

POS 430 435 with B55/B75 M/B Installation Guide



Point-of-Sale Hardware System

P/N: 48200095
Nov 2004 V3.0

Safety

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions carefully. Save these instructions for future reference.
2. Follow all warnings and instructions marked on the product.
3. Do not use this product near water.
4. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
5. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
6. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
7. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
8. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

FCC

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference and (2) This device must accept any interference received, including interference that may cause undesired operation.

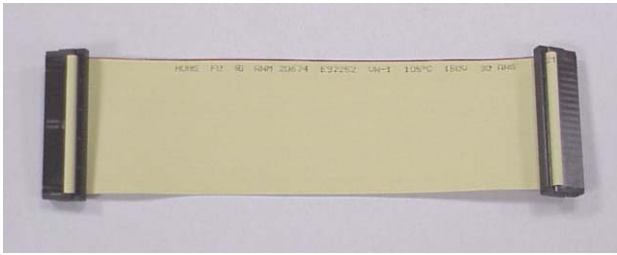
Caution on Lithium Batteries

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

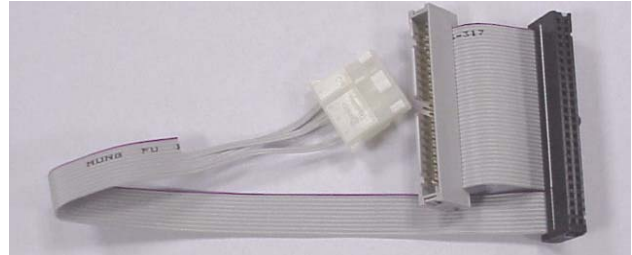
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1. Accessory



External IDE Cable



Power Cable



Drivers Bank



Warranty Card

The following drivers in the folders of Driver Bank are necessary for driver installation.
B55 M/B

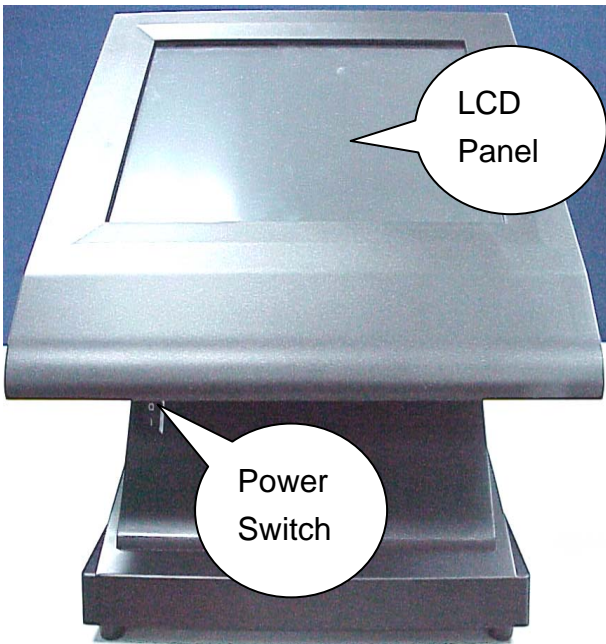
Folder/File	File Description
<CD>: \B55\VGA	VGA driver
<CD>: \Common\LAN_driver\R8139_810x	LAN driver
<CD>: \Common\NetMOS	NetMOS driver
<CD>: \Common\ELO_Touch	Touch driver

B75 M/B

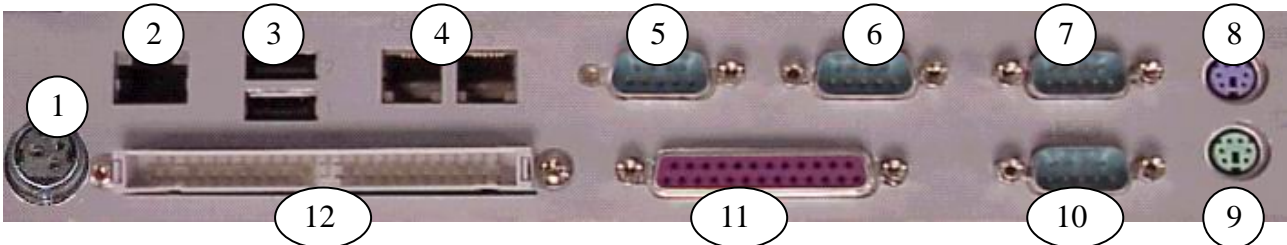
Folder/File	File Description
<CD>: \B75\VGA	VGA driver
<CD>:\Common\LAN_driver\R8139_810x	LAN driver
<CD>: \Common\NetMOS	NetMOS driver
<CD>: \Common\ELO_Touch	Touch driver

Note: The touch screen is setting on COM5. The Netmos driver must be loaded to enable COM5 & COM6 before installing ELO touch driver to COM5.

