Click “**Finish**”.

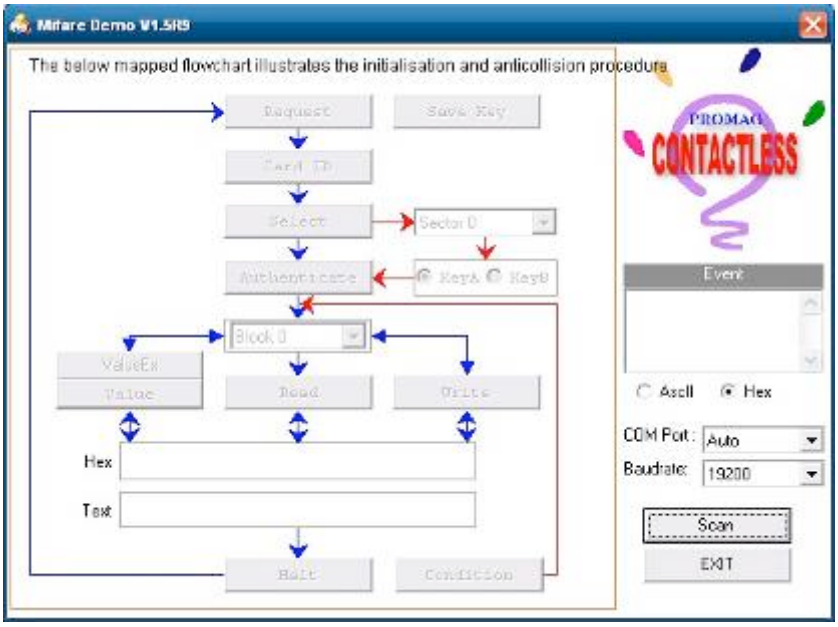


2. Run RFID demo program. Start -> All Programs -> GIGA-TMS -> **Mifare Demo**

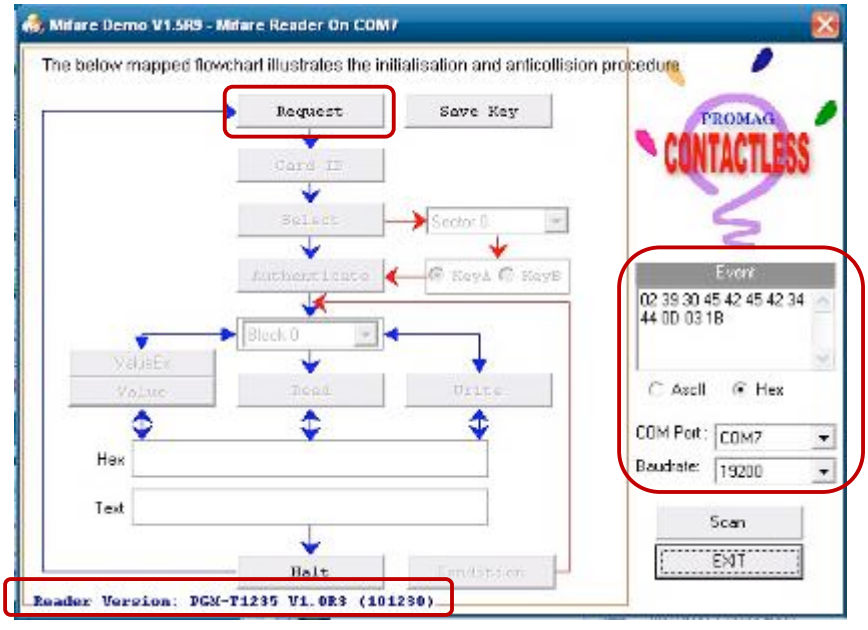


6. Device Driver Installation

2.1 Run “**Auto Scan**” Demo AP will detect the RFID reader automatically or select the RFID COM port.



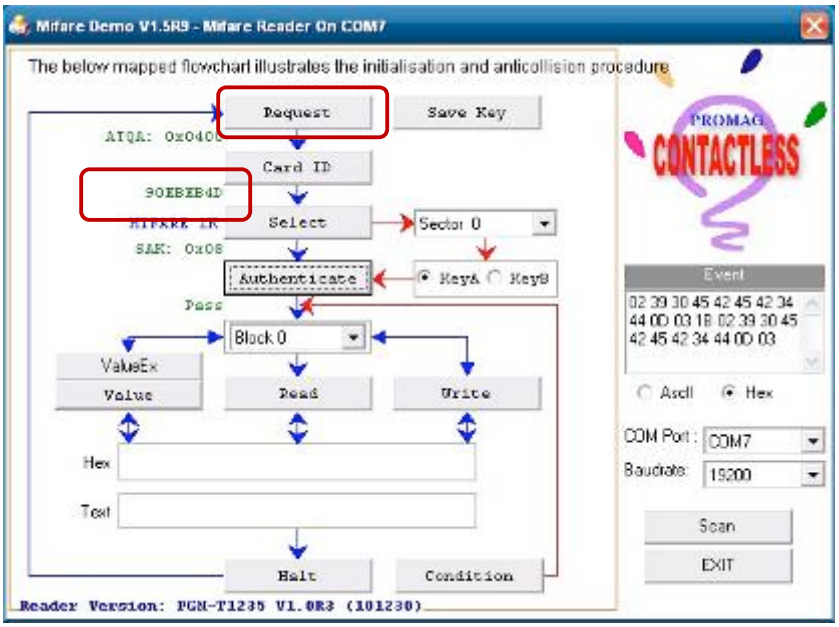
2.2 After finishing the AutoScan, Request box will be ready for the click and Reader Version will show on the position as marked. (Reader Version: PGM-T1235 V1.0R3 (101230) Place Mifare Card to the RFID reader area. Event Dialog window gets the data from the Mifare Card.



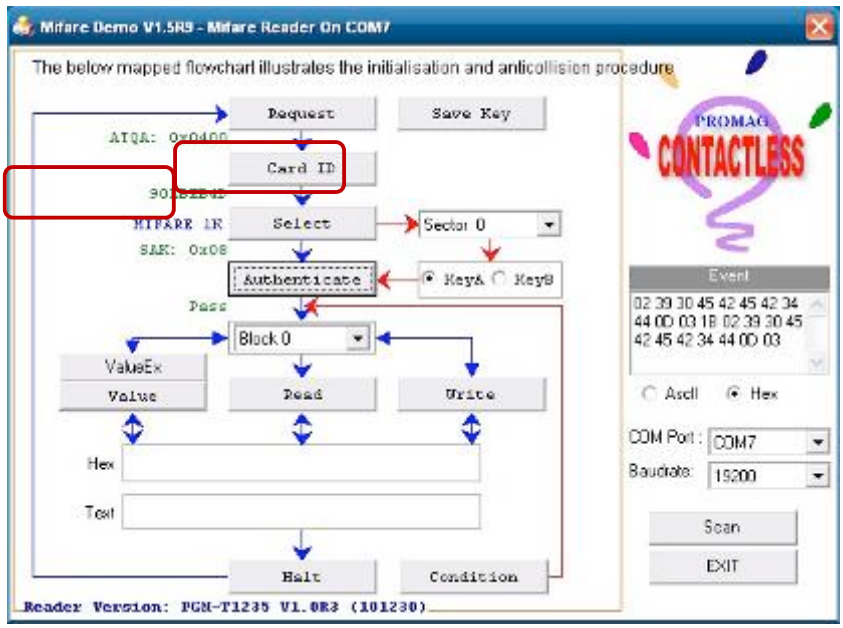
6. Device Driver Installation

Place the RFID card on the RFID reader.

2.3 **Card type** will be recognized when you click “**Request**”.
(Your Mifare card should be placed on the RFID reader area.)

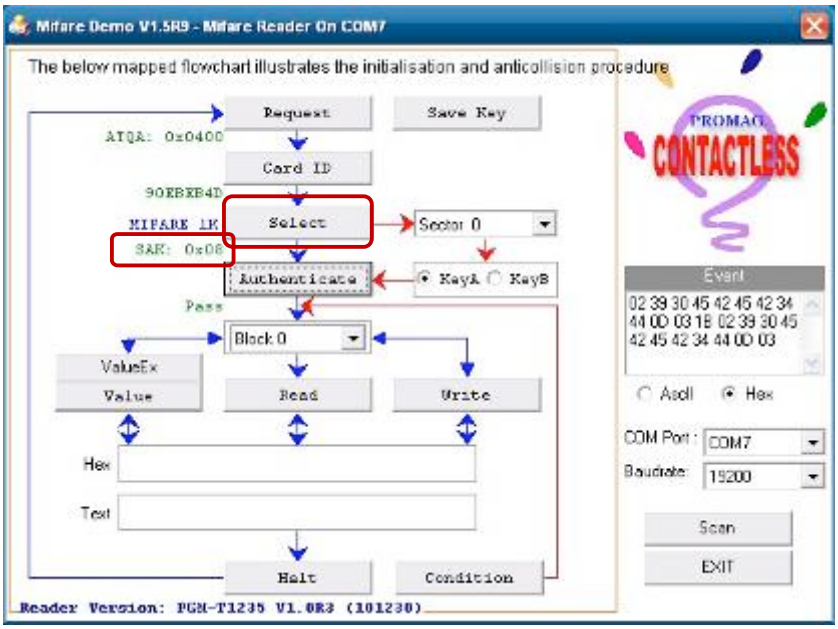


2.4 **Card ID** will be recognized when you click “**Card ID**”.

