



Service Manual

MPOS 50 Series

*MPOS50-8B-LX800

March 2007

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CHAPTER

1

Troubleshooting

Chapter 1 Troubleshooting

1.1 Symptoms and Solutions

Error Code	Symptom	Check Points	Detail Steps
3200	NO BOOT with Power On	1. Battery 2. RAM 3. MB	1. Check LED Light (Upper Left) should be on 2. If yes to item 1, check if Battery is well plugged on the battery module 3. If yes to item 2, replace with another Battery for testing 4. If still fail, remove battery module/ remove MSR module base/ I/O Cover, open rear cover, open EMI chassis, remove inverter cable on M/B (CN1), check if RAM well plugged on the memory slot 5. Check golden finger cleanness, if not clean, use pencil eraser to clean golden finger 6. If fail, replace with another RAM for testing 7. If fail, replace with another mother board for testing 8. If fail, RMA system to EBN
3100	NO POWER	1. Recharge cradle 2. Battery 3. Power button cable 4. 52 I/O board 5. M/B to I/O connector cable 6. MB	1. Check if main unit is well plugged or not(The LED at right hand side will show orange/ green color if it is plugged correctly) 2. If the LED is on, check if Battery is well plugged on the battery module 3. If yes to item 2, push the power button to see if the LED light is on(Upper left) 4. If the LED light is not on, check if power button cable is well plugged or not 5. If yes to item 4, replace with another power button cable 6. If fail, check if 52 I/O board is well plugged or not 7. If yes to item 6, replace with another 52 I/O board 8. If still fail, check if M/B to I/O cable if well plugged or not(MB CN32 and CN13) 9. If yes to item 8, replace with another I/O cable 10. If fail, replace with another mother board for testing 11. If still fail, RMA system to EBN

Error Code	Symptom	Check Points	Detail Steps
3201	System HANG Up	1. CF 2. RAM 3. MB	1. Shut Down Power, remove battery module/ remove MSR module base/ I/O Cover, open rear cover, check if CF is well plugged or not 2. If yes to item 1, open EMI chassis, remove inverter cable on M/B (CN1), check if check if RAM well plugged on the memory slot 2. Check golden finger cleanness, if not clean, use pencil eraser to clean golden finger 3. If fail, replace with another RAM for testing 4. If fail, replace with another MB for testing 5. If fail, System RMA to EBN
3300	LCD Blank	1. Inverter 2. MB 3. M/B to LCD cable	1. Shut Down Power, remove battery module/ remove MSR module base/ I/O Cover, open rear cover, open inverter cover, replace with another inverter for testing 2. If fail, check if LCD signal cable well connected on MB(CN2) 3. If yes to item 2, replace with another MB for testing 4. If fail, replace with another LCD signal cable for testing 5. If fail, System RMA to EBN
3301	LCD Turn Black	1. Inverter 2. Inverter Cable 3. MB 4. M/B to LCD cable 5. LCD	1. Shut Down Power, remove battery module/ remove MSR module base/ I/O Cover, open rear cover, open inverter cover, check if inverter to LCD cable is well plugged or not. 2. If yes to item 1, replace with another inverter for testing 2. If fail, is, remove EMI cover, check if inverter cable well connected between MB(CN1) and inverter 3. If yes, replace with another inverter cable for testing 4. If fail, check if LCD signal cable well connected on MB(CN2) 5. If yes, replace with another MB for testing 6. If fail, replace with another LCD signal cable for testing 8. If fail, replace another LCD for testing 9. If fail, System RMA to EBN

Error Code	Symptom	Check Points	Detail Steps
3601	Unable to detect CF / Unstable CF	1. CF Card 2. CF Slot 3. MB	1. Shut Down Power, remove battery module/ remove MSR module base/ I/O Cover, open rear cover, open EMI chassis, remove inverter cable on M/B (CN1), 3. Check if CF Card well connected with CF Slot 4. If yes to item 3, remove CF card, check if pins on CF slot located at the correct position 5. If CF slot is damaged, go to item 7; if CF slot is not damaged go to item 6 6. If yes to item 4, replace with another CF card for testing 7. If fail, replace with MB for testing 8 If fail, system RMA to EBN
3602	Data Can't read and write	1. CF 2. MB	1. Shut Down Power, remove battery module/ remove MSR module base/ I/O Cover, open rear cover, open EMI chassis, remove inverter cable on M/B (CN1), check if CF Card well connected with CF Slot 2. If yes to item 2, replace with another CF card for testing 3. If fail, replace with MB for testing 4 If fail, system RMA to EBN
3500	CMOS checksum error	1. MB	1. Shut Down Power, remove battery module/ remove MSR module base/ I/O Cover, open rear cover, open EMI chassis, remove inverter cable on M/B (CN1), replace with another MB for testing 2. If fail, system RMA to EBN
3400	Touch malfunction	1. Driver (NA) 2. Touch to.MB cable 3. MB 4. Touch panel	1. Reinstall touch driver 2. If fail, shut down power, remove battery module/ remove MSR module base/ I/O Cover, open rear cover, open EMI chassis, remove inverter cable on M/B (CN1), check if touch panel cable well connected with MB 3. If yes to item 2, replace with another MB for testing 4. If fail, replace with another touch panel for testing 5. If fail, RMA system to EBN

Error Code	Symptom	Check Points	Detail Steps
3700	Boot Up, USB K/B Malfunction	1. USB Keyboard 3. MB	1. Check if USB keyboard cable well connected with USB port 2. If yes to item 2, replace with another keyboard(same model) for testing 3. If fail, replace with another keyboard(other model) for testing 4. If fail, shut down power, remove battery module/ remove MSR module base/ I/O Cover, open rear cover, open EMI chassis, remove inverter cable on M/B (CN1), replace with another MB for testing. 7. If fail, system RMA to EBN
3701	MSR Malfunction	1. MSR to 52 I/O board Cable 2. MSR 3. MB	1. Shut down power, remove battery module, check if MSR cable well connected with 52 I/O Board 2. If yes to item 2, replace with another MSR for testing 3. If fail, open rear cover, open EMI chassis, remove inverter cable on M/B (CN1), replace with another MB for testing 4. If fail, RMA MSR to EBN
3703	USB Device Malfunction	1. Device USB cable 3. MB	1. Check if USB keyboard cable well connected with USB port 2. If yes to item 2, replace with another keyboard(same model) for testing 3. If fail, replace with another keyboard(other model) for testing 4. If fail, shut down power, remove battery module/ remove MSR module base/ I/O Cover, open rear cover, open EMI chassis, remove inverter cable on M/B (CN1), replace with another MB for testing. 7. If fail, system RMA to EBN

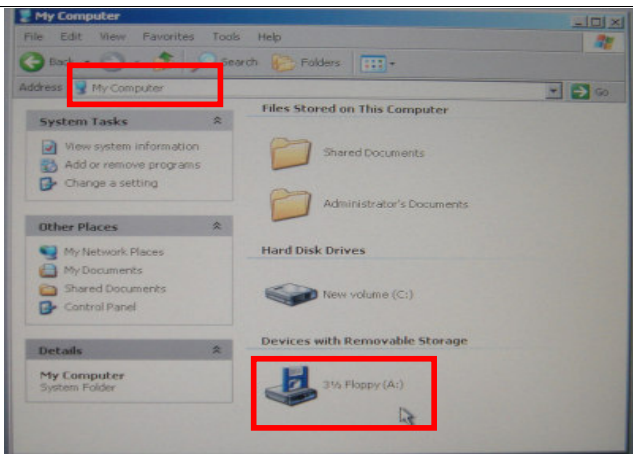
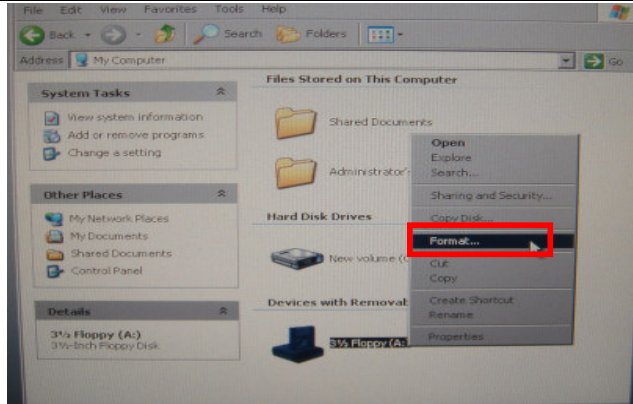
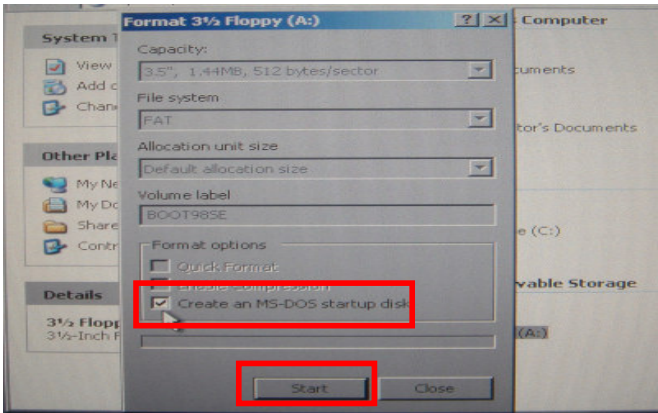
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1.2 BIOS Upgrade

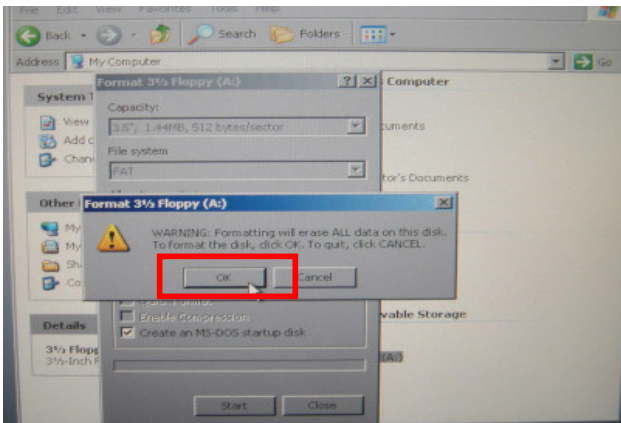
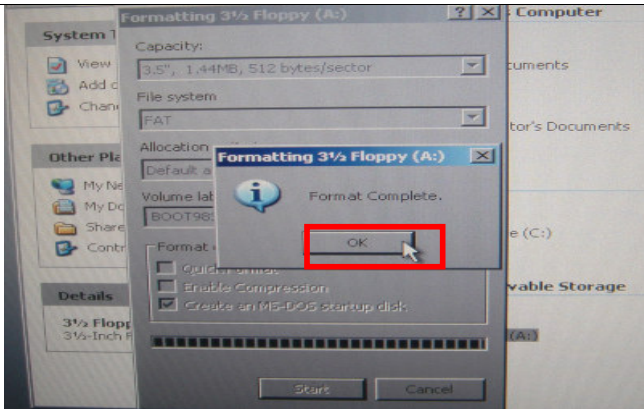
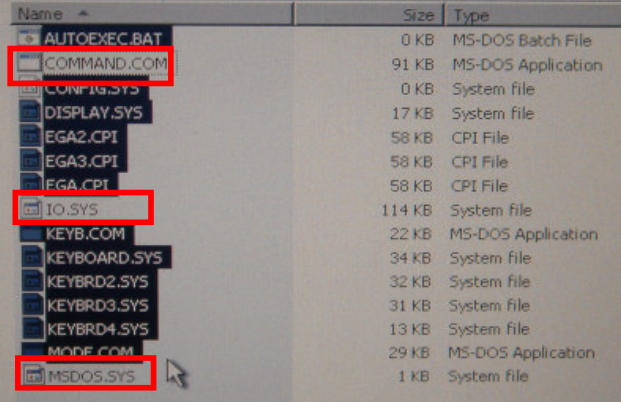
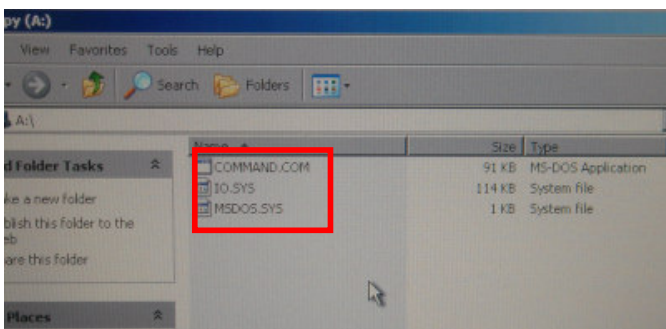
1.2.1 Equipment List:

- USB Floppy Disk* 1 set
- Keyboard* 1 set,
- 1.44MB Floppy Boot up Disk*1
- BIOS file

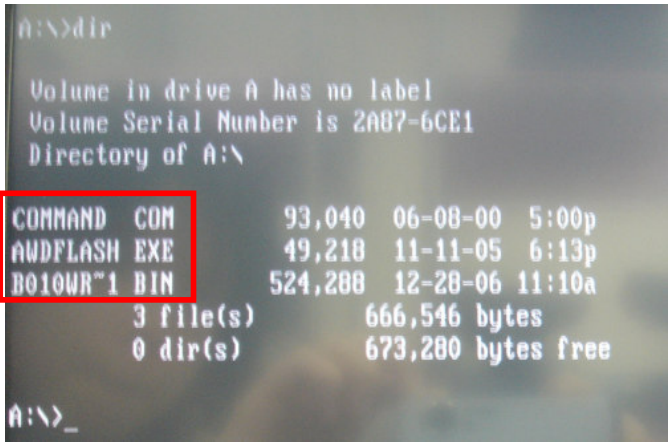
1.2.2 Upgrade Process

Make a start up disk and copy BIOS and EXE file		
Item	Photo	Description
1		1. Put empty 1.44MB disk into USB floppy disk 2. Plug the disk into another computer with XP OS installed 3. Click "My Computer". The new device "Floppy A" will show on the screen
2		1. Right click floppy disk and select "Format"
3		1. Click "Create an MS-DOS startup disk" 2. Click "Start"