2. I/O Function

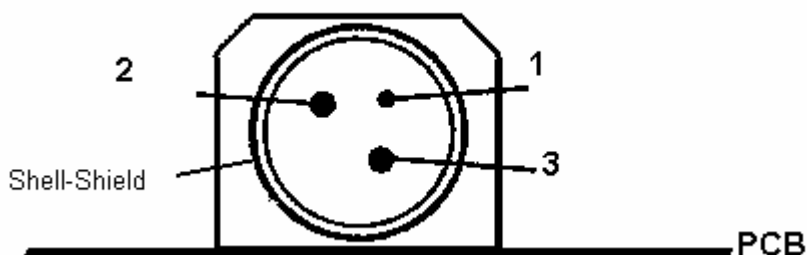


2.1 I/O Connector



#	Function	#	Function	#	Function
1	DC Output 24V/2.0A (Optional)	5	COM1	9	PS/2 Mouse
2	LAN	6	COM2	10	COM3
3	USB1&2	7	COM4	11	LPT
4	Cash Drawer 1&2	8	PS/2 Keyboard	12	IDE

Note: DC output 24 V Pin Assignment



Pin	Assignment
1	NC
2	+ 24V DC
3	Ground

3. Specifications

3.1 B55 M/B

Items	POS430	POS430M	POS430L	POS435
Motherboard	B55			
Core Logic	SiS 630ST Single Chip			
CPU	Intel® SK370 CPUs Celeron® /PIII® FC-PGA /FC-PGA2 FSB 66/100/133Mhz			
System RAM	168pin x 2 DIMM sockets, up to 1GB FSB 66/100/133MHz			
BIOS	Award			
Video Display	Built-in Core Logic			
Video memory	2/4/8/16/32/64 MB frame buffer using system memory			
IDE controller	PCI IDE supports ATA PIO UDMA33/66/100 One primary 40-pin 2.54 pitch and one 44-pin 2.0 pitch(secondary)			
I/O Controller	Built-in Core Logic integrate V1.1 USB controller W83697HF x 2 supports : PS2 Keyboard x 1 & PS2 Mouse x 1 & COM1 ~ COM4 & LPT x 1 NetMos Nm9835 supports : COM5 ~ COM 6			
LAN controller	RTL8139C 10/100Mb Fast Ethernet			
Motherboard Size	232(w) x 208 (D) mm			
I/O Ports	RJ-45 LAN x 1 USB x 2 LPT x 1 COM port x 4 (pin1/pin9 supports +5V/+12V selectable) Cash Drawer x 2 supports 12V PS2 Keyboard x 1, PS2 Mouse x 1 External IDE x 1 Optional 24V DC port x1 (Blind hole)			
Cash Drawer Port	Output address 200H, Input address 201H			
HDD drive	One 3.5" internal HDD; one external IDE connector			
LCD Panel	12.1" TFT LCD Resolution 800 x 600 Luminance 180cd/ m ²	12.1" LVDS LCD Resolution 800 x 600 /1024 x 768 Luminance 150cd/ m ²	12.1" LVDS LCD Resolution 800 x 600 Luminance 100cd/ m ²	15" LVDS LCD Resolution 1024x768 Luminance 250cd/ m ²
Touch Panel	5-wire resistive touch	5-wire resistive touch	5-wire / 6-wire resistive touch	5-wire / 6-wire resistive touch
Card Reader	Optional keyboard/serial type MSR 3 track			
Customer Display	Optional LED/VFD/LCD type			

2nd Pole Display	Optional LED/VFD/LCD type
Power Supply	Internal FT-8180 ATX 180W
Operation Temp.	5°C ~ 35°C
EMI/EMS	FCC /CE Class A
System Dimension	320 (W) x 344~ 360(D) x 216 ~ 338.7(H) mm
Weight	N.W. 7.5Kgs / G.W 9.0Kgs

Note: The control Chip NetMos NM9835 of B55 M/B that controls COM5 & COM6 is PCI 2.1 protocol, which not support system standby mode.