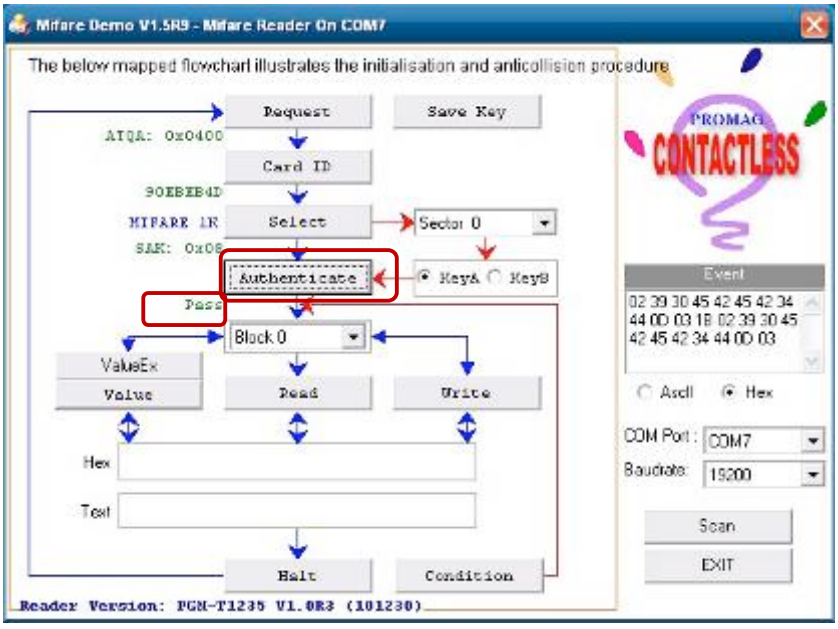


6. Device Driver Installation

2.5 SAK will be read when you click “**Select**”.



2.6 The result will show when you click “**Authenticate**”.



6. Device Driver Installation

6-5 Internal VFD

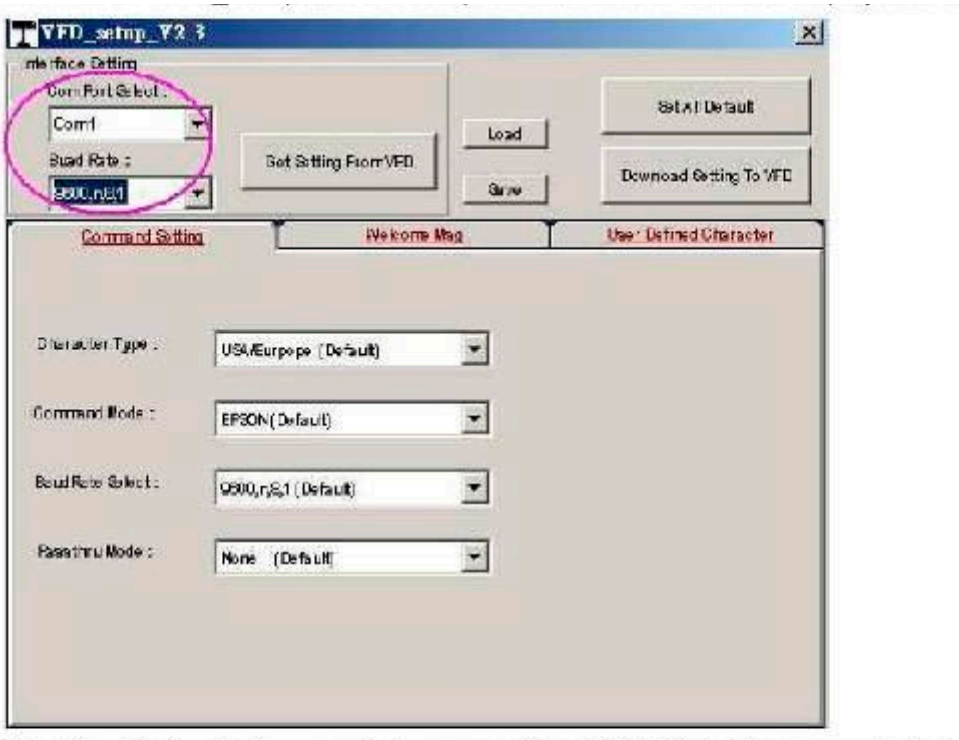
Specification			
General	Display Method	Vacuum Fluorescent Display(blue-Green)	
	Number of Characters	40 (20 Columns X 2 Lines)	
	Brightness	500 ~ 1000 cd/m2	
	Character Font	5X7 Doc Matrix	
	Character Type	95 Alphanumeric, 32 International Characters	
	Character Size	6.75(H) X 3.75(W)mm	
	Doc Size (X x Y)	0.55 x 0.75 mm	
	Download Characters	9 Characters	
Commands Mode	LD220, EPSON POS D101(default), AEDEX, UTC/S, UTC/P, ADM788, DSP800, CD5220, EMAX, LOGIC CONTROL		
Language Support	USA, France, Germany, UK, Sweden, Denmark I & II, Italy, Spain, Norway, Japan(Katakana), Slavonic, Russian, Greek, Czech, Lativain		
Interface	RS-232(Serial)		
Connection	Baud Rate	Direct Connection 9600 or 19,200 bps	
Reliability	MTBF	30,000 Hours	
Power	Consumption	5-12 VDC	
Safety	EMC Standards & Safety Standards	FCC, CE	

6. Device Driver Installation

Setup Software Utility Guide

1. Power on, and waiting test page of EEPROM test, Baud rate, and Command page. And you may set up the customer display by "VFD_Setup.exe" Utility.

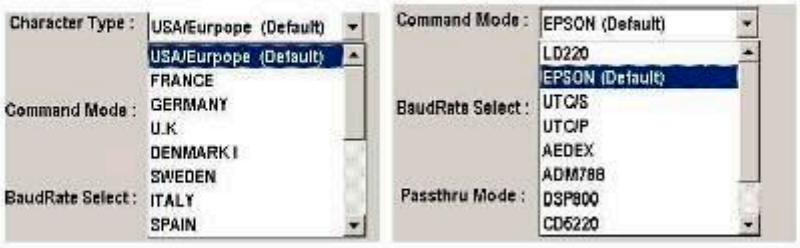
2. To execute "VFD_Setup.exe" for setup communication between display and Utility.



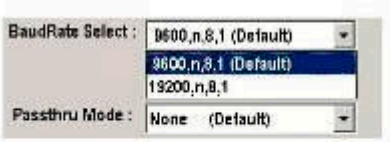
The Baud Rate will show on states age of the Utility (Note: You may check it when power on the display).

3. "Get Setting From FVD" button.
To get all setting from the display and it`ll refresh the "VFD_setup.exe" utility.

4. "Character Type"/ "Command Mode"/ "BaudRate Select"/ "Passthru Mode"
Please refer to Chapter 4-5 user manual.



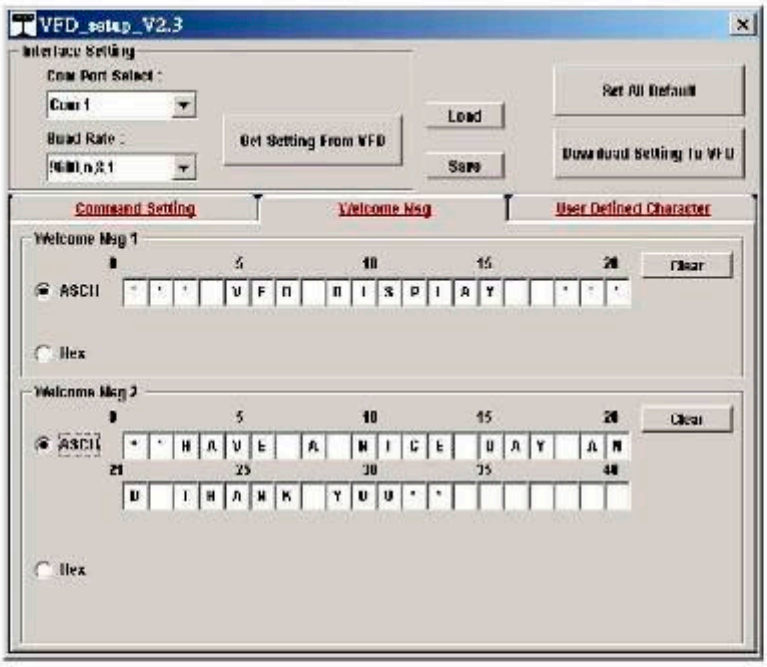
6. Device Driver Installation



5. "Set ALL Defaut" button.
   To show default setting, the Default table is,
   - Character Type :USA
   - Command Type :Epson
   - BaudRate Setting :9600/n/8/1
   - Passthru Mode :None
   - Welcome msg line1 :*** VFD DISPLAY ***
   - Welcome msg line2 :** HAVE A NICE DAY AND THANK YOU **

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

   a. ASCII mode

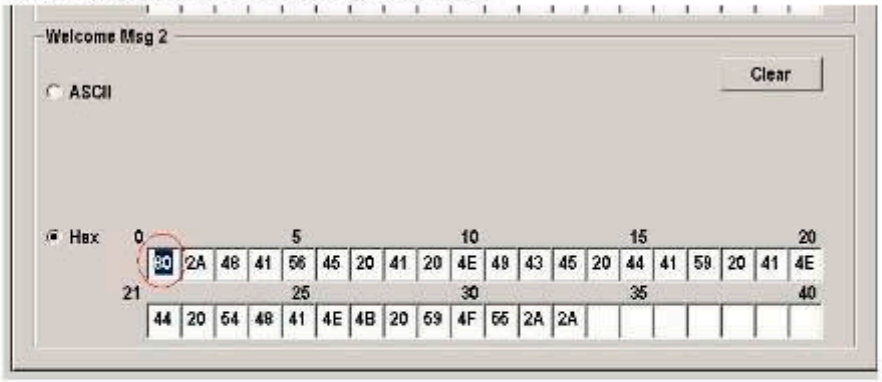


   You can type the character by keyboard (0x20h ~ 0x7Fh), if you press clear icon, it will clear the all Msg characters on AP.

   b. Hex mode
   Hex mode can define the character from 0x20h to 0xFFh , the range 0x80~0xFF.