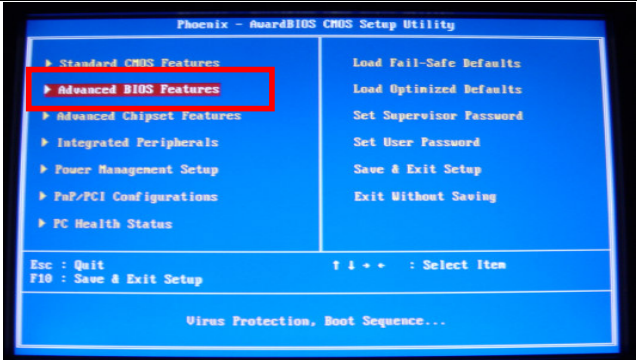
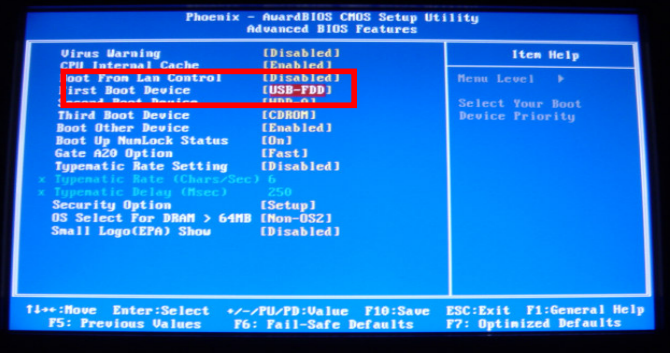
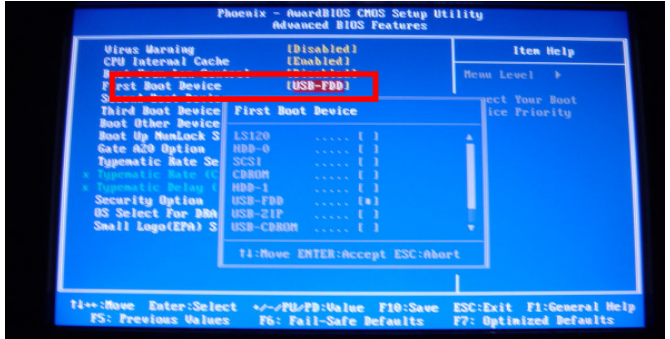
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Item	Photo	Description
4		1. Click "OK"
5		1. Click "OK". 2. The start up disk is created
6		1. Check the files in floppy disk 2. Leave 3 files in the floppy disk, delete the rest files highlighted.
7		1. Only 3 files left in the floppy disk - "COMMAND.COM" - "IO.SYS" (hidden file) - "MSD OS.SYS" (hidden file) 2. Copy BIOS file and EXE. File into floppy disk

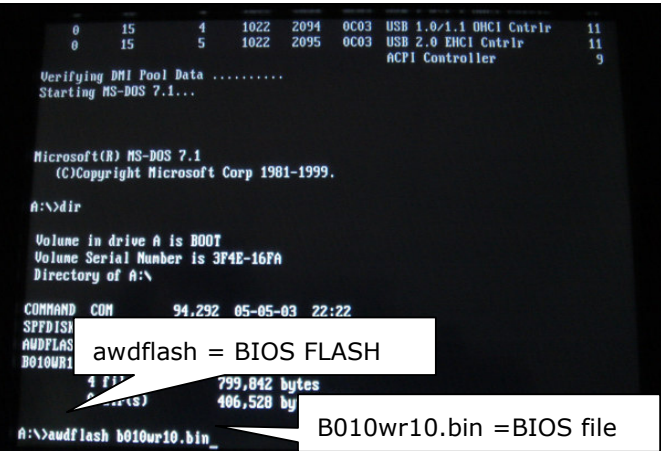
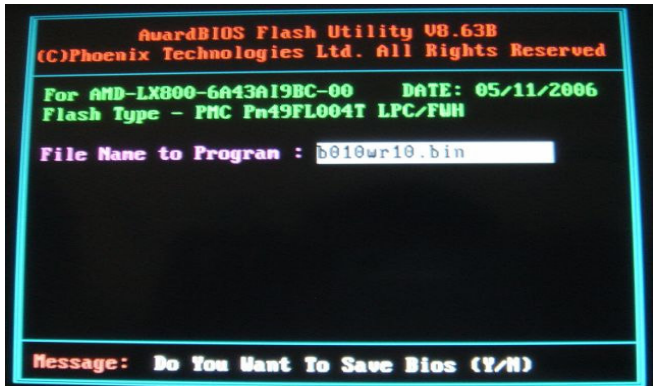
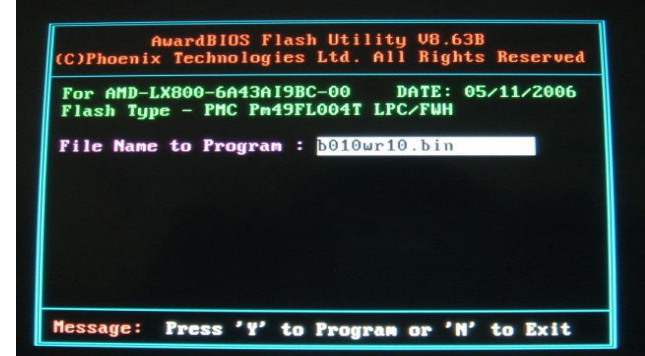
EBN EBN Technology Corp.

Item	Photo	Description
8		1. Plug the floppy disk into Mobile POS 2. Power on the computer 3. Ensure that 3 files show on the screen -Command COM -AWDFLASH EXE -BIOS file(Ex: B010R~1 Bin)

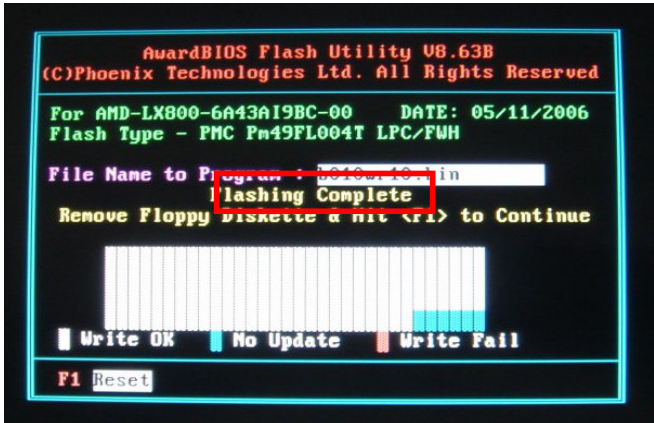
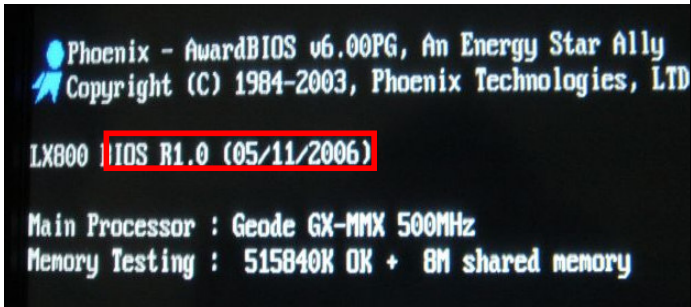
Update BIOS file

Item	Photo	Description
1		4. Reboot Mobile POS 50 5. Press "Del" button 6. Choose "Advanced BIOS Features" 7. Press "Enter" Key
2		1. Choose "First Boot Device". 2. Press "Enter" Key
3		1. Select "USB-FDD". 2. Press "Enter" Key 3. Press "F10". 4. Press "Enter" key to save the file

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Item	Photo	Description
4		1. Key in BIOS Utility and BIOS Version needs to be updated. Ex: "awdflash b010wr10.bin"
5		1. Press "N". Press "Enter" Key
6		1. Press "Y". Press "Enter" Key
7		Note: DO NOT TURN OFF or RESET SYSTEM Until the BIOS update is completed. Stopping the BIOS update before it is completed will cause the system to become non-functional.

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Item	Photo	Description
8	 A screenshot of the AwardBIOS Flash Utility V8.63B interface. The text on the screen includes: 'AwardBIOS Flash Utility V8.63B', '(C)Phoenix Technologies Ltd. All Rights Reserved', 'For AMD-LX800-6A43A19BC-00 DATE: 05/11/2006', 'Flash Type - PMC Pm49FL004T LPC/FWH', 'File Name to Program: BIOS.R1.0', and 'Flashing Complete'. A red box highlights the 'Flashing Complete' message. Below this, it says 'Remove Floppy Diskette and hit <F1> to Continue'. At the bottom, there are three status indicators: 'Write OK' (green bar), 'No Update' (blue bar), and 'Write Fail' (red bar). A red box also highlights the 'F1 Reset' button at the bottom left.	1. Wait till the screen shows "Flashing Complete". 2. Press "F1" to reset
9	 A screenshot of the Phoenix - AwardBIOS v6.00PG interface. The text on the screen includes: 'Phoenix - AwardBIOS v6.00PG, An Energy Star Ally', 'Copyright (C) 1984-2003, Phoenix Technologies, LTD', 'LX800 BIOS R1.0 (05/11/2006)', 'Main Processor : Geode GX-MMX 500MHz', and 'Memory Testing : 515840K OK + 8M shared memory'. A red box highlights the 'BIOS R1.0 (05/11/2006)' text.	1. Double check the BIOS version is updated when the system resets. Note: The BIOS contained here is exclusively for EBN MPOS 50 Series only. EBN has no responsibility for any damages resulting from improper use or lacking of technical expertise at field side

CHAPTER

2

Chapter 2

Disassembly, Assembly

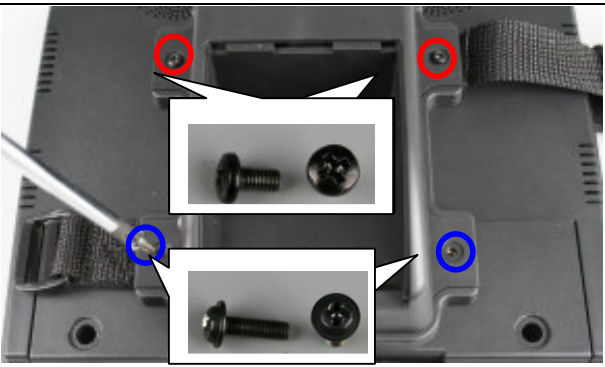
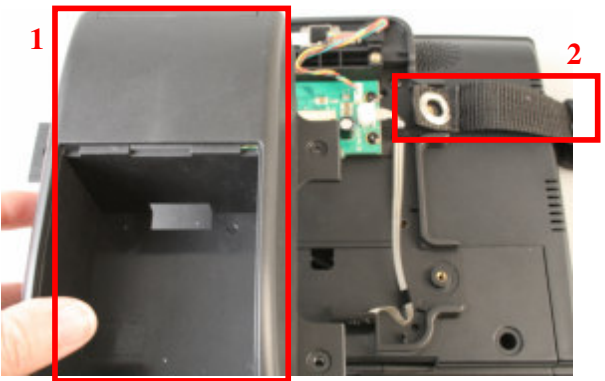
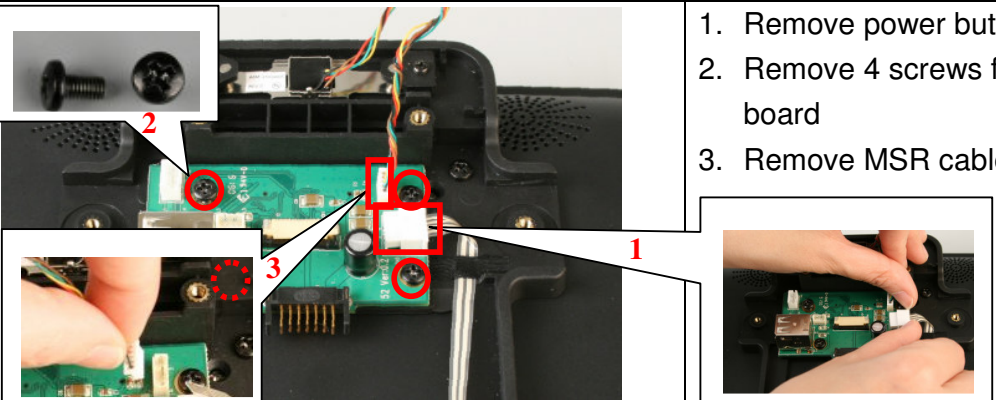
Chapter 2 Disassembly, Assembly

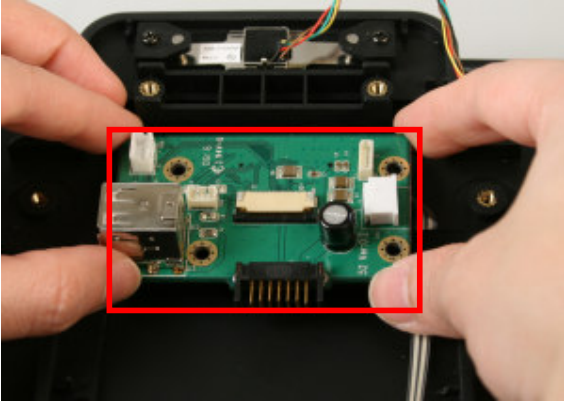
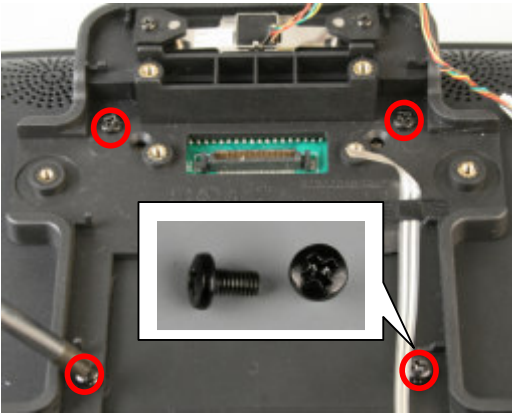
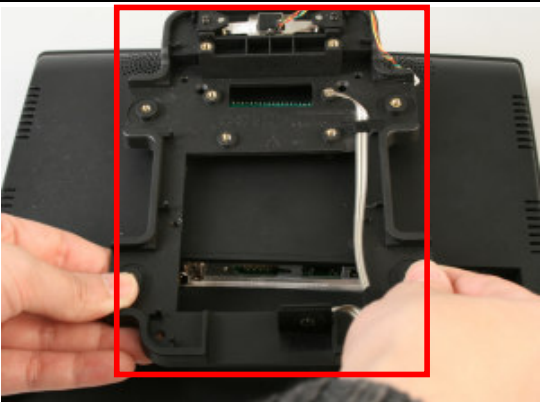
2.1 Main Unit