3.2 B75 M/B

Model No.	POS430L	POS430	POS435
Motherboard	B75		
Core Logic	SIS 650 (SIS 650 & SIS 961) Supports 400MHz FSB		
CPU	Intel P4 processor mP478-Pin		
System Memory	2 x DIMM up to 2GB DDR SDRAM 200/266		
BIOS	AWARD PnP 2Mbit		
VGA Display	Built-in Core Logic		
VGA memory	4/8/16/32/64 MB frame buffer using system memory		
I/O Controller	Built-in Core Logic integrate V1.1 USB controller W83697HF x 2 supports : COM1 ~ COM4 & LPT1 x 1 NetMos Nm9835 x1 supports : COM5-COM 6		
LAN Controller	RTL 8100BL 10/100Mb Fast Ethernet controller		
M/B dimension	23.2 x 20.8cm (W*D)		
DVO	SIS302LV		
I/O Ports	RJ-45 LAN Port x 1 USB(1.1) x 2 LPT x 1 COM Port x 4 (pin1/pin9 supports +5V/+12V selectable) Cash Drawer Port x 2 supports 12V PS2 Keyboard Port x 1, PS2 Mouse Port x 1 External IDE connector x 1 Optional 24V DC output Port x1 (Blind Hole)		
Cash drawer port	Cash Drawer Port: Output address 200H, Input address 201H		
Compact Flash	Not support		
HDD drive	Optional One 3.5"HDD		
LCD Panel	12.1" TFT LCD Resolution 1024x768 Brightness 150cd/m ²	12.1" TFT LCD Resolution 800x600 Brightness 180 cd/m ²	15" TFT LCD Resolution 1024x768 Brightness 250cd/m ²

Touch panel	5-wire / 6-wire resistive touch panel	5-wire / 6-wire resistive touch panel	5-wire / 6-wire resistive touch pane
Card Reader	Optional keyboard/serial type MSR 3 track		
Customer Display	Optional LED/VFD / LCD fixed type display		
Pole Display	Optional 2nd Pole Display support LED/VFD /LCD type		
Power Supply	FT-8180 180W ATX power supply		
Operation Temperature	5°C ~ 35°C		
EMI/EMS	FCC/CE Class-A		
System Dimension	320 (W) x 344- 360(D) x 216 – 338.7(H) mm		
Weight	N.W. 7.5kgs/ G.W 9kgs		

Note: The control Chip NetMos NM9835 of B75 M/B that controls COM5 & COM6 is PCI 2.1 protocol, which not support system standby mode.

3.3 System Memory Combination

B55

RAM Size Slot	128MB		256MB			512MB			1024MB
DIMM1	X	128	128	256	X	256	512	X	512
DIMM2	128	X	128	X	256	256	X	512	512

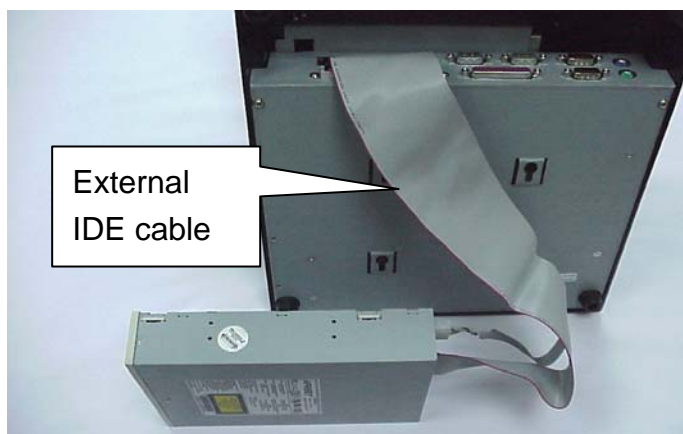
B75

RAM Size Slot	128MB		256MB			512MB			1024MB	2048MB
DIMM1	X	128	128	256	X	256	512	X	512	1024
DIMM2	128	X	128	X	256	256	X	512	512	1024

4. Install Peripherals

4.1 Install External IDE Device

Connect the IDE cable from either the second HDD or CD-ROM drive to the 50 pin Header hidden under the base cover. Check if the second HDD or CD-ROM drive is properly connected if there is no signal.



4.2 Install the Magnetic Card Reader (Optional)

The MCR unit is tested and can be supplied at your request. This MCR is removed during transportation and can be connected by the user. There are two types of MCR Module, either by the COM type or keyboard type.

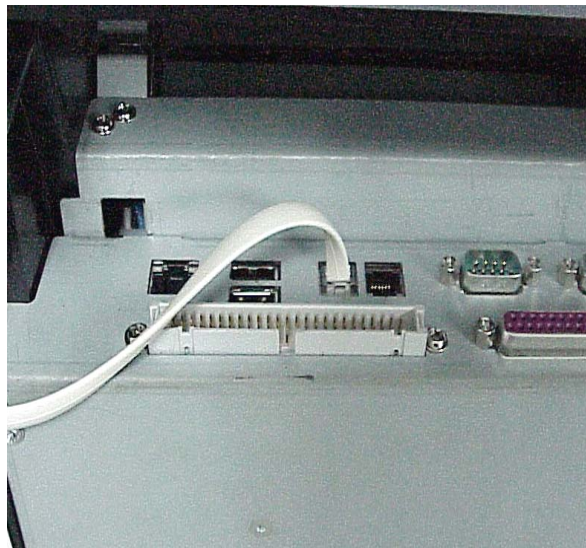


a. Install the MCR module to the right side of System Bay Module and lock it with two screws.

b. If you select a keyboard type MCR and the system does not connect a standard P/S2 keyboard, please insert the Terminator for simulate and instead of the P/S2 Keyboard.