6. Device Driver Installation

which depends on the code page table.



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

7. "Download settings to VFD" button
   This button is to download the setting from VFD_Setup.exe to display.
   *After success dialog "Download O.K ! Rlease restart !" message popped up, you must restart display for enable new setting.

8. "Save" button
   To save user`s setting in file, example: below picture to save file name as "Rename-GOODLUCK" file set for Welcome Msg.
   P.s: The default setting named "VFD.vfd" which can`t be made any setting change.

9. "Load" button
   For saving your time, you could load any setting file which you made before to the display.
   You must restart the display for enable the new settings.

6. Device Driver Installation

6-6 i-Button Reader Configuration Utility

The i-Button Reader Configuration Utility is used to set up the output format of HID MSR.

Installation

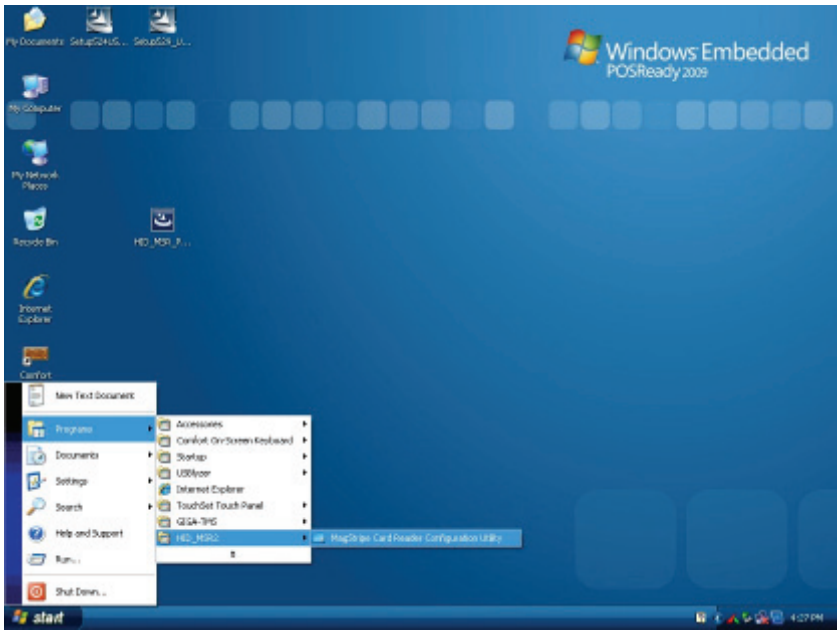
Below steps guide you how to install the Utility program:

- Insert the setup CD.
- Run the **HID_MSR_PSW00003_V2_0_0.exe** setup file that is located in the Software folder of CD.
- Follow the wizard to complete the installation.

Launching Program

Below steps guide you how to load the **Utility** program:

- From **Start/Programs**, click **HID_MSR2** folder.
- Click **MagStripe Card Reader Configuration Utility** to launch the program.

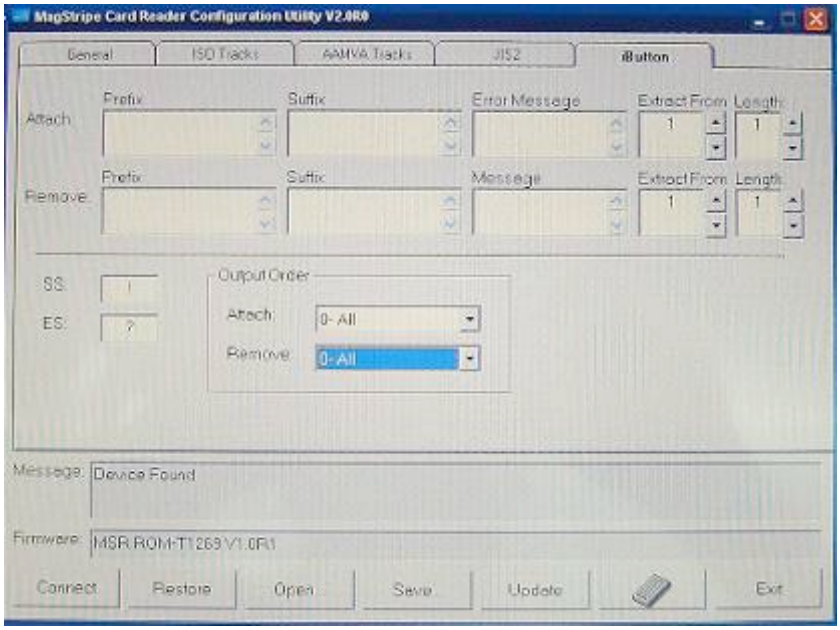


6. Device Driver Installation

- The utility program will detect the connected reader. If detected, all the input text boxes will be enabled.
- If the reader has not been connected to PC yet, please connect the reader and then click Refresh to get connected.

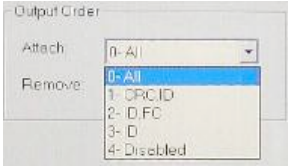
Configuration

Below is the main window of i-Button **Utility** program:



For the settings, there are:

- **Prefix/Suffix**: Defines the data string which you would like to append in front or end of the i-Button key string.
- **Error Message**: Indicates error message when i-Button key read fail.
- **Message**: Indicates message when i-Button key read correctly.
- **SS/ES** : Define Start and End sentinel byte for the i-Button ID string.
- **Length** : i-Button ID length request from 0~16.
- **Output order** : 4 format could be select at Attach /Remove i-Button ID.



6. Device Driver Installation

Update Settings

Once complete the settings, click Update to update the settings to connected HID MSR reader.

Save Settings

To save the settings to a file, click Save; specify the file name and location to be saved.

Open Settings

To load pre-saved settings, click Open, specify the settings file, and then click OK to load into program.

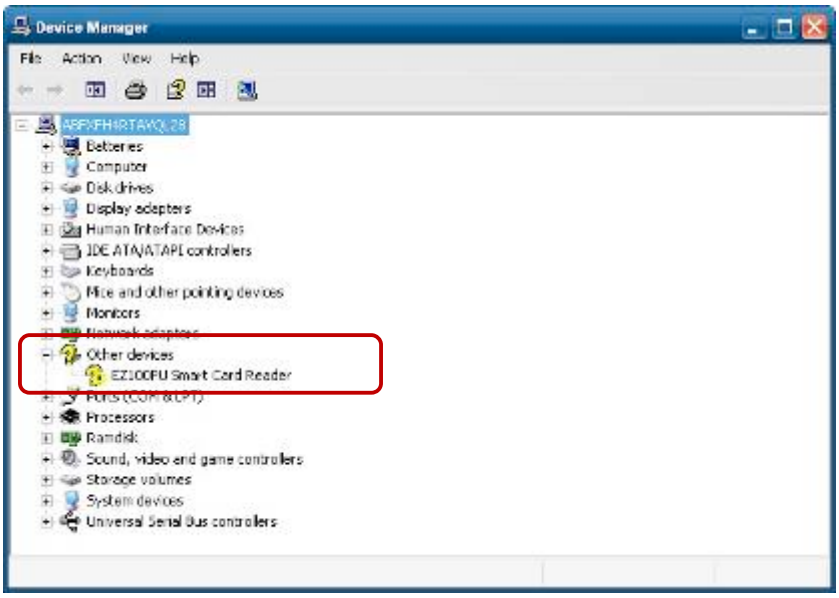
Restore iButton Reader Settings

To load restore settings of connected iButton reader, click Restore ES2: End sentinel for track.