2.1.1 Touch Panel + Touch Screen Holder

Item	Photo	Description
1		1. Unpack handheld belt
2		1. Remove 2 screw pad 2. Remove 2 screws from I/O cover
3		1. Move the clicker to right and push up
4		1. Remove battery from battery module

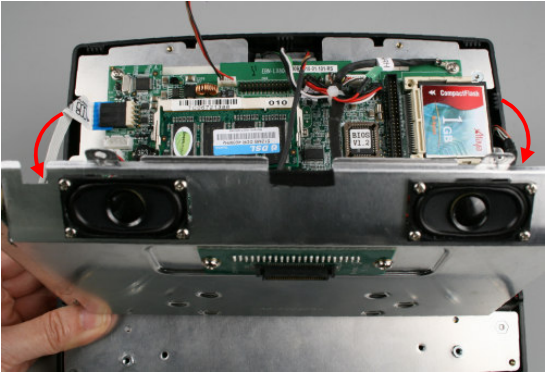
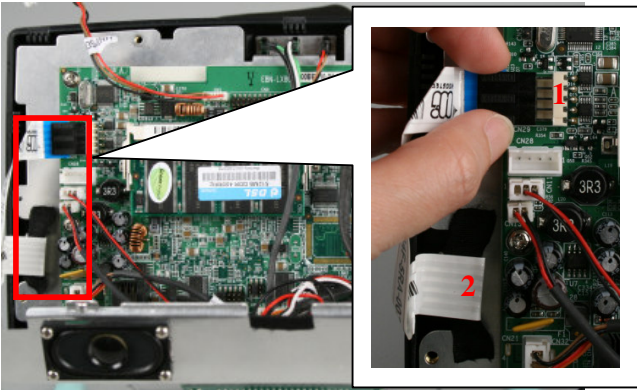
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Item	Photo	Description
5		1. Remove 4 screws from MSR reader module cover
6		1. Remove MSR reader module cover 2. Remove handheld belt
7		1. Remove I/O cover
8		1. Remove power button cable 2. Remove 4 screws from I/O board 3. Remove MSR cable if needed

Item	Photo	Description
9		1. Remove I/O board from MSR module base
10		1. Remove 4 screws from MSR module base
11		1. Remove MSR module base
12		1. Remove 4 screws from LCD rear cover 2. Be aware of different screw length. The misplace of the screw will cause the LCD broken

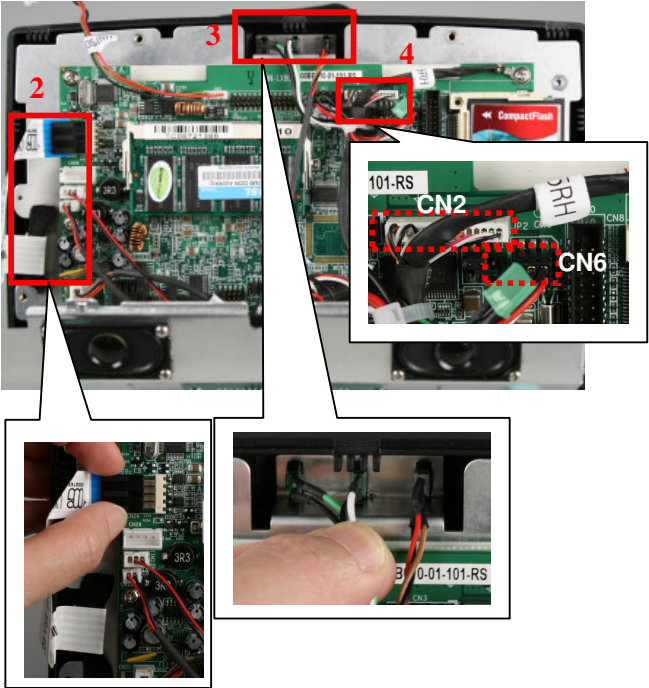
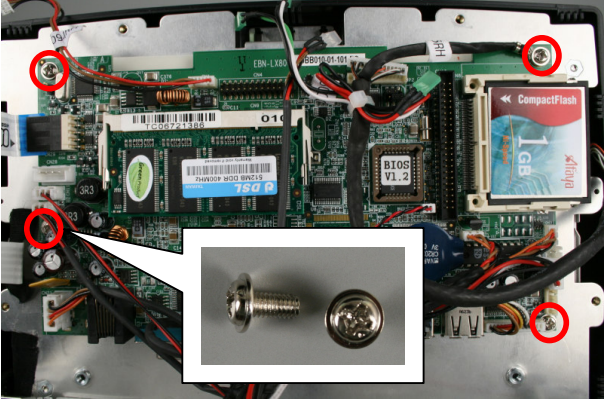
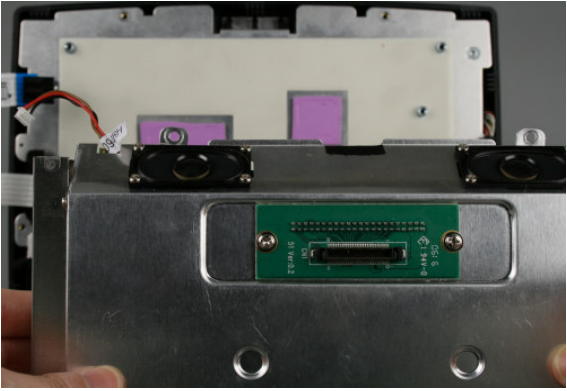
Item	Photo	Description
13		1. Push out the LCD rear cover to loose clicker 2. Push down the LCD rear cover to enable COM port go underneath the cover 3. Push up the LCD rear cover to loose clicker
14		1. Remove 2 hex nuts from COM port 2. Remove cable (inverter to LCD)
15		1. Remove 4 screws from EMI cover 2. Remove cable(inverter to M/B)

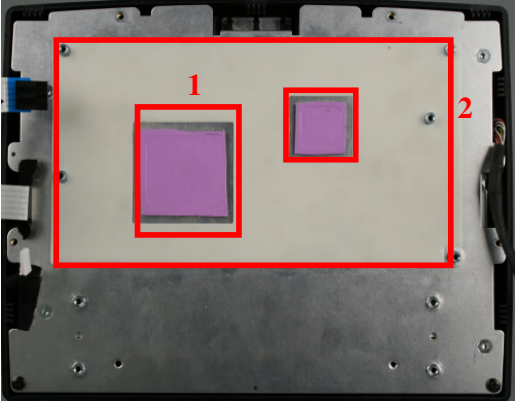
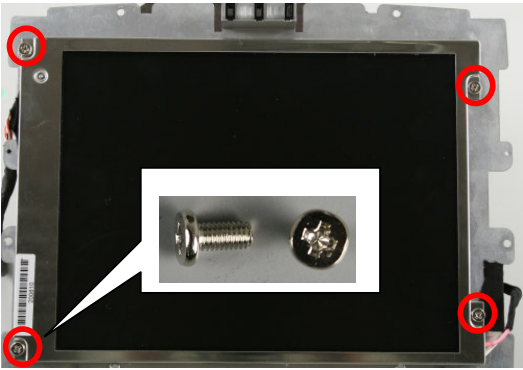
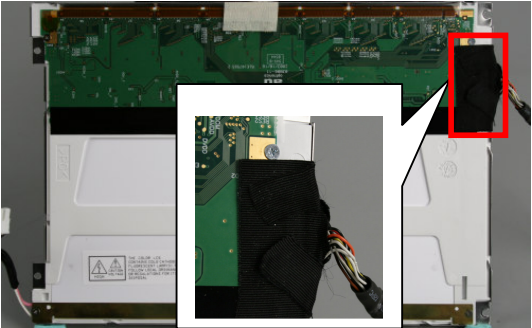
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Item	Photo	Description
16		1. Push up the EMI cover
17		1. Remove touch panel cable 2. Pull up the black tape
18		1. Remove the LCD module / M/B and EMI cover from touch panel module
19		1. Replace with another touch panel module

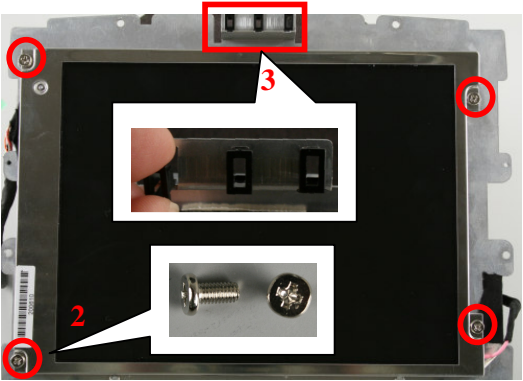
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2.1.2 LCD, AUO 8.4"

Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 16 2. Remove cable (touch panel to M/B)(CN29) and pull up the black tape 3. Pull out LED cable from LED frames 4. Remove cables (LCD to M/B) (CN2) and (LED to M/B)(CN6)
2		1. Remove 4 screws from M/B
3		1. Remove M/B and EMI chassis

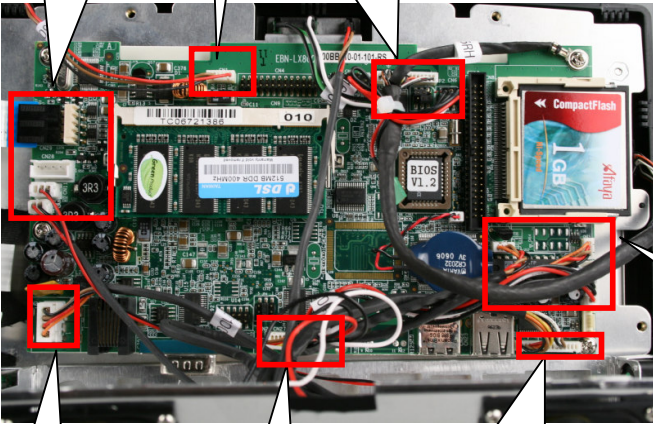
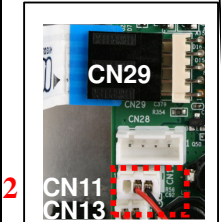
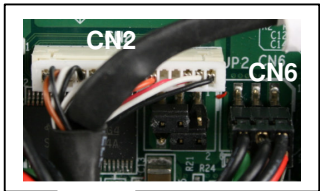
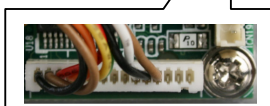
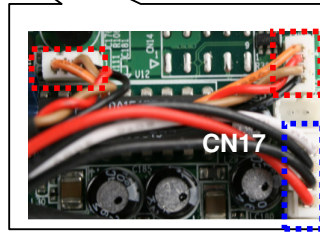
Item	Photo	Description
4		1. Remove 2 heat pads 2. Remove mylar from M/B
5		1. Turn to front side. Remove 4 screws from LCD chassis
6		1. Remove LCD cable 2. Replace with another LCD

2.1.3 LCD Chassis

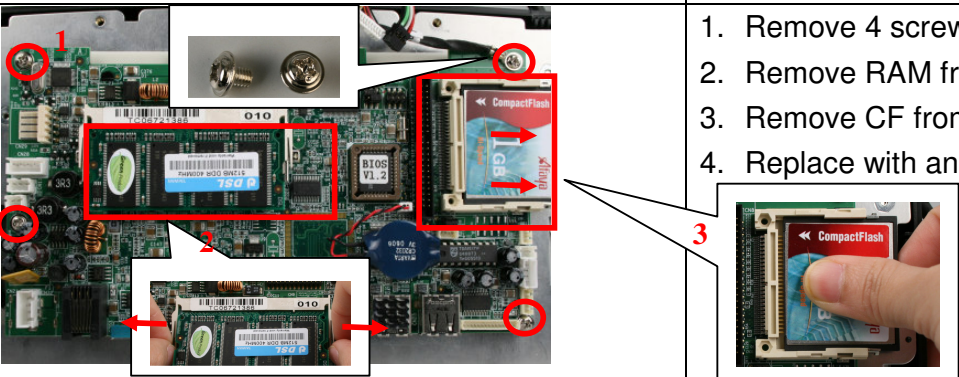
Item	Photo	Description
1		1. Follow 2.1.2 item 1 to 4 2. Remove 4 screws on LCD 3. Pull out 3 LED frames from LCD chassis