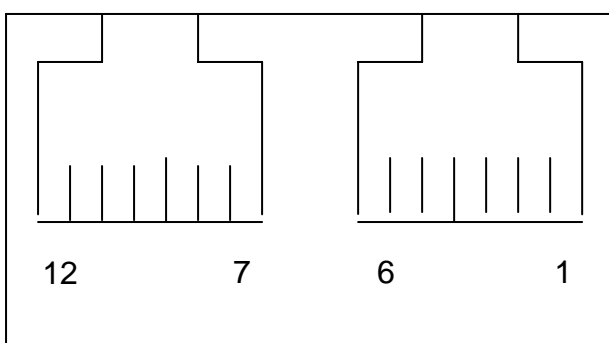
Note: We have a new version that enhances the Keyboard type MCR. When you select a keyboard type MCR, does not connect a standard P/S2 keyboard or insert the Terminator.

4.3. Install Cash Drawer



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

4.3.1 Cash Drawer Pin Assignment



Pin	Signal	Pin	Signal
1	GND	7	GND
2	DOUT bit0	8	DOUT bit2
3	DIN bit0	9	DIN bit1
4	12V	10	12V
5	DOUT bit1	11	DOUT bit3
6	GND	12	GND

4.3.2 Cash Drawer Controller register

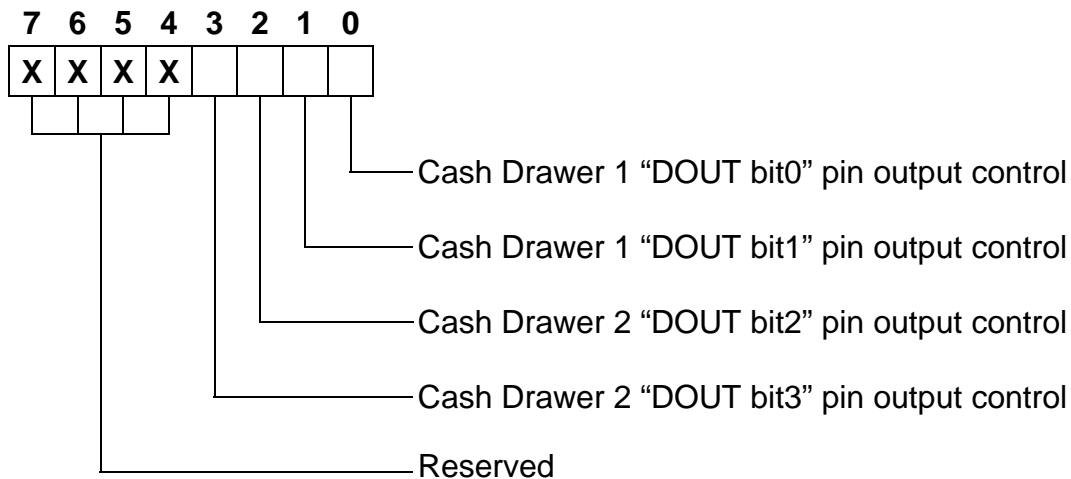
The Cash Drawer Controller use two I/O addresses to control Cash Drawer –Cash Drawer Control Register and Cash Drawer Status Register.

4.3.2.1 Cash Drawer Control Register

Register Location: 200h

Attribute: Write

Size: 8bit



Bit 7-4: Reserved

Bit 3: Cash Drawer 2 "DOUT bit3" pin output control.

= 1: Opening the Cash Drawer 2

= 0: Allow close the Cash Drawer 2

Bit 2: Cash Drawer 2 "DOUT bit2" pin output control.

= 1: Opening the Cash Drawer 2

= 0: Allow close the Cash Drawer 2

Bit 1: Cash Drawer 1 "DOUT bit1" pin output control.

= 1: Opening the Cash Drawer 1

= 0: Allow close the Cash Drawer 1

Bit 0: Cash Drawer 1 "DOUT bit0" pin output control.