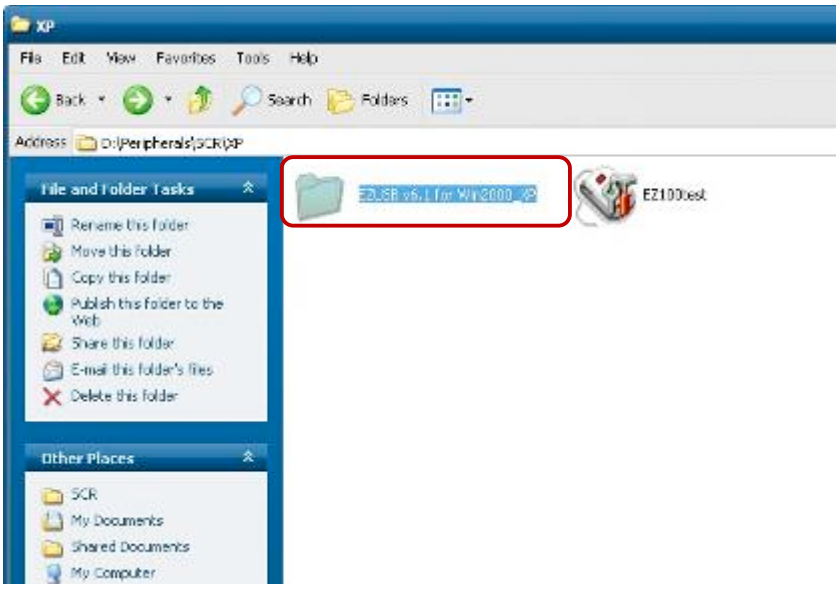
6. Device Driver Installation

6-7 Installation and Testing of Smart

1. Check smart card reader be detected by “Device manager”.

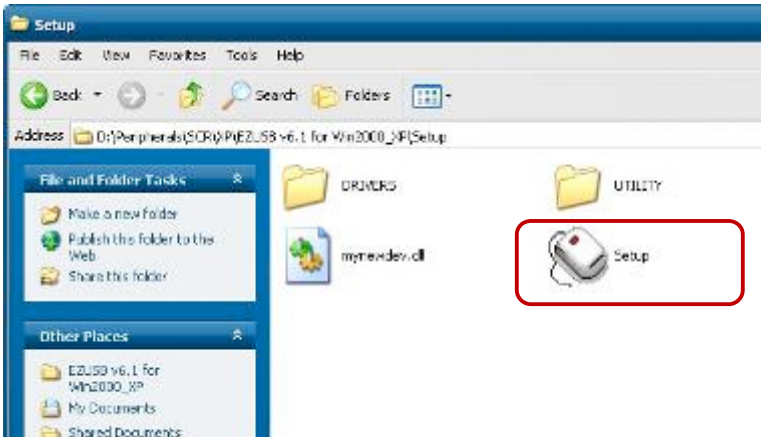


2. Install the SCR driver.

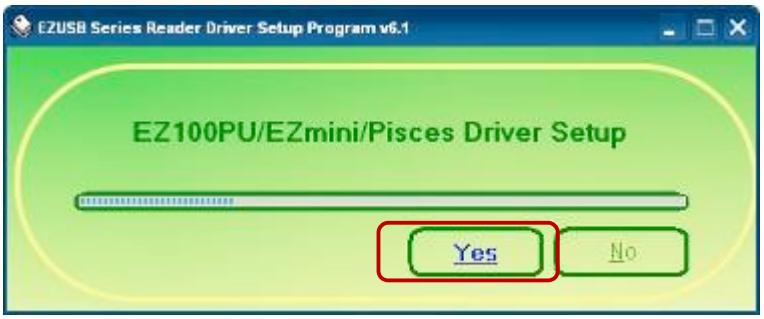


6. Device Driver Installation

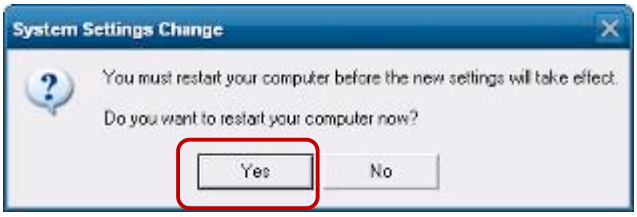
3. Run Setup.exe.



4. Click "**Yes**".

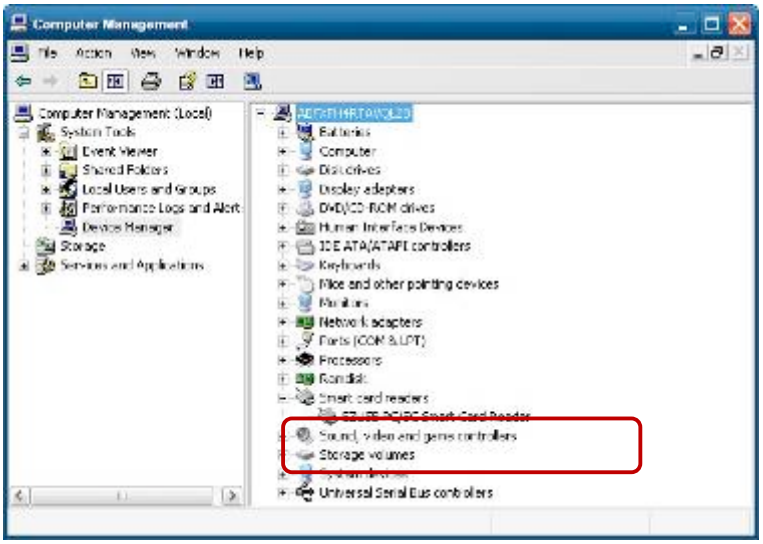


5. Restart systems.



6. Device Driver Installation

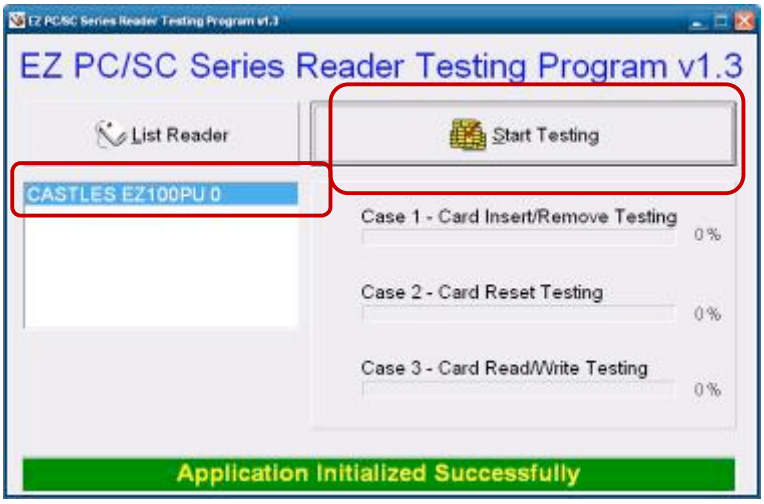
6. Check SCR reader in Device Manager.



7. Run the testing program – EZ100test.

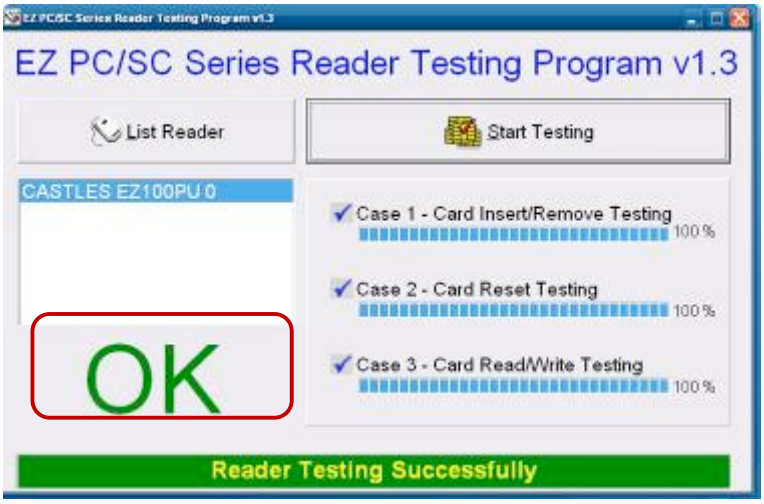
6. Device Driver Installation

8. Conferm that SCR can be detected by the testing program, then run the program - the Start Testing.



9. Follow dialog boxes displayed to remove and insert card.

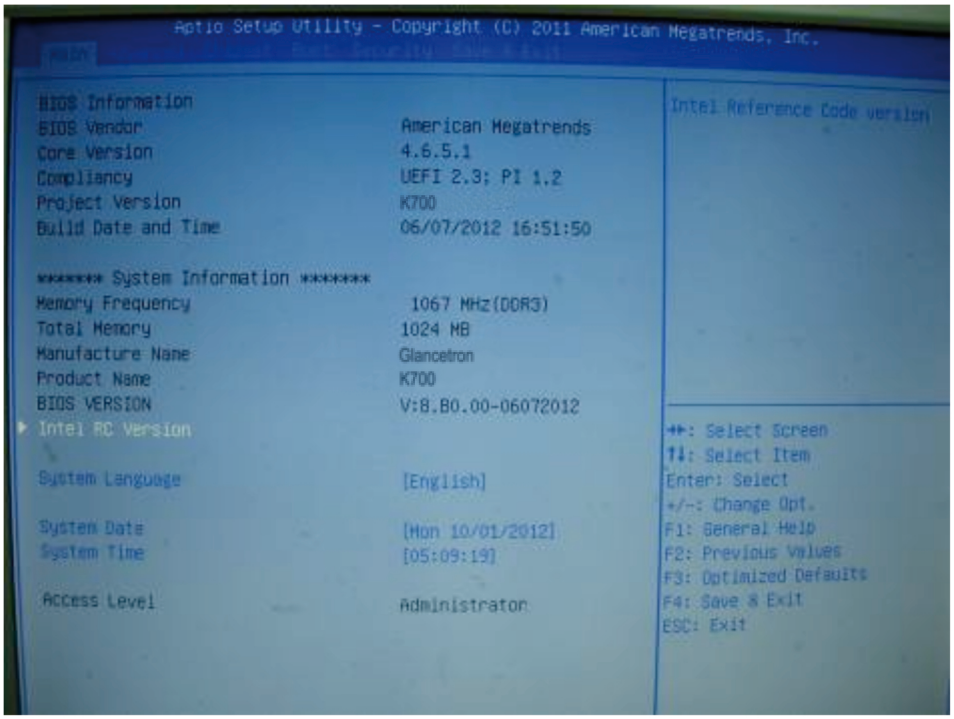
10. After finishing the testing, the dialog box will show "**OK**".