Item	Photo	Description
2		1. Replace with another LCD chassis

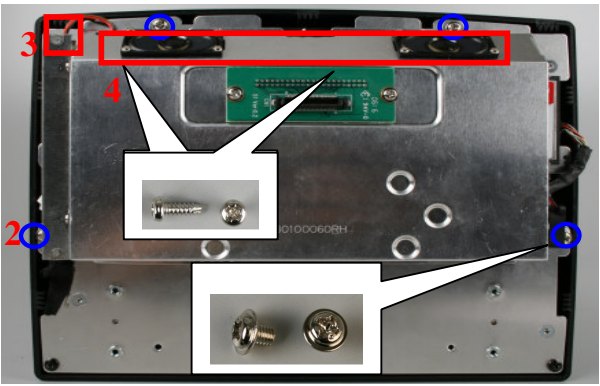
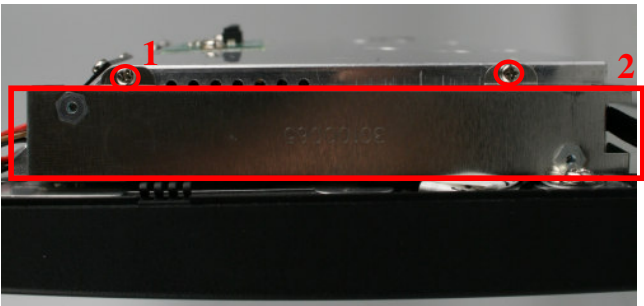
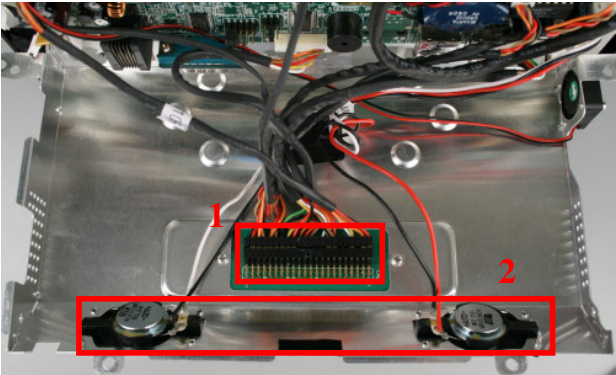
2.1.4 M/B

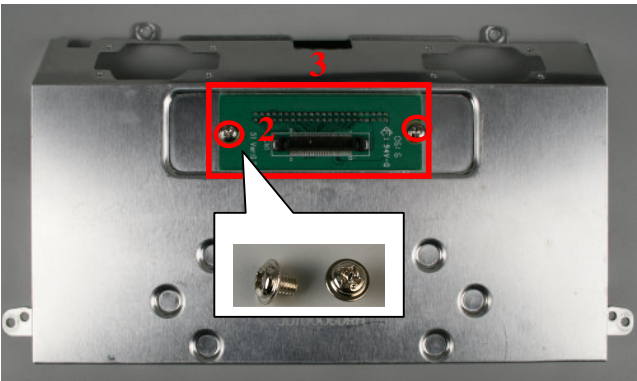
Item	Photo	Description
1	 4  3  5  9  7  8  6 	- Follow 2.1.1 item 1 to 16 - Remove fan cable(CN11) and switch cable(CN13) - Remove touch panel cable(CN29) and pull up the black tape - Remove cable (inverter to M/B)(CN1) - Remove LCD cable(CN2) and LED cable (CN6) - Remove USB cable *2 and audio cable(CN17) - Remove COM 3 cable - Remove COM2 cable(CN27) - Remove power cable(CN32)

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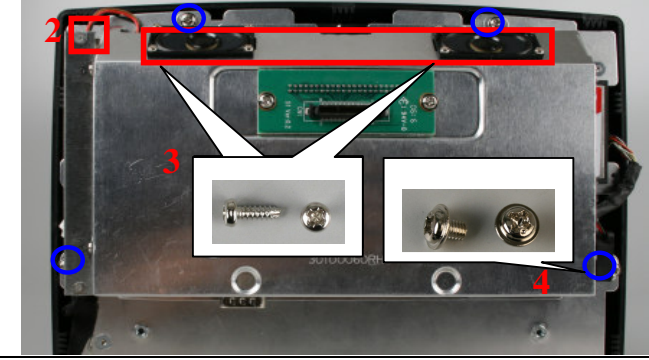
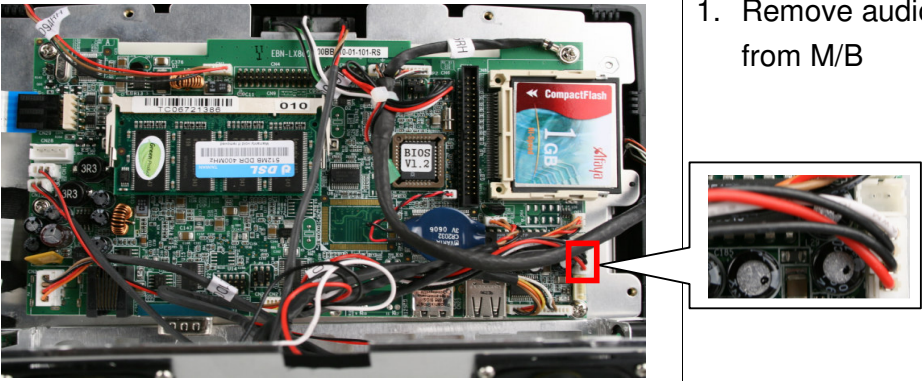
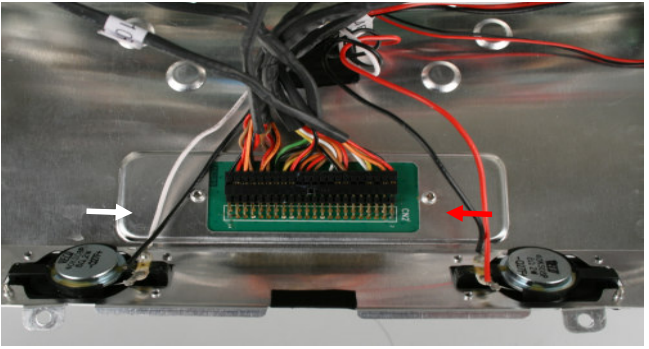
Item	Photo	Description
2		1. Remove 4 screws 2. Remove RAM from M/B(CN9) 3. Remove CF from M/B(CN8) 4. Replace with another M/B

2.1.5 EMI A/D Cover

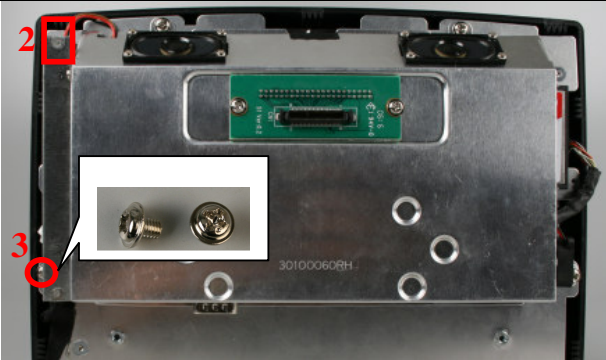
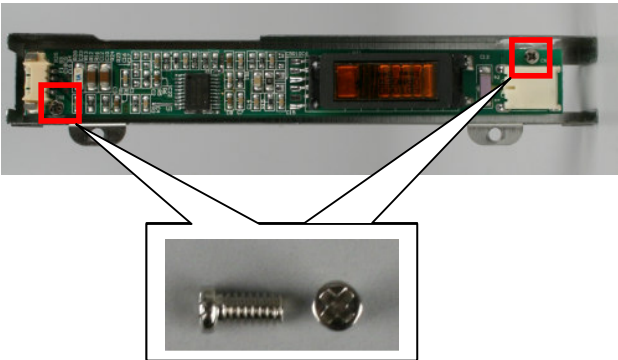
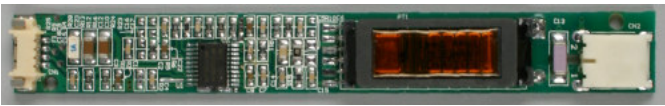
Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 14 2. Remove 4 screws 3. Remove inverter cable 4. Remove 8 screws from speaker
2		1. Remove 2 screws from inverter cover 2. Remove inverter cover
3		1. Remove I/O cable from I/O board 2. Pull out 2 speakers

Item	Photo	Description
4		1. Remove 2 screws from I/O board 2. Remove I/O board from EMI cover 3. Replace with another EMI cover

2.1.6 Speaker Module

Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 14 2. Remove inverter cable 3. Remove 8 screws from speaker 4. Remove 4 screws 5. Open EMI cover
2		1. Remove audio cable(CN17) from M/B
3		1. Replace with another speaker module Note: The white cable goes to left hand side, while red cable goes to right hand side

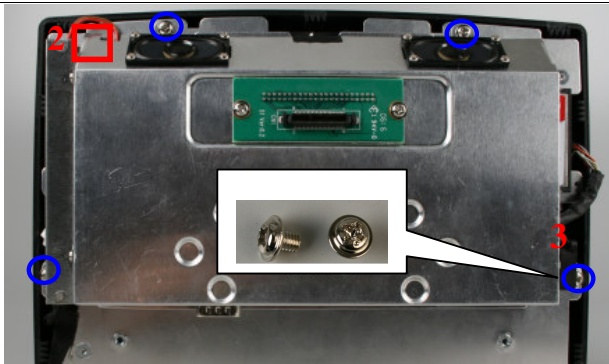
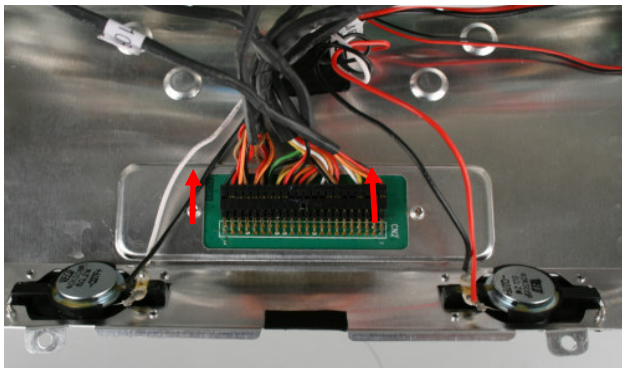
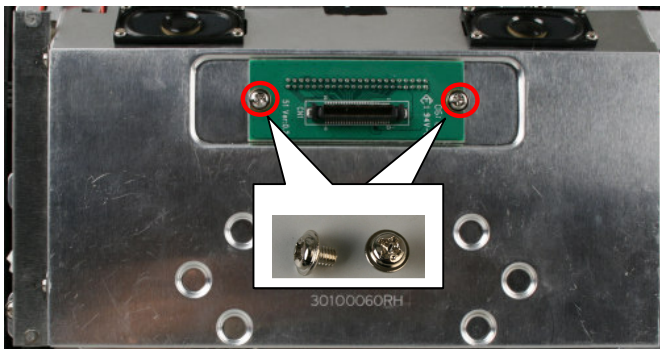
2.1.7 Inverter

Item	Photo	Description
1		1. Follow item 2.1.1 item 1 to 14 2. Remove inverter cable 3. Remove 1 screw from inverter cover
2		1. Remove 2 screws from inverter cover
3		1. Remove 2 screws from inverter
4		1. Replace with another inverter

2.1.8 Inverter Cover

Item	Photo	Description
1		1. Follow item 2.1.7 item 1 to 3 2. Replace with another inverter cover

2.1.9 51 I/O Board

Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 14 2. Remove inverter cable 3. Remove 4 screws 4. Open EMI cover
2		1. Remove I/O cable from EMI cover
3		1. Turn the EMI cover to the other side 2. Remove 2 screws from 51 I/O board 3. Replace with another 51 I/O board

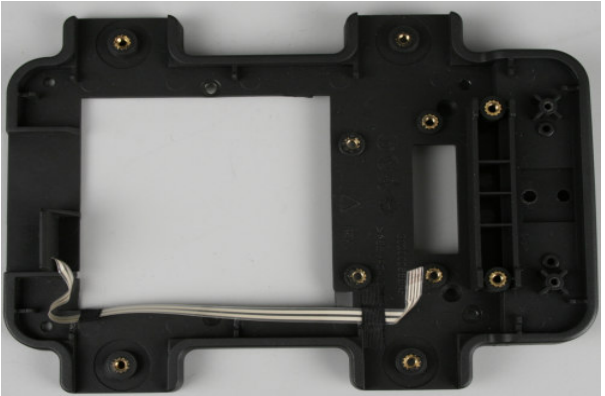
2.1.10 LCD Rear Cover

Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 13 2. Replace with another LCD rear cover

2.1.11 I/O Cover

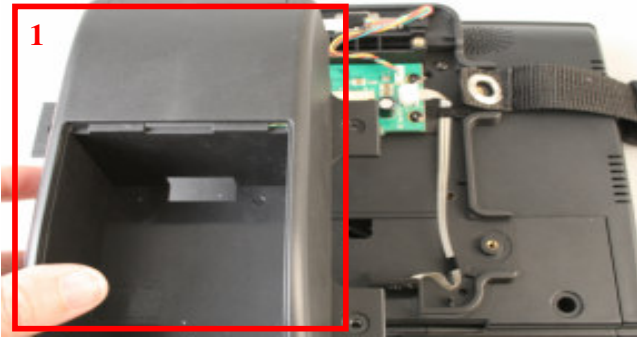
Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 6 2. Replace with another I/O Cover

2.1.12 MSR Module Base+ Power Button

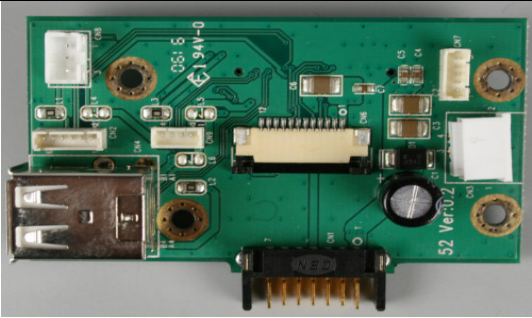
Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 10 2. Replace with another MSR module

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2.1.13 MSR Reader Module Cover

Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 5 2. Remove MSR reader module cover
2		1. Replace with another MSR reader module cover