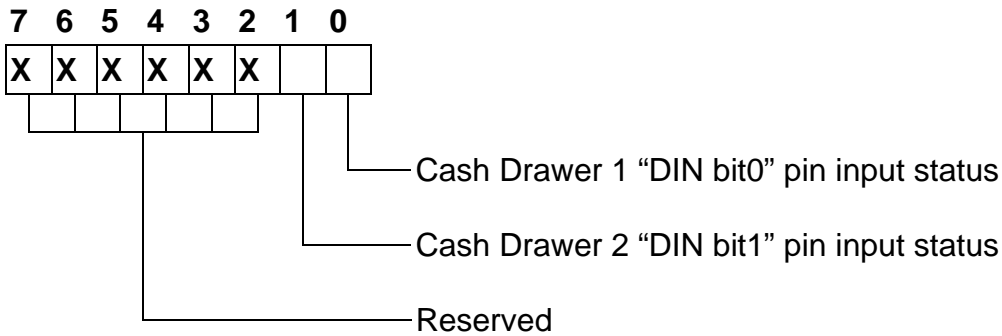
= 1: Opening the Cash Drawer 1

= 0: Allow close the Cash Drawer 1

Note: Please follow the Cash Drawer control signal design to control the Cash Drawer. Suggestion control the bit3/2 or bit1/0 at the same time.

4.3.2.2 Cash Drawer Status Register

Register Location: 201h
 Attribute: Read
 Size: 8bit



Bit 7-2: Reserved

Bit 1: Cash Drawer 2 "DIN bit1" pin input status.

= 1: the Cash Drawer 2 opened or not exists.

= 0: the Cash Drawer 2 closed.

Bit 0: Cash Drawer 1 "DIN bit0" pin input status.

= 1: the Cash Drawer 1 opened or not exists.

= 0: the Cash Drawer 1 closed.

4.3.3 Cash Drawer control command example

Use Debug.EXE program under DOS or Windows98

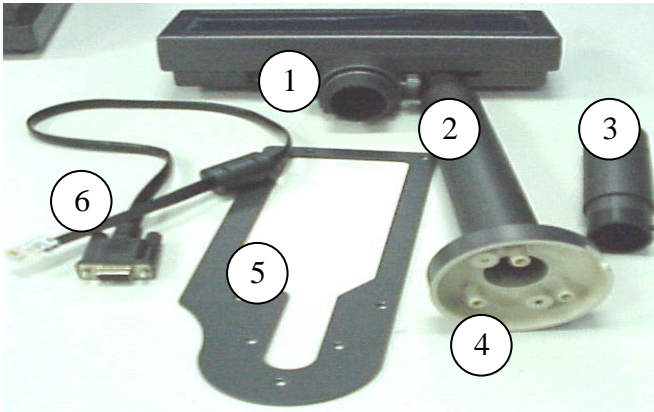
Command	Cash Drawer 1	Cash Drawer 2
O 200 01	Opening	Allow to close
O 200 00	Allow to close	Allow to close
<ul style="list-style-type: none"> ➤ Set the I/O address 200h bit0 =1 for opening Cash Drawer 1 by "DOUT bit0" pin control. ➤ Set the I/O address 200h bit0 = 0 for allow close Cash Drawer 1. 		

Command	Cash Drawer 1	Cash Drawer 2
O 200 04	Allow to close	Opening
O 200 00	Allow to close	Allow to close
<ul style="list-style-type: none"> ➤ Set the I/O address 200h bit2 = 1 for opening Cash Drawer 2 by "DOUT bit2" pin control. ➤ Set the I/O address 200h bit2 = 0 for allow close Cash Drawer 2. 		

Command	Cash Drawer 1	Cash Drawer 2
I 201	Check status	Check status
<ul style="list-style-type: none"> ➤ The I/O address 201h bit0 =1 mean the Cash Drawer 1 is opened or not exist. ➤ The I/O address 201h bit0 =0 mean the Cash Drawer 1 is closed. ➤ The I/O address 201h bit1 =1 mean the Cash Drawer 2 is opened or not exist. ➤ The I/O address 201h bit1 =0 mean the Cash Drawer 2 is closed. 		

4.4. Install Pole Display (Optional)

#	Item	#	Item
1	Customer Display (VFD or LCD)	4	Pole Stud
2	Long Pole	5	Base Bracket
3	Short Pole	6	RJ-45 TO DB9 Cable



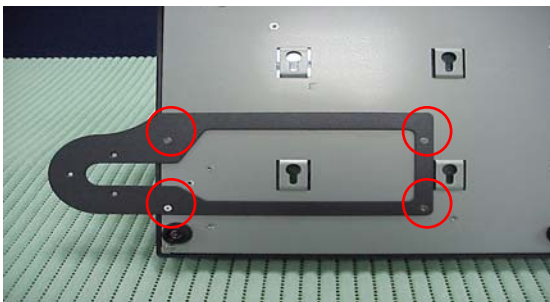
Use the following parts to install the Pole Display.



a. Connect the item 1~4.