6. Device Driver Installation

Press <DEL > / <F2> key to enter BIOS SETUP UTILITY when system boot up.

- Please press <DEL > / <F2> key tenderly and slowly.



Date and Time

The Date and Time items show the current date and time on the computer. If you are running a Windows OS, these items are automatically updated whenever you make changes to the Windows Date and Time Properties utility.

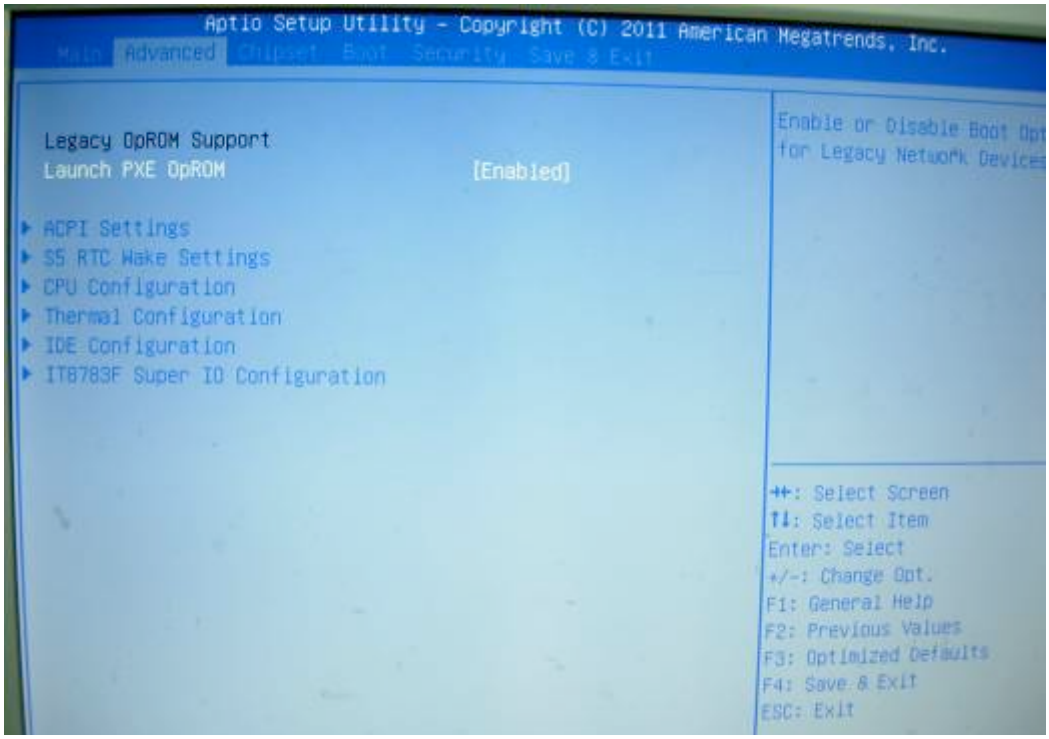
WARNING!

Setting the wrong values in the sections below may cause the system to malfunction. Make sure that the settings made are compatible with the hardware.

7. BIOS/Utility setup

7-1 Advanced

Use the Advanced menu to configure the CPU and peripheral devices through the following sub-menus:

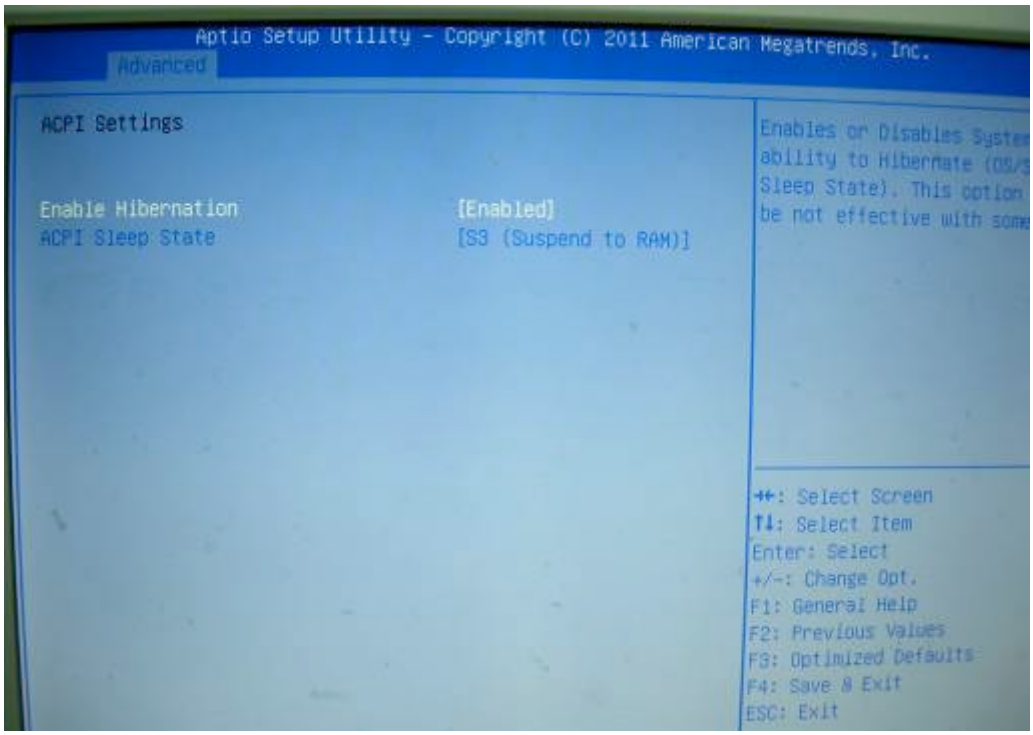


Launch PXE OPROM: Enable or Disable PXE Function.

7. BIOS/Utility setup

7-1-1 ACPI Configuration

The ACPI Configuration menu configures the Advanced Configuration and Power Interface (ACPI) options:



ACPI Sleep State

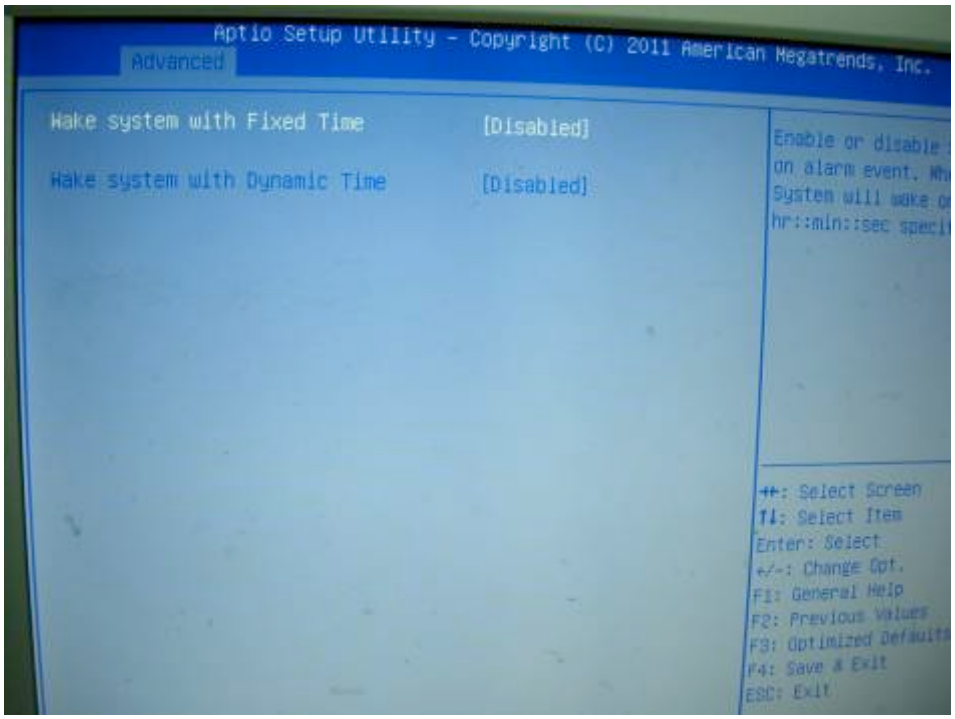
Use the ACPI Sleep State option to specify the sleep state the system enters when it is not being used.