2.1.14 52 I/O Board

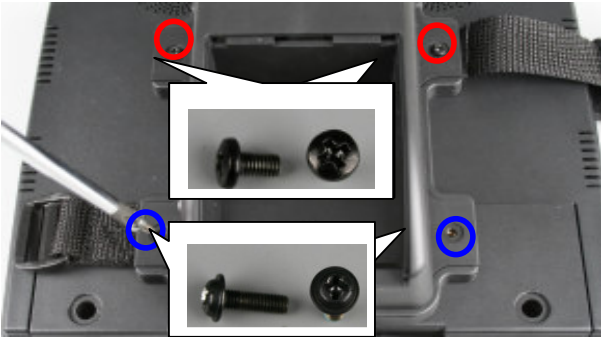
Item	Photo	Description
1		2. Follow 2.1.1 item 1 to 8 3. Replace with another 52 I/O Board

2.1.15 Battery Module

Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 3 2. Replace with another Battery module

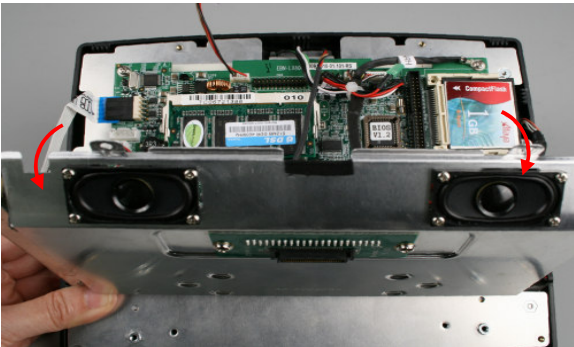
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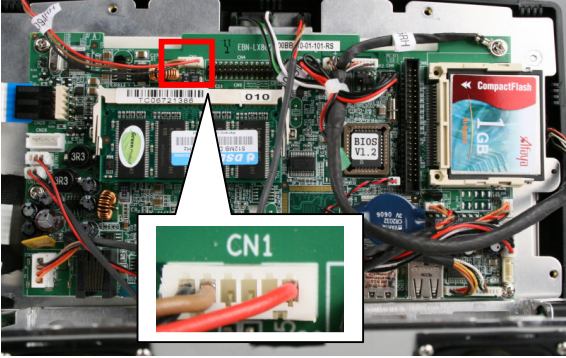
2.1.16 Handheld Belt

Item	Photo	Description
1		1. Unpack handheld belt
2		1. Remove 4 screws from MSR reader module cover
3		1. Replace with another handheld belt

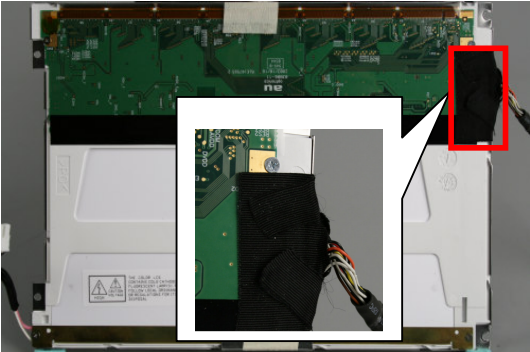
2.2 Cables

2.2.1 Cable, M/B to Inverter

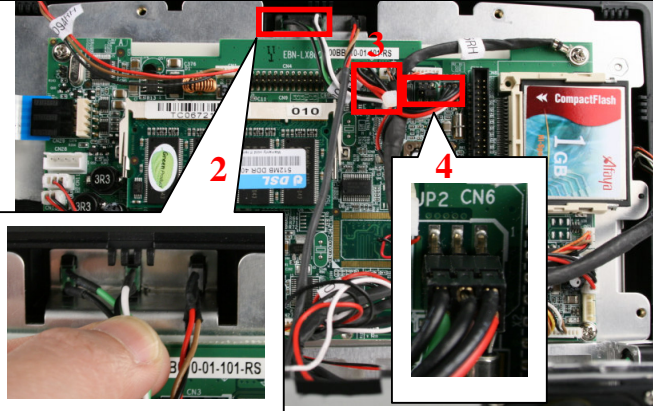
Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 15 2. Push up the EMI cover

Item	Photo	Description
2	 A photograph of a laptop mainboard. A red rectangle highlights a connector labeled 'CN1'. An inset image shows a close-up of the CN1 connector with a red cable plugged into it.	1. Remove inverter to M/B cable(CN1)
3	 A photograph of a curved, multi-colored cable with white connectors at both ends, which is the inverter to mainboard cable.	1. Replace with another inverter cable

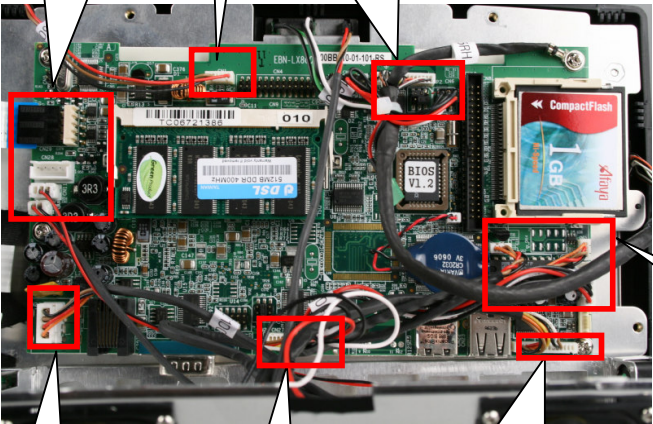
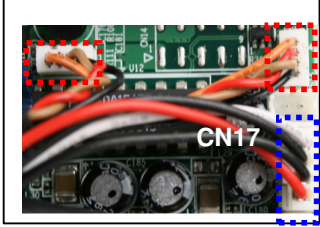
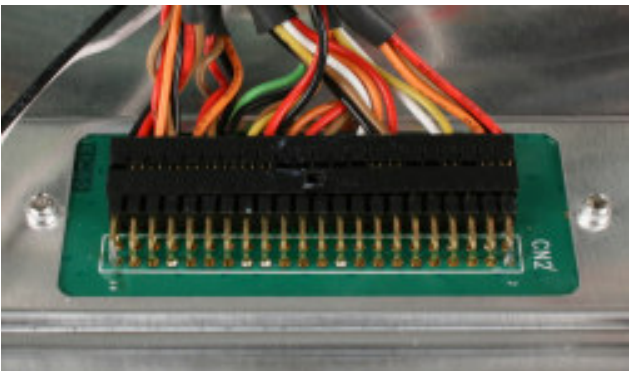
2.2.2 Cable, M/B To LCD

Item	Photo	Description
1	 A photograph of a laptop mainboard. A red rectangle highlights a connector on the right side. An inset image shows a close-up of the connector with a black cable plugged into it.	1. Follow 2.1.2 item 1 to 6 2. Remove LCD cable
1	 A photograph of a black, curved cable with a metal connector at one end and a black plastic connector at the other, which is the LCD to mainboard cable.	1. Replace with another LCD cable

2.2.3 Cable, M/B To LED

Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 16 2. Pull out the 2 LED from LED frames 3. Cut plastic belt (Green at the left / white in the middle) 4. Remove LED cable (CN6)
2		1. Replace with another LED cable

2.2.4 Cable, M/B To I/O Connector

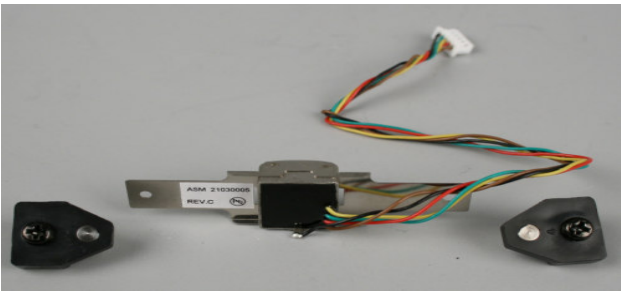
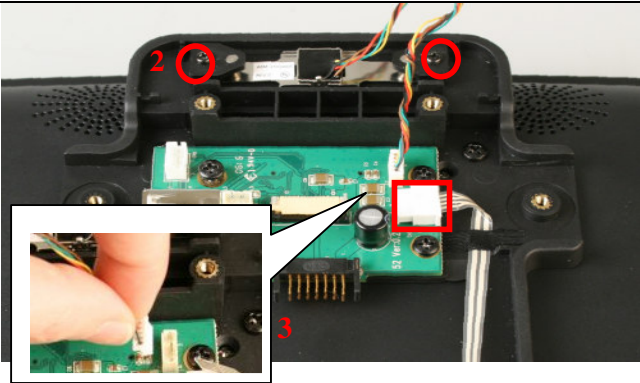
Item	Photo	Description
1	      	1. Follow 2.1.1 item 1 to 16 2. Remove fan cable(CN11) and switch cable(CN13) 3. Remove touch panel cable(CN29) and pull up the black tape 4. Remove inverter cable(CN1) 5. Remove LCD cable (CN2) and LED cable (CN6) 6. Remove USB cable *2 and audio cable(CN17) 7. Remove COM 3 cable 8. Remove COM2 cable(CN27) 9. Remove power cable(CN32)
2		1. Remove the I/O connector cable

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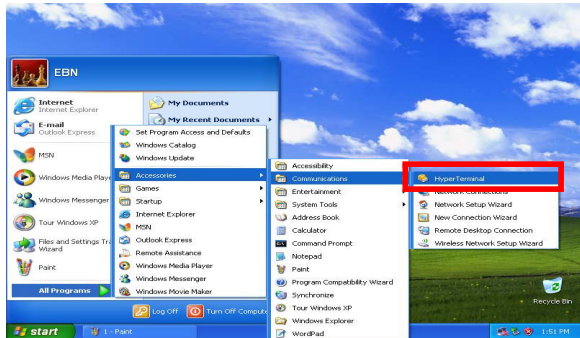
Item	Photo	Description
3		1. Replace with another I/O Connector cable

2.3 Accessories

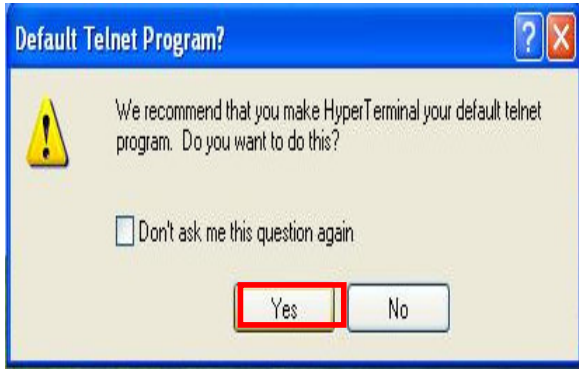
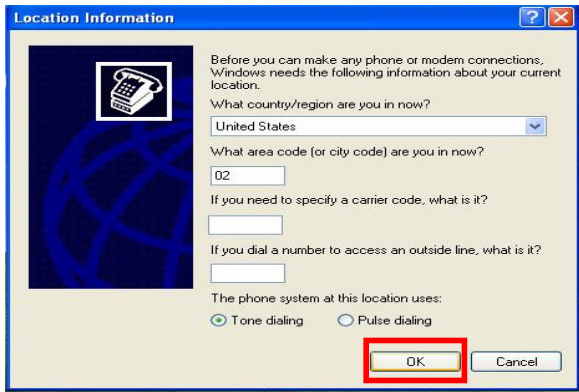
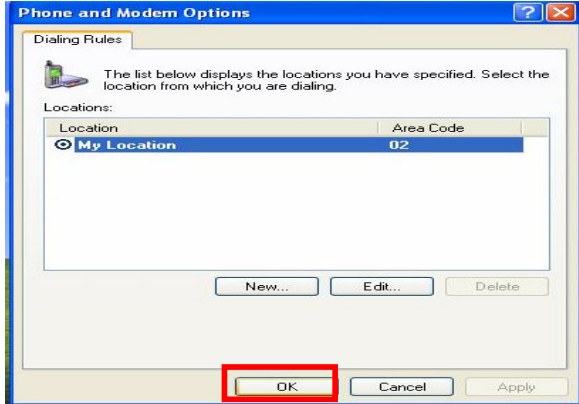
2.3.1 MSR

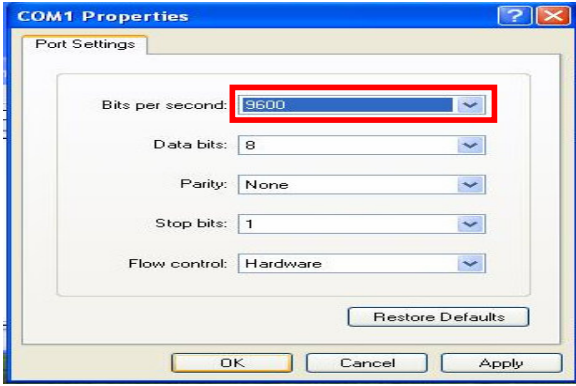
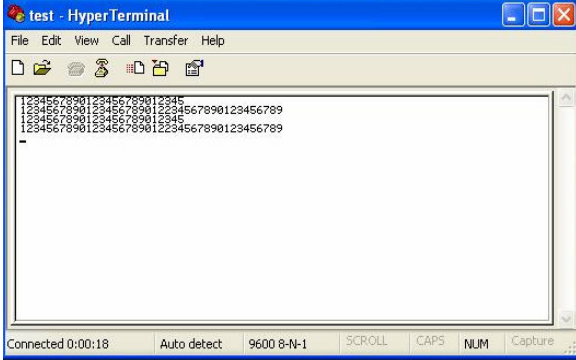
HW Installation		
Item	Photo	Description
1		1. Take out MSR module
2		1. Follow 2.1.1 item 1 to 5 2. Put MSR module at upper position 3. Fasten 2 screws to tighten MSR module 4. Plug MSR cable to I/O board 5. Follow steps back to 2.1.1 item 1