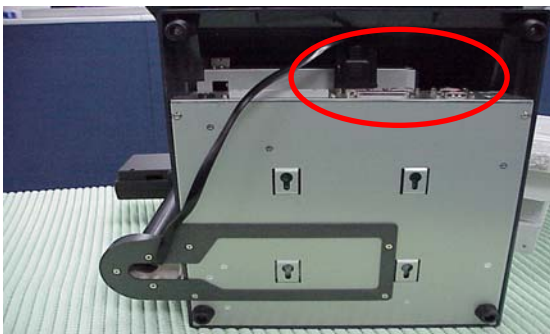
b. Connect the item 1~4



c. Lock item 5 with 4 screws first.



d. Assemble the Item1~5 and lock three screws.



e. Connect the DB-9F to any of the COM ports (1~4).



f. The installation is completed.

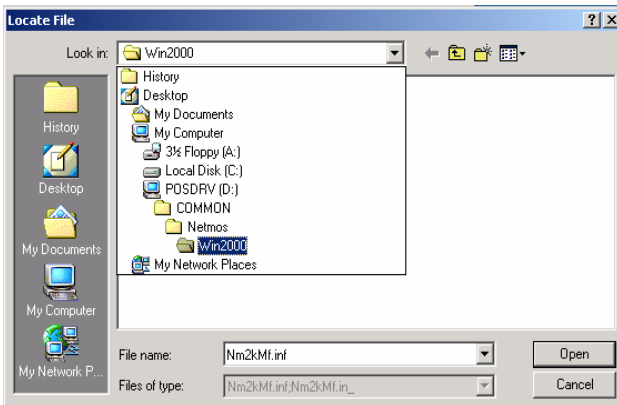
5. Driver Installation

5.1 B55

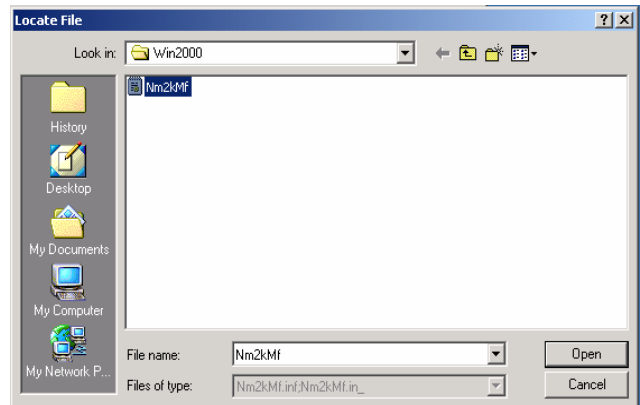
The following procedures are for Windows 2000. Other platforms are similar.

5.1.1 NetMos

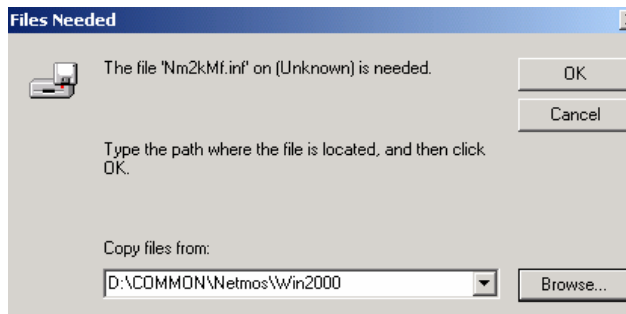
Driver path: <CD>:\Common\Netmos



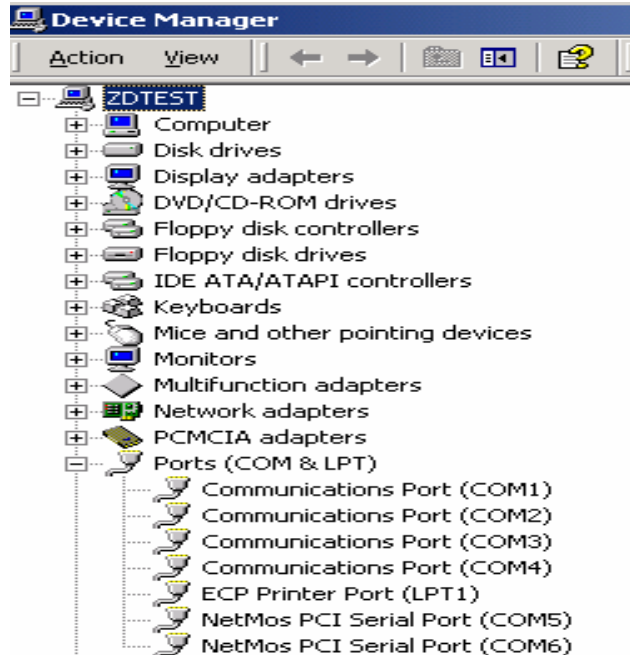
a. Indicate the location of the Netmos driver



b. Choose "Nm2kMf" in the Locate File window.