1. **Suspend Disabled**
2. **S1 (CPU Stop Clock)**
   DEFAULT The system enters S1 (POS) sleep state. The system appears off. The CPU is stopped; RAM is refreshed; the system is running in a low power mode.
3. **S3 (Suspend to RAM)**
   The caches are flushed and the CPU is powered off. Power to the RAM is maintained. The computer returns slower to a working state, but more power is saved.

7. BIOS/Utility setup

7-1-2 S5 RTC Wake Settings

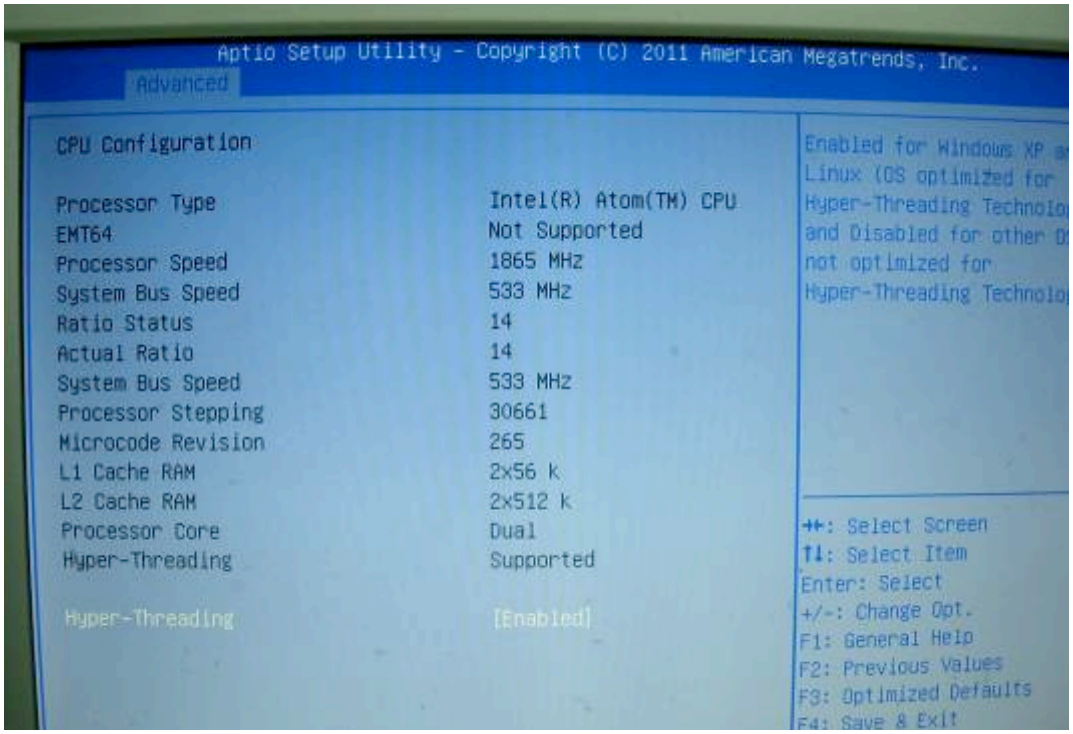
Enable or disable system wake on alarm event. When enabled, system will wake on the hr::min::sec specified:



7. BIOS/Utility setup

7-1-3 CPU Configuration

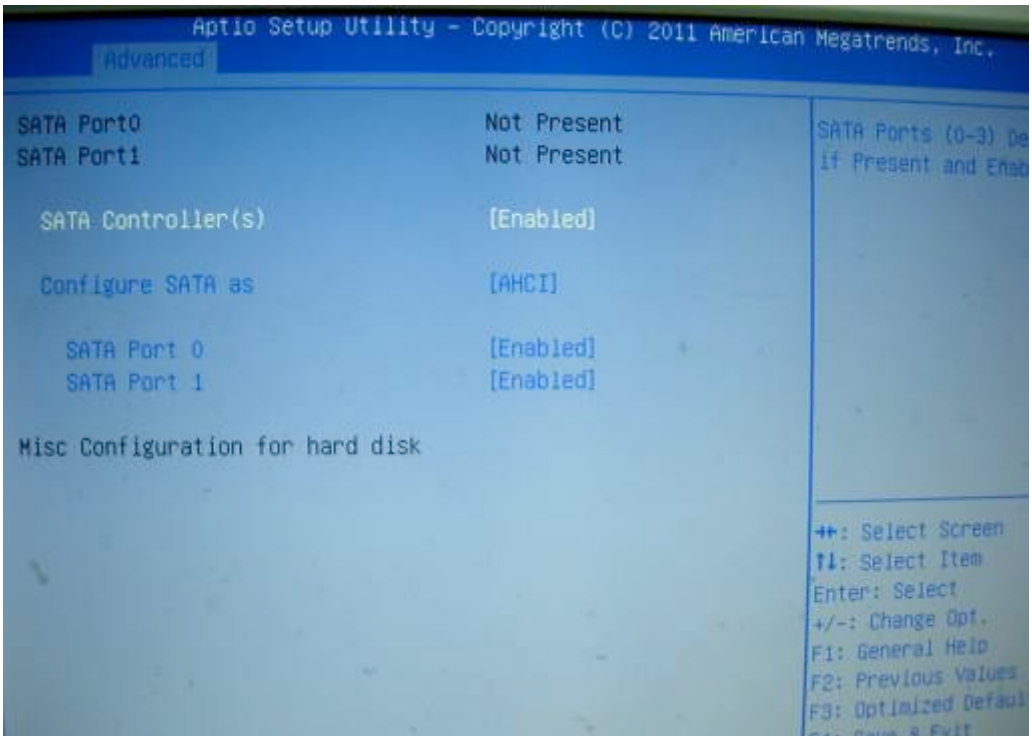
Use the CPU Configuration menu to enter the CPU Information submenu or setup Intel CPU parameter:



7. BIOS/Utility setup

7-1-4 IDE Configuration

Use the SATA Configuration menu to change and/or set the configuration of the SATA devices installed in the system:



SATA Mode

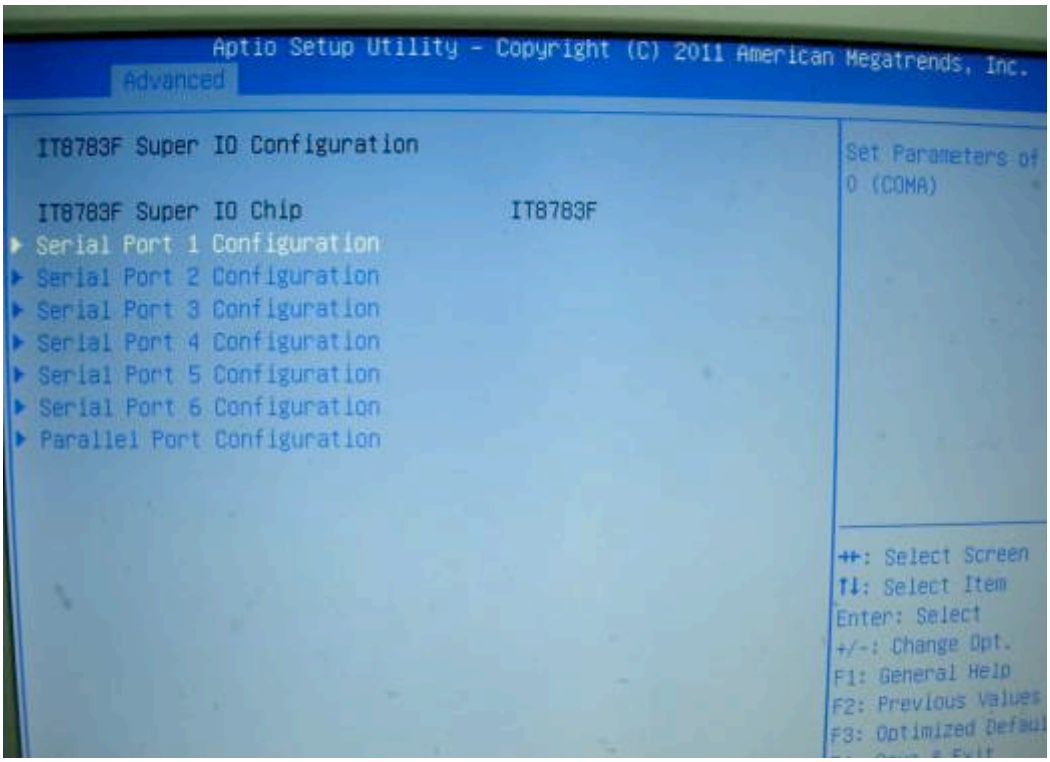
Use the SATA Mode option to configure SATA devices as normal IDE devices.

Disable	Disables SATA devices.
IDE Mode	Configures SATA devices as normal IDE device.
RAID Mode	Configures SATA devices as RAID device.