Verification: RS232 type

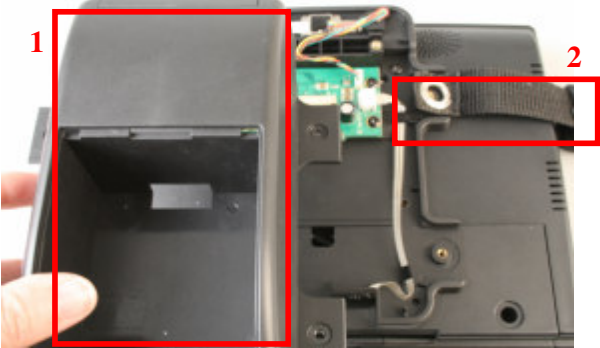
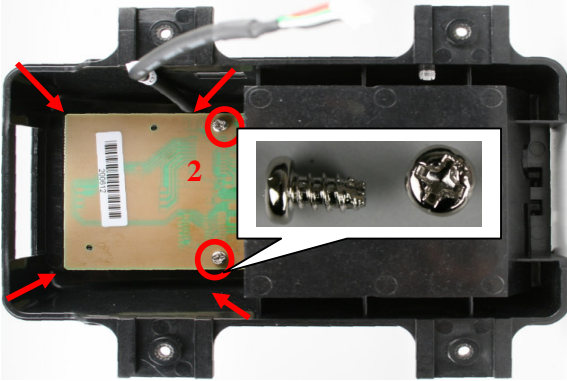
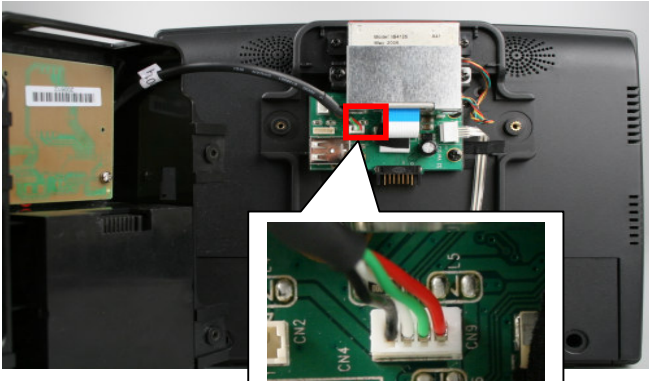
Item No.	Photo	Description
1		1. Enter to "All Programs" → "Communication" → "Hyper Terminal"

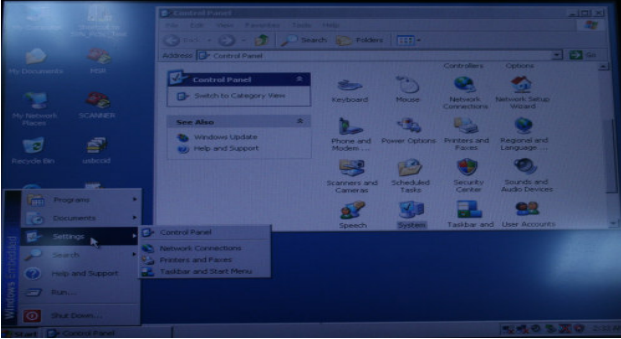
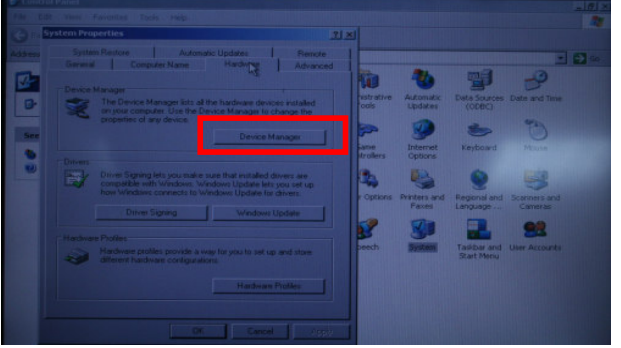
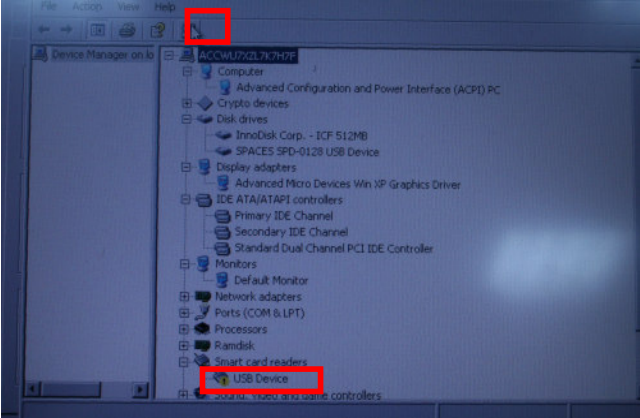
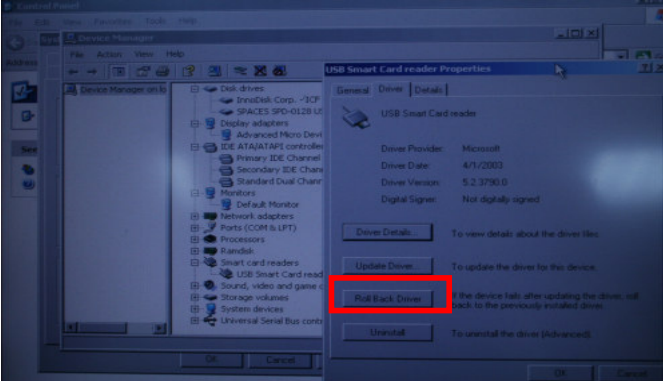
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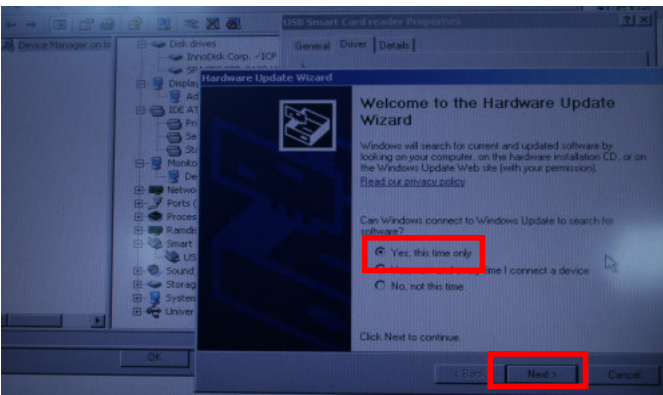
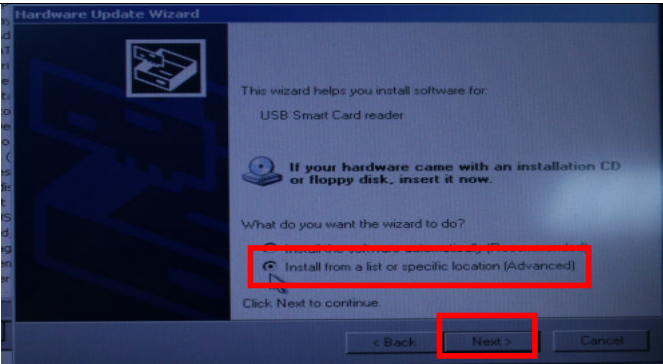
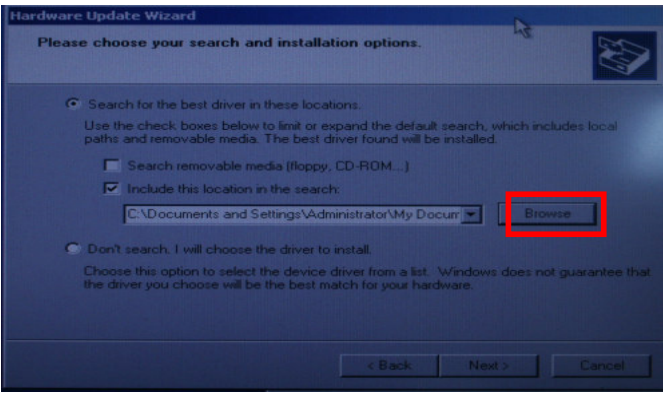
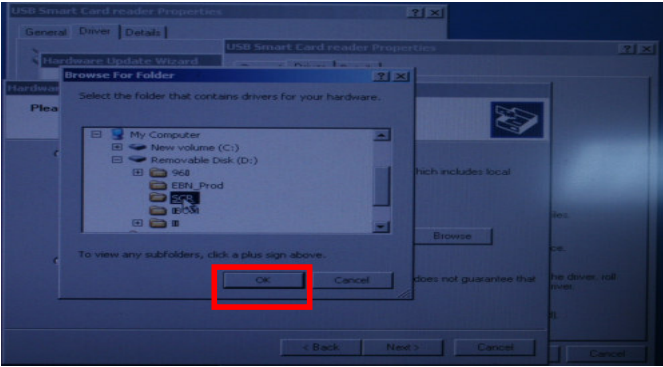
Item No.	Photo	Description
2		1. Click "Yes" to continue
3		1. Set "area code" and click OK
4		1. Click OK
5		1. Enter a name and Click OK

Item No.	Photo	Description
6		1. Select on using COM2 port for MSR (Select COM3 if scanner installed) 2. Click "OK"
7		1. Set Bits per second to be 9600 bps.
8		1. Test OK

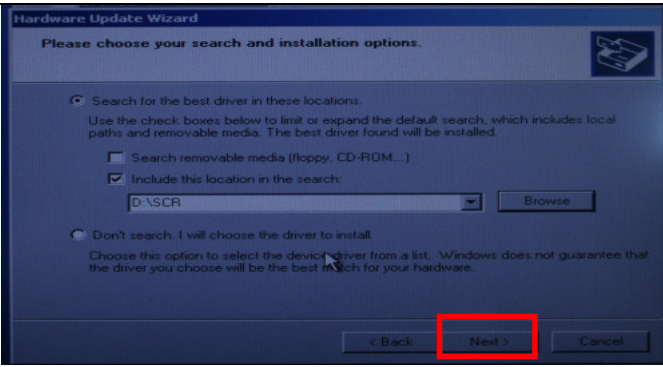
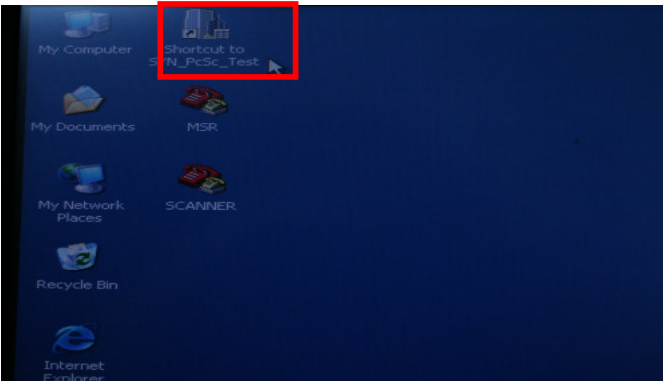
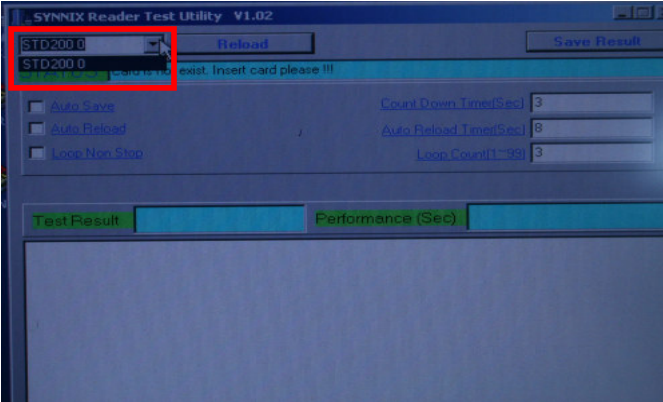
2.3.2 Smart Card

HW Installation		
Item	Photo	Description
1		1. Take out smart card module
2		1. Follow 2.1.1 item 1 to 5 2. Remove MSR reader module cover 3. Turn MSR reader module cover to the other side
3		1. Put smart card in the reader module 2. Fasten 2 screws to tighten smart card
4		1. Plug smart card cable on I/O board 2. Follow steps back to 2.1.1 item 1

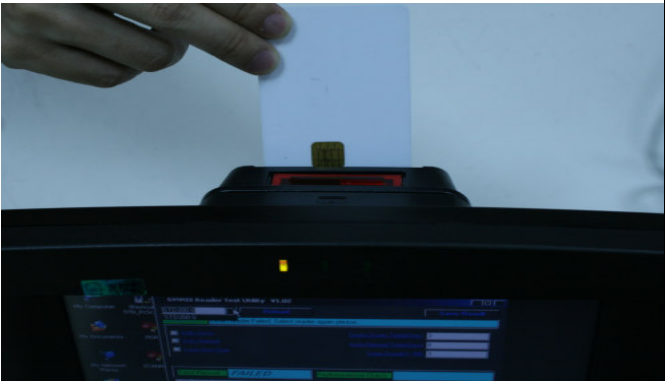
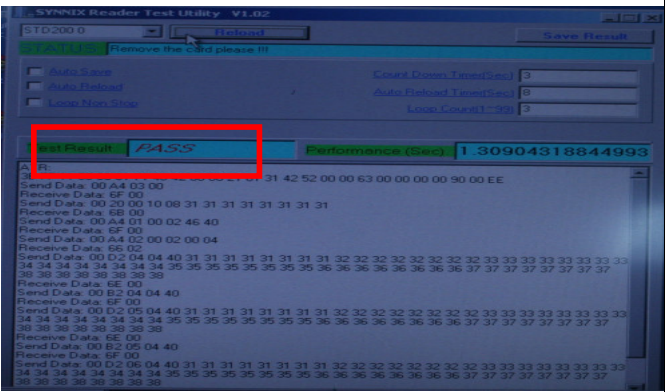
Verification		
Item	Photo	Description
1		1. Click “start”→”Setting”→”Control Panel”→”System”
2		1. Click “Hardware” 2. Click “Device Manager”
3		1. Click “Detect plug in device..” 2. Double click “USB Device”
4		1. Click “Update Driver”