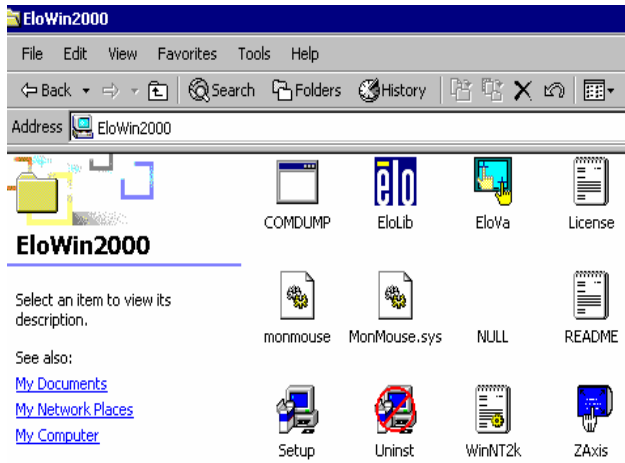
c. Click "OK" on the Files Needed window.



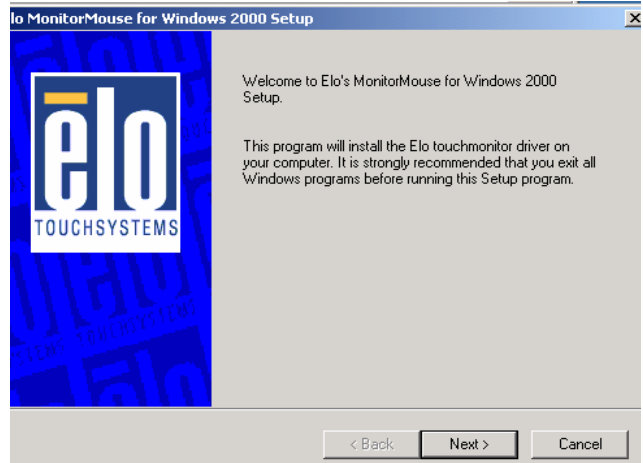
d. Now the Netmos driver is installed.

5.1.2 Elo_Touch

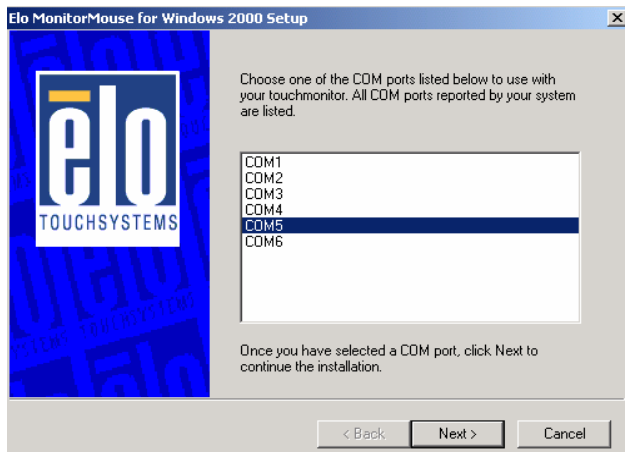
Driver path: <CD>:\Common\Elo_Touch



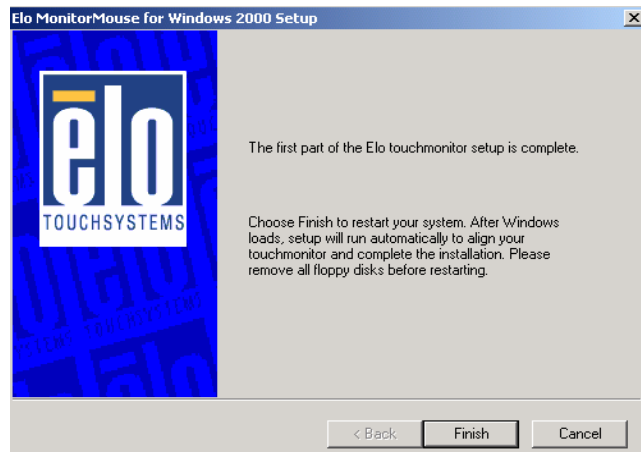
a. Click "Setup" on the EloWin2000 window.