7. BIOS/Utility setup

7-1-5 IT8783F Super IO Configuration

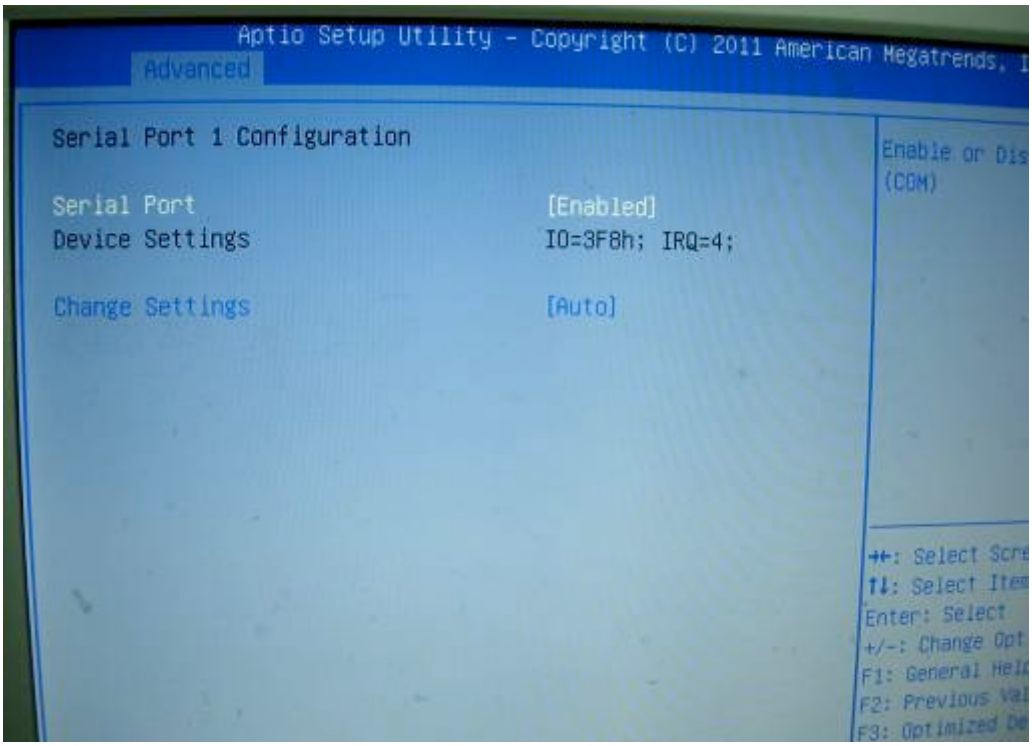
Use the Super IO Configuration menu to set or change the configurations for parallel ports and serial ports:



7. BIOS/Utility setup

Serial Port Configuration

Use the Serial Port Configuration menu to configure the serial port:



Serial Port [Enabled]

Use the Serial Port option to enable or disable the serial port.

Disabled Disable the serial port

Enabled Enable the serial port

Change Settings [Auto]

Use the Change Settings option to change the serial port IO port address and interrupt address.

Auto The serial port IO port address and interrupt address are automatically detected.

Serial Port 1/2 Voltage Select [STD]

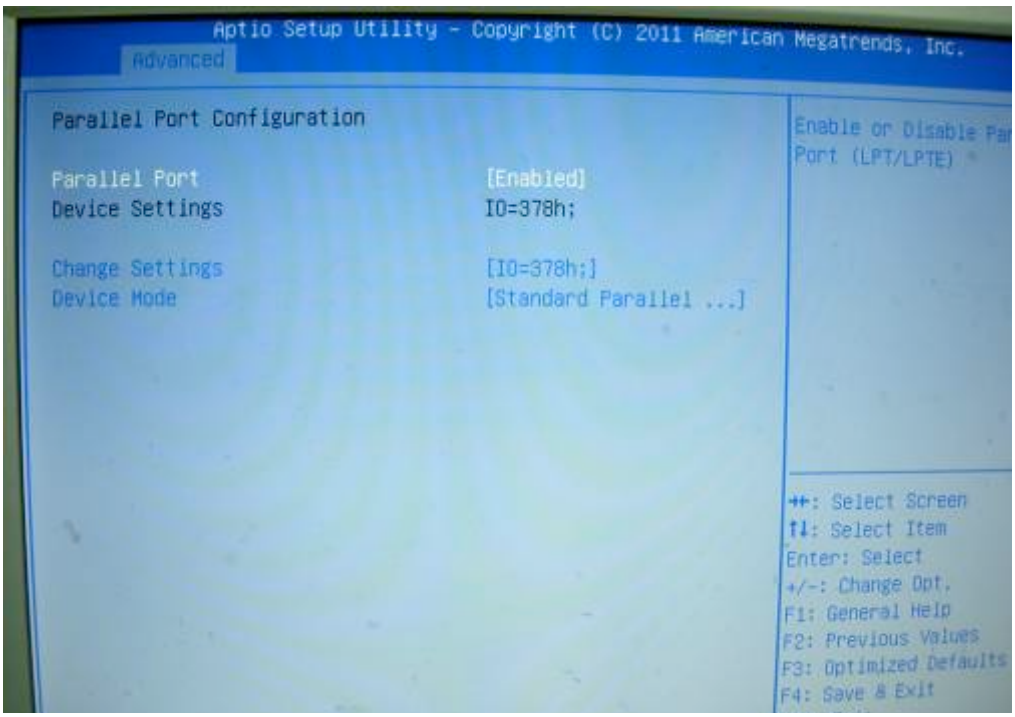
Select "COM1/2 PIN9 Function" and press <Enter> to setup COM 1/2 PIN9 function.

ITEM	Option	Descriptions
COM1 PIN9 Function	STD (Default) 5V 12V	COM1/2 Pin9 select RING function
COM2 PIN9 Function		COM1/2 Pin9 select 5V/12V function

7. BIOS/Utility setup

7-1-6 Parallel Port Configuration

Use the Parallel Port Configuration menu to configure the parallel port:

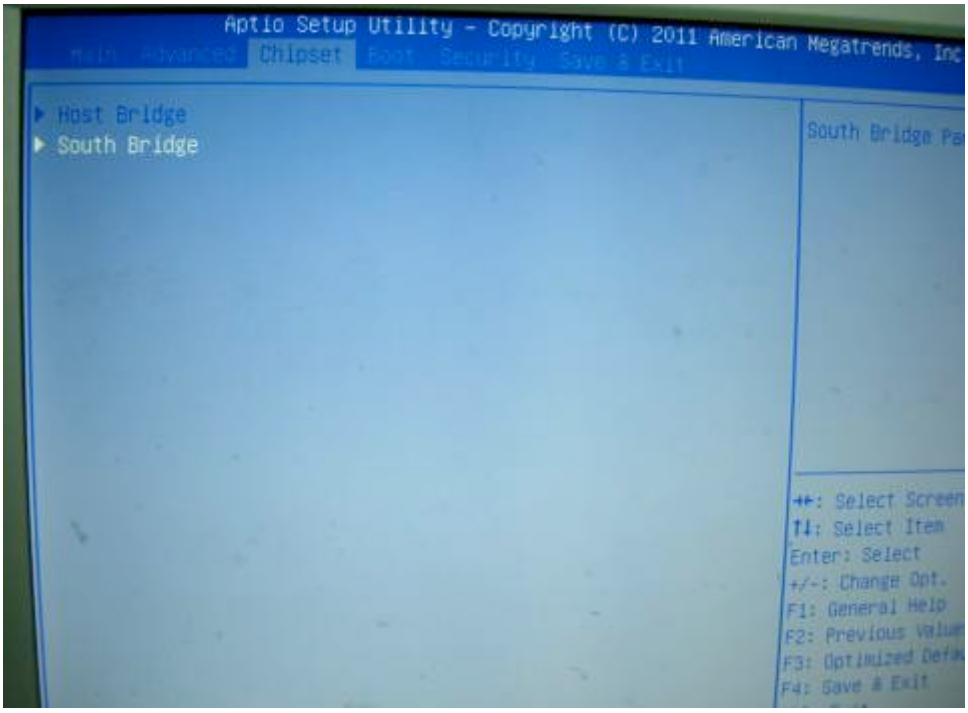


7. BIOS/Utility setup

7-1 Chipset

Use the Chipset menu to access the Southbridge configuration menus.

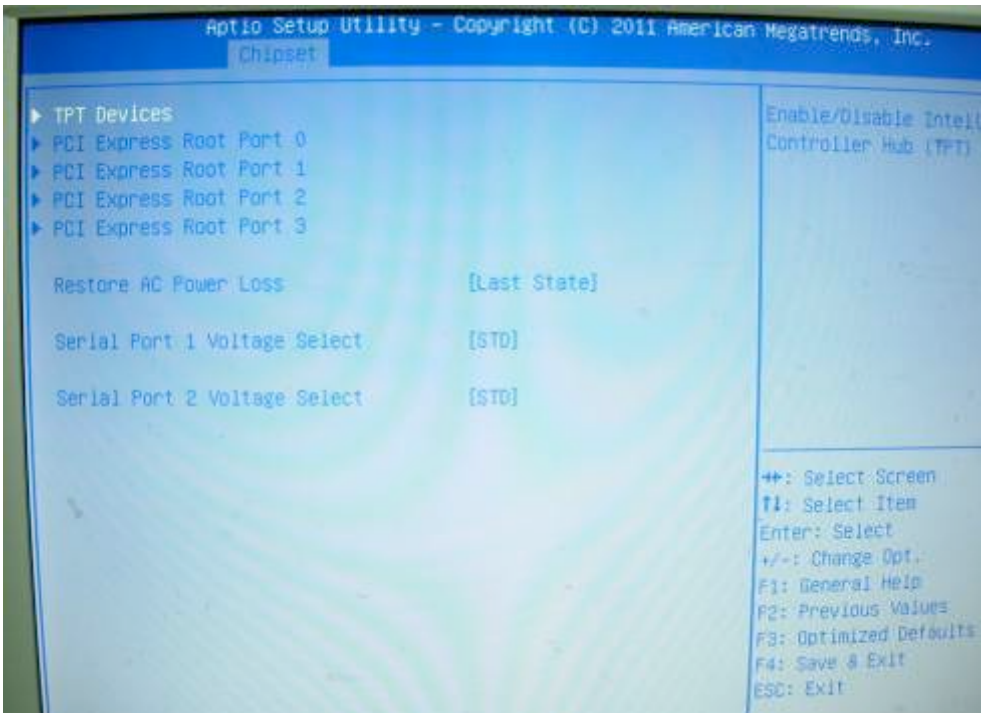
WARNING!
Setting the wrong values for the Chipset BIOS selections in the Chipset BIOS menu may cause the system to malfunction.