Item	Photo	Description
5		1. Click "Yes, this time only" 2. Click "Next"
6		1. Click "Install from a list or specific location..." 2. Click "Next"
7		1. Click "Browse"
8		1. Choose the location where the driver is stored 2. Click "OK"

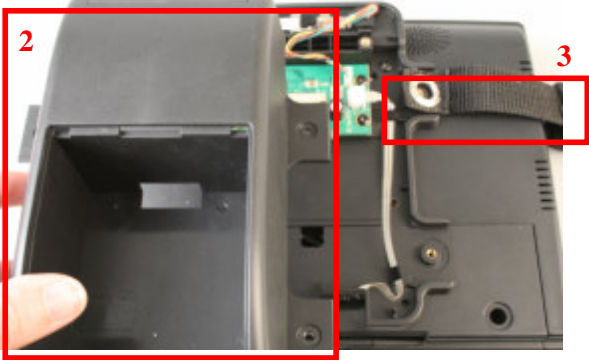
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Item	Photo	Description
9		1. Click "Next"
10		1. Click "Finish" and the installation process is completed
11		1. Click "Shortcut to SYN_PcSc_Test"
12		1. Click "STD2000"

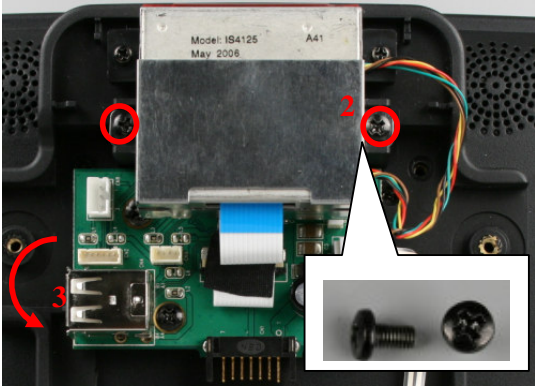
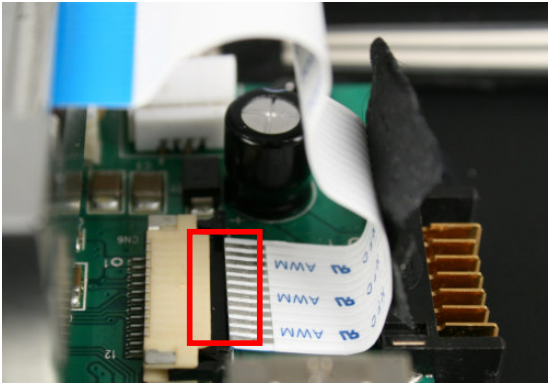
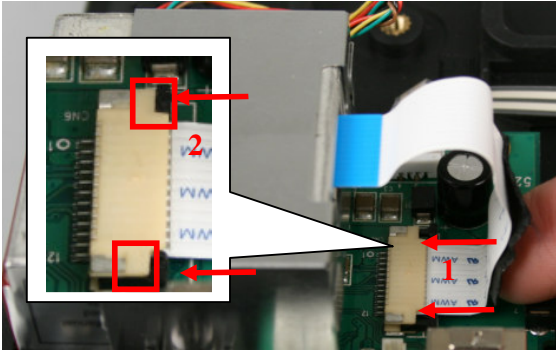
EBN EBN Technology Corp.

Item	Photo	Description
13		1. Insert any smart card into smart card reader
14		1. The test result "PASS" will show on the screen 2. The installation is completed

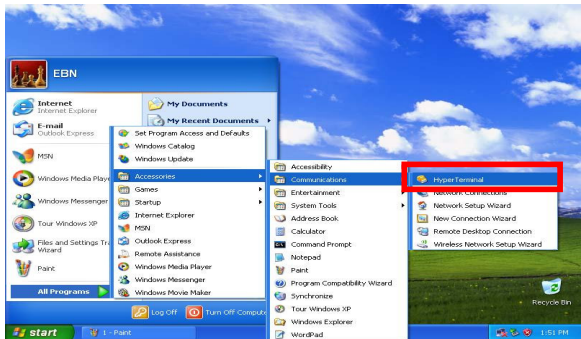
2.3.3 Barcode Scanner

Item	Photo	Description
1		1. Take out smart card module
2		1. Follow 2.1.1 item 1 to 5 2. Remove MSR reader module cover 3. Remove handheld belt

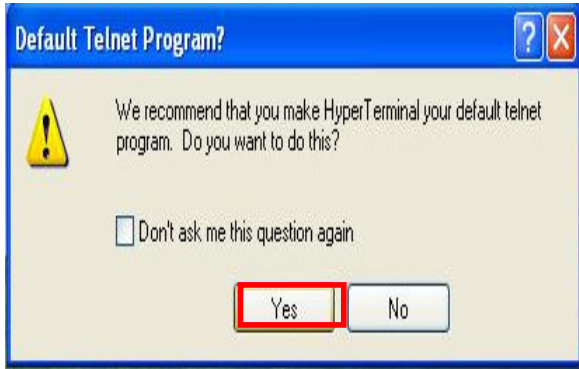
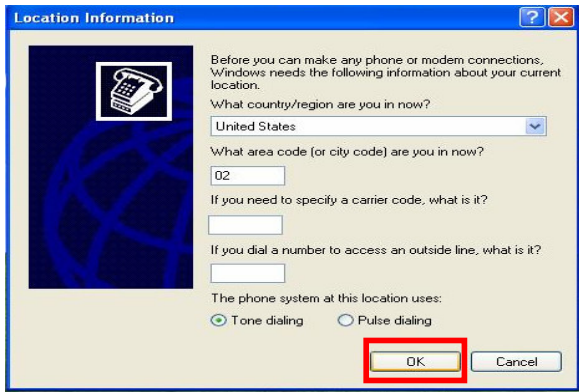
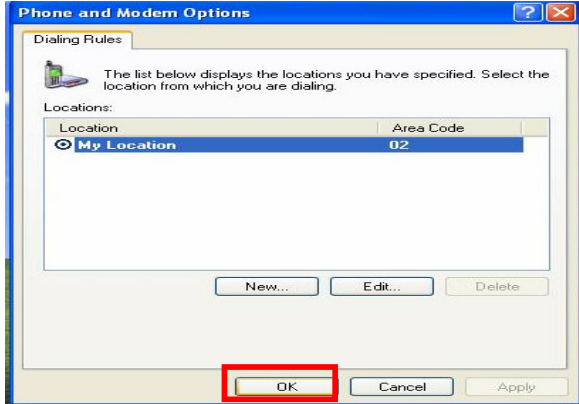
EBN EBN Technology Corp.

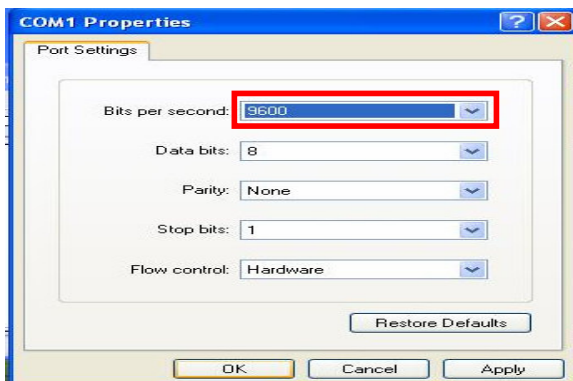
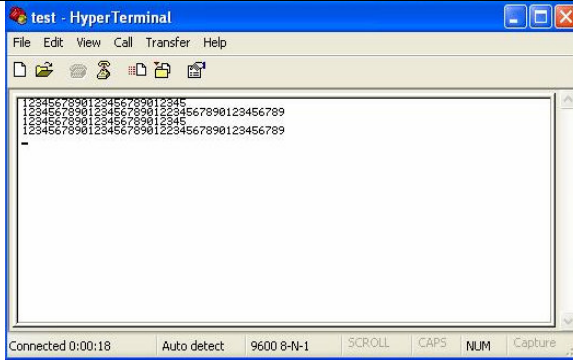
Item	Photo	Description
3		1. Put barcode scanner module on MSR module base 2. Fasten 2 screws to tighten barcode scanner 3. Turn Mobile POS 90° to the left
4		1. Put the cable into the connector on I/O board
5		1. Push in the cable 2. Lock the cable by pushing in black clicker 3. Follow steps back to 2.1.1 item 1

Verification:

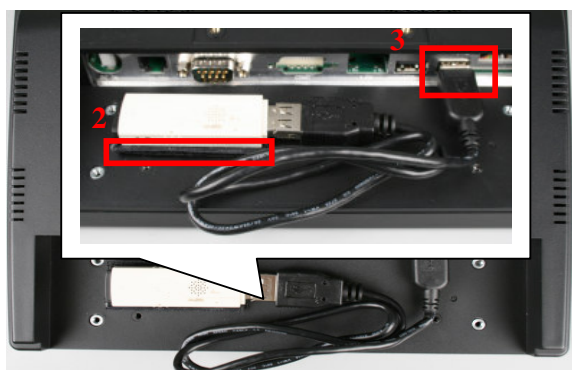
Item No.	Photo	Description
1		1. Enter to "All Programs" → "Communication" → "Hyper Terminal"

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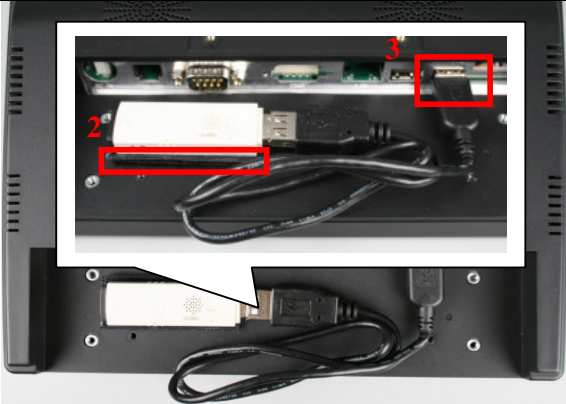
Item No.	Photo	Description
2		1. Click "Yes" to continue
3		1. Set "area code" and click OK
4		1. Click OK
5		1. Enter a name and Click OK

Item No.	Photo	Description
6		3. Select on using COM3 port for barcode scanner (Select COM2 if MSR installed) 4. Click "OK"
7		1. Set Bits per second to be 9600 bps.
8		1. Test OK

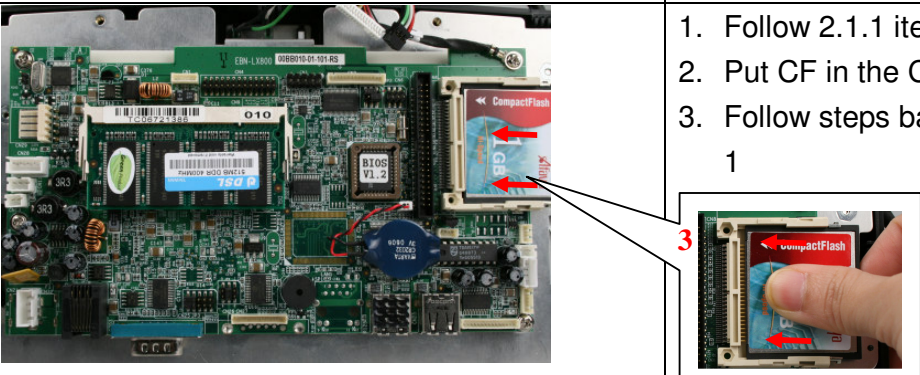
2.3.4 WLAN IEEE

Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 11 2. Use adhesive tape to stick WLAN IEEE with rear cover 3. Plug in the WLAN IEEE cable to USB port 4. Follow steps back to 2.1.1 item 1 5. Follow the steps in driver CD for installation process

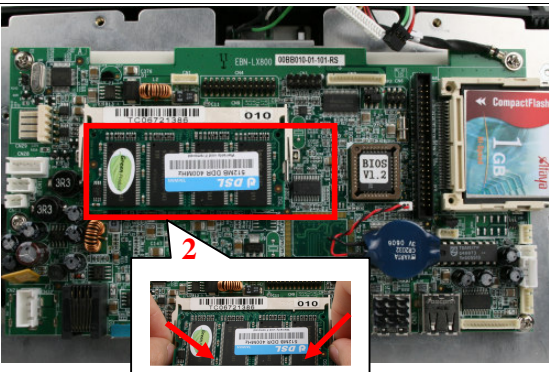
2.3.5 WLAN Bluetooth

Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 11 2. Use adhesive tape to stick blue tooth with rear cover 3. Plug in the WLAN IEEE cable to USB port 4. Follow steps back to 2.1.1 item 1 1. Follow the steps in driver CD for installation process

2.3.6 Compact Flash

Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 16 2. Put CF in the CF slot 3. Follow steps back to 2.1.1 item 1

2.3.7 Memory

Item	Photo	Description
1		1. Follow 2.1.1 item 1 to 16 2. Put RAM in the RAM slot 3. Follow steps back to 2.1.1 item 1

CHAPTER

3

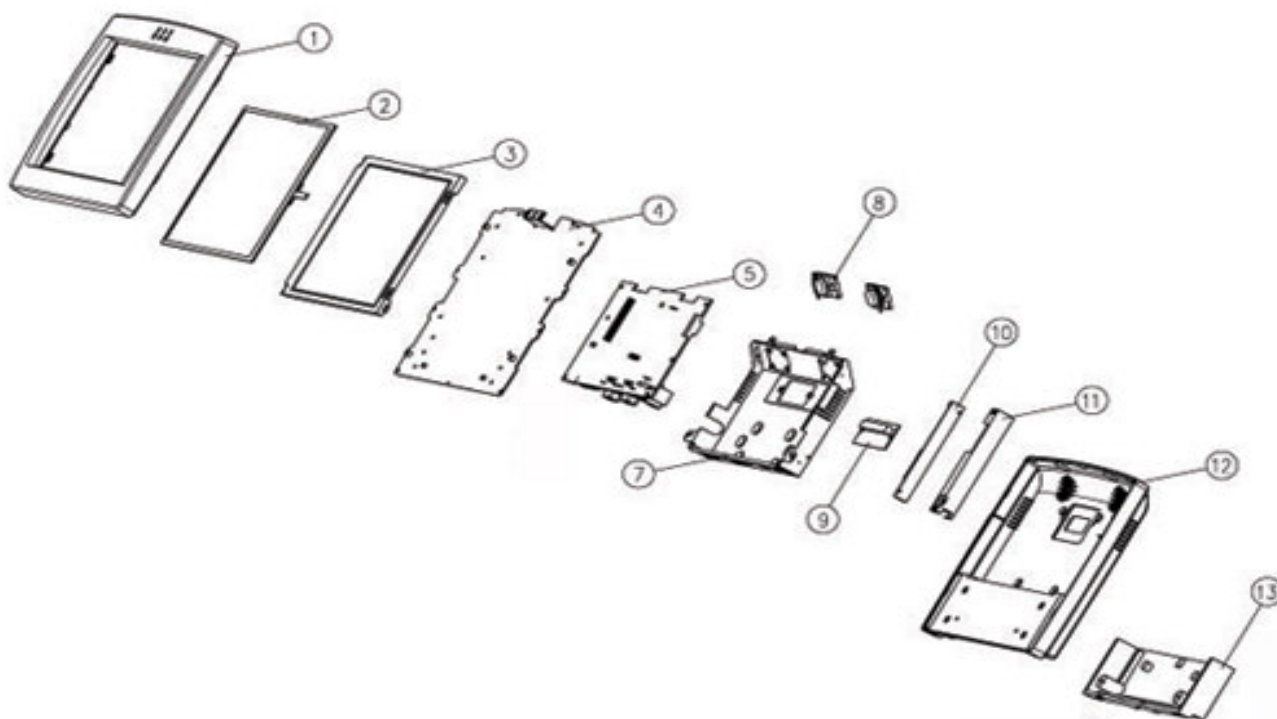
Spare Parts

Chapter 3

Chapter 3 Spare Parts

3.1 Main Unit

3.1.1 Explode of Main Unit



3.1.2 Main Unit Parts List & Quotation

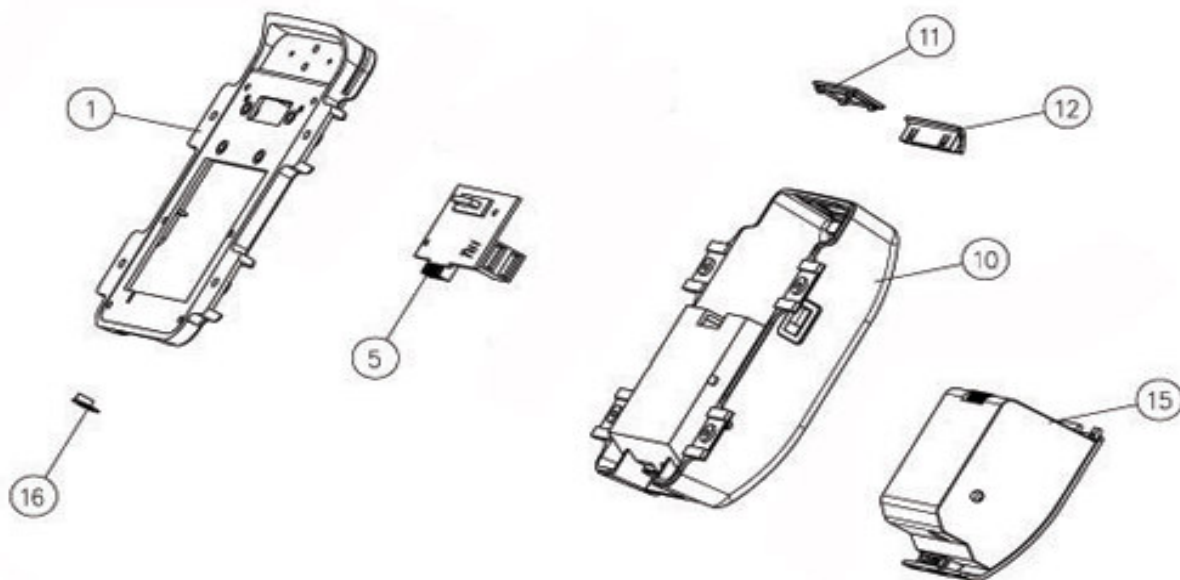
Item	Part No.	Description	Q'ty	Price (USD)
1+2	A10400237RH	Plastic Bezel: 8.4"LCD W/ Water proof sealed stick	1	Call Sales
		Touch Panel: 8.4", Resistive, HT-084F-5RA-002N-18	1	
3	21100011RH	AUO 8.4" LCD PANEL	1	Call Sales
4	30100061RH	LCD chassis (AL=1.0mm)	1	Call Sales
5	10100047RH	LX-800 M/B	1	Call Sales

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Item	Part No.	Description	Q'ty	Price (USD)
7+8+ 9+10 +11	A10400561RH	EMI Chassis Module	1	Call Sales
12	30200061BRH	Cover: 8.4 LCD rear cover, Black	1	Call Sales
13	30200051BRH	Cover: I/O Cover, Black	1	Call Sales

3.2 Battery Module

3.2.1 Explode of Battery Module

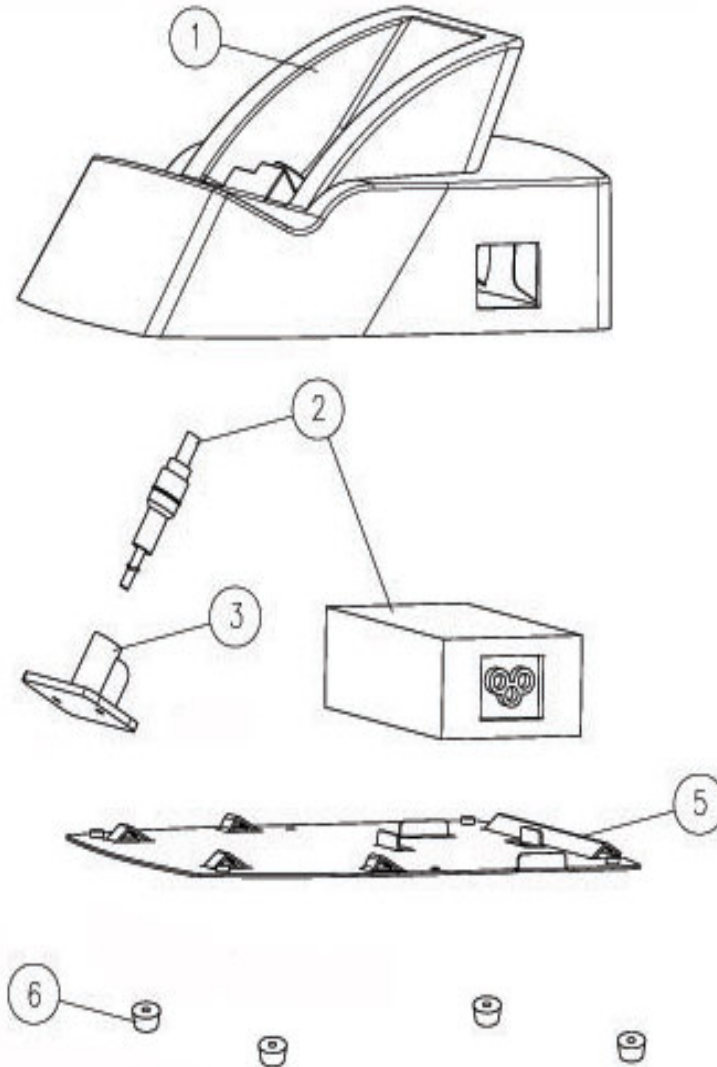


3.2.2 Battery Module Parts List & Quotation

Item	Part No.	Description	Q'ty	Price (USD)
1+16	30200058BRH +21600116RH	Plastic Base: Reader Module Base, PC+ABS, Black	1	Call Sales
5	10100039RH	52 I/O Board	1	Call Sales
10	30200057BRH +30500026RH	Cover: Reader Module Cover, Black W/ Len LED	1	Call Sales
11	30200059BRH	Cover: Scanner Cover, Black	1	Call Sales
12	30200060BRH	Cover: Smart Card Cover, Black	1	Call Sales
15	A10400199RH	Battery Module: 11.1V, 2400mA, Li-ion 3P1S SONY Cell, 68 x 55 x 23.5(mm)	1	Call Sales

3.3 Recharge Cradle

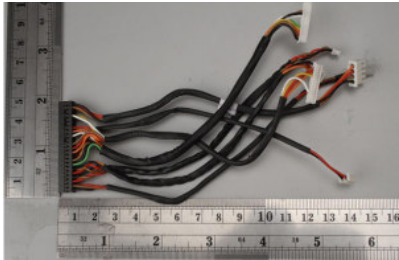
3.3.1 Explode of Recharge Cradle



3.3.2 Recharge Cradle Part List & Quotation

Item	Part No.	Description	Q'ty	Price (USD)
1+2+ 3+5+ 6	A10400116RH	Recharge Cradle Module	1	Call Sales

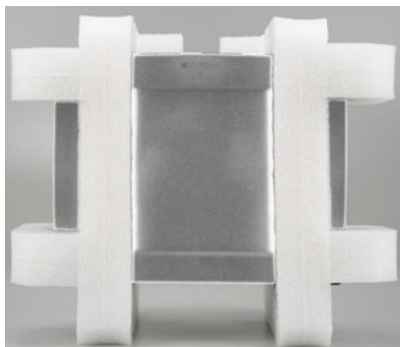
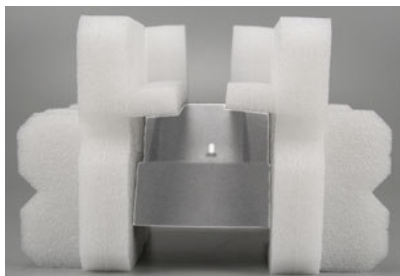
EBN EBN Technology Corp.

Part No.	Description	Photo	Price(USD)
21600094RH	Inverter cable		Call Sales
21600103RH	I/O CONNECTOR cable, P=2.0 44Pin , MOLEX P=1.25 4Pin+MOLEX P=1.25 4Pin+MOLEX P=1.25 15Pin+MOLEX P=1.25		Call Sales
21600095RH	LCD CABLE for AUO panel		Call Sales
21600041RH	LED cable		Call Sales
31400003RH	Heat pad 40*40*2(mm)		Call Sales

EBN EBN Technology Corp.

Part No.	Description	Photo	Price(USD)
31400004RH	Heat pad 23*23*2(mm)		Call Sales
31700001RH +31700002RH	Hand Held Belt		Call Sales
40200016RH	Carton: Inner Packing Carton 321 *228 *585 (mm)		Call Sales
40200024RH	Carton: Outer Packing Carton 700*310*210(mm)		Call Sales

EBN EBN Technology Corp.

Part No.	Description	Photo	Price(USD)
40800014RH	EPE Sponge for Mobile POS Main Unit(Left and Right)		Call Sales
40800023RH	EPE Sponge for Mobile POS Recharge Cradle(Left and Right)		Call Sales
31800001RH +31800002RH	Leather Bag: Bag w/ Belt		Call Sales

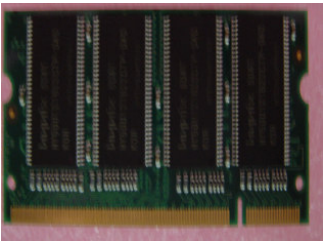
EBN EBN Technology Corp.

3.4 Accessories

3.4.1 Power Cord

Part No.	Description	Photos	Price(USD)
20700001RH	POWER CORE FOR USA 		Call Sales
20700005RH	POWER CORD FOR UK 		Call Sales
20700002RH	POWER CORD FOR EUR 		Call Sales
20700004RH	POWER CORD FOR Australia 		Call Sales

3.4.2 Memory

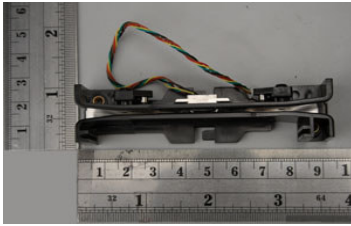
Part No.	Description	Photo	Price(USD)
20300005RH	400MHz DDR MODULE 128M(200PIN-SO DIMM)		Call Sales
20300006RH	400MHz DDR MODULE 256M(200PIN-SO DIMM)		Call Sales
20300007RH	400MHz DDR MODULE 512M(200PIN-SO DIMM)(		Call Sales

EBN EBN Technology Corp.

3.4.3 Compact Flash

Part NO.	Description	Photo	Price(USD)
20600001RH	Compact Flash 128MB		Call Sales
20600002RH	Compact Flash 256MB		Call Sales
20600003RH	Compact Flash 512MB		Call Sales
20600005RH	Compact Flash 1G		Call Sales
20600007RH	Compact Flash 2G		Call Sales

3.4.4 MSR

Part NO.	Description	Photo	Price(USD)
20400008RH	MSR 3 Tracks, RS232		Call Sales

3.4.5 Smart Card

PART NO.	Description	Price(USD)
A10400198RH	Smart Card Module for Mobile POS	Call Sales

3.4.6 Barcode Scanner

PART NO.	Description	Price(USD)
A10400197RH	Barcode Scanner Module: Laser Engine W/ RS-232+130mm FPC CABLE	Call Sales

3.4.7 OS

PART NO.	Description	Price(USD)
20900001RH	WinXP Professional, English Version	Call Sales
20900002RH	WEPOS, English Ver.	Call Sales

3.4.8 Wireless LAN

PART NO.	Description	Photo	Price(USD)
60900002RH	WiFi WLAN:WiFi WLAN 802.11b/g USB		Call Sales
61000001RH	Bluetooth V1.2 USB DONGLE(BT-01UD1)		Call Sales