7. BIOS/Utility setup

7-2-1 Southbridge Configuration

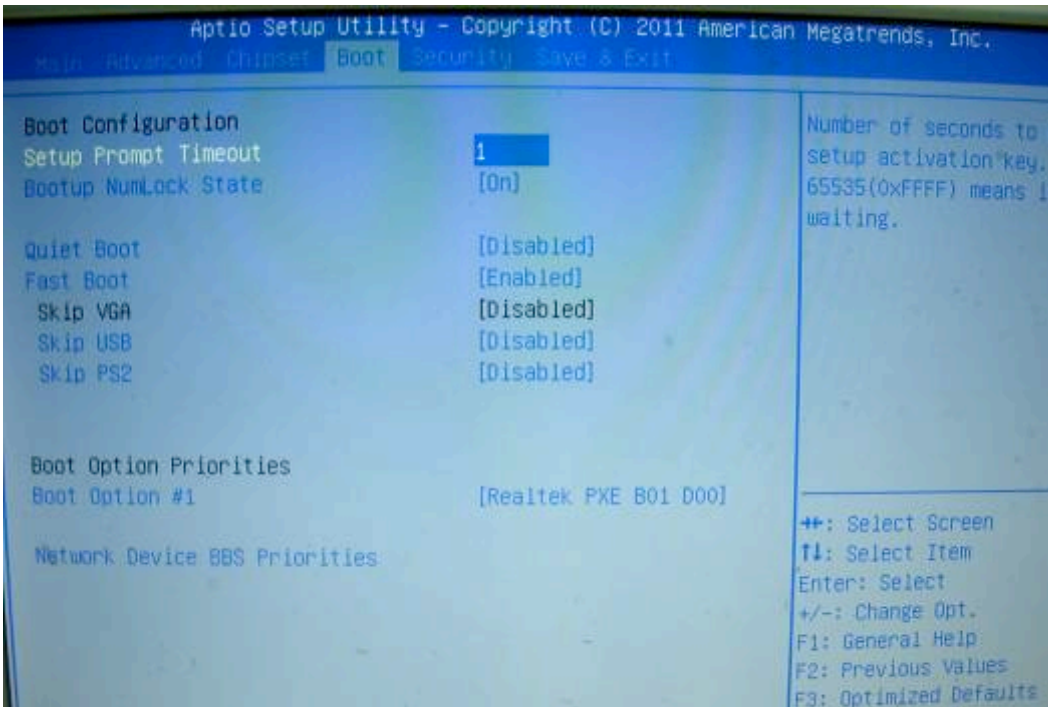
Use the Chipset menu to access the Southbridge configuration menus:



7. BIOS/Utility setup

7-3 Boot

Use the Boot menu to configure system boot options:



Bootup NumLock State [On]

Use the Bootup NumLock State BIOS option to specify if the number lock setting must be modified during boot up.

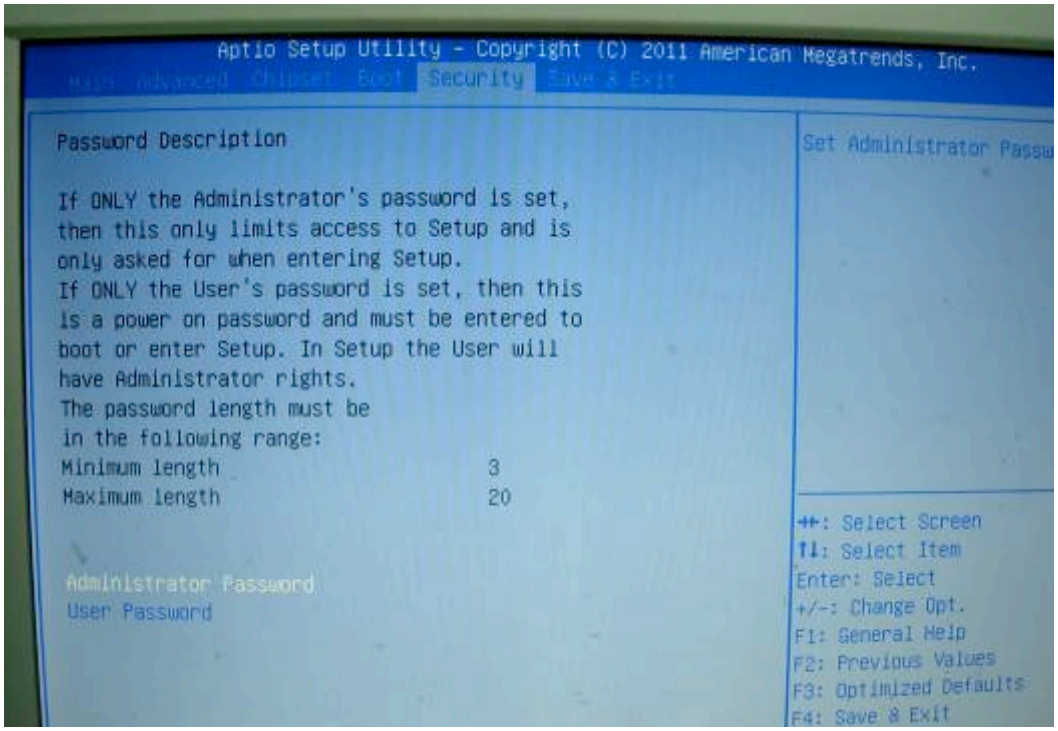
Quiet Boot [Enabled]

Use the Quiet Boot BIOS option to select the screen display when the system boots.

7. BIOS/Utility setup

7-4 Security

Use the Security menu to set system and user passwords:



Administrator Password

Use the Administrator Password to set or change an administrator password.

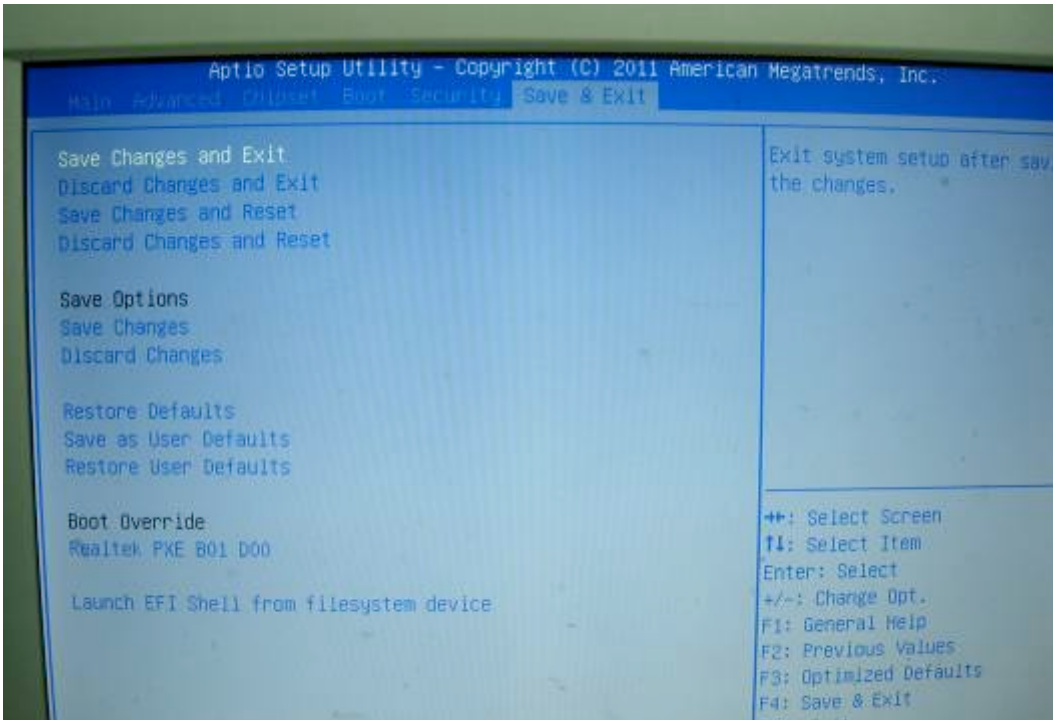
User Password

Use the User Password to set or change a user password.

7. BIOS/Utility setup

7-5 Save & Exit

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



8. 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