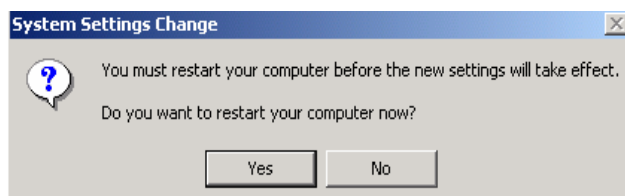
b. Click "Next" on the Elo MonitorMouse for Windows 2000 Setup window.



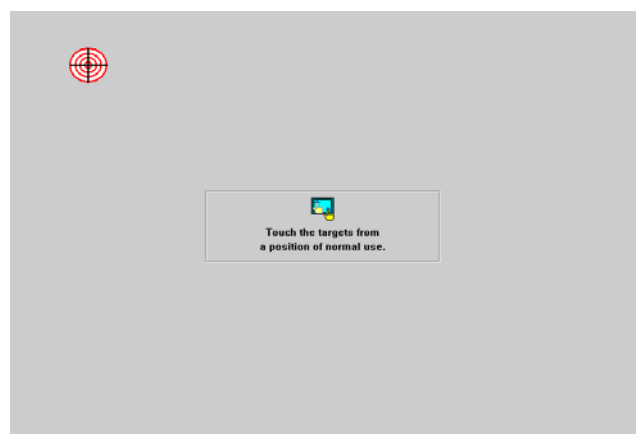
c. Choose "COM5" and click "Next" on the Elo MonitorMouse for Windows 2000 Setup window.



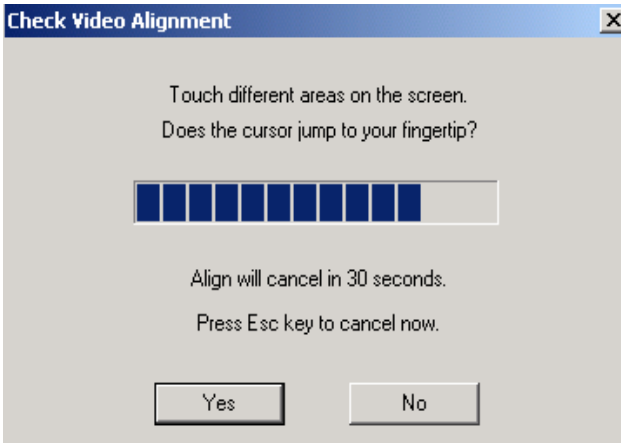
d. Click "Finish" on the Elo MonitorMouse for Windows 2000 Setup window.



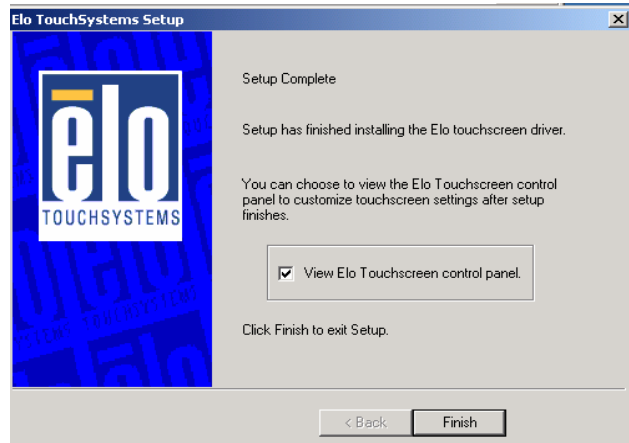
e. Click "Yes" on the System Settings Change.



f. After the computer restarted, touch the targets with your finger for alignment.



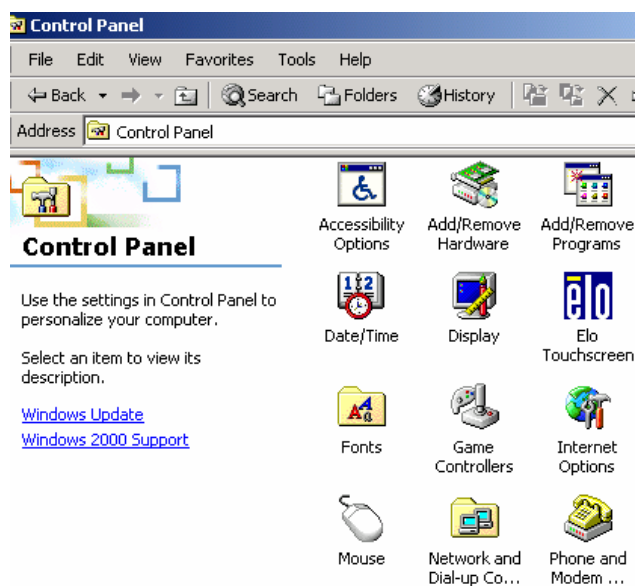
g. Click “Yes” on the Check Video Alignment window.



h. Click “Finish” on the “Elo TouchSystem Setup window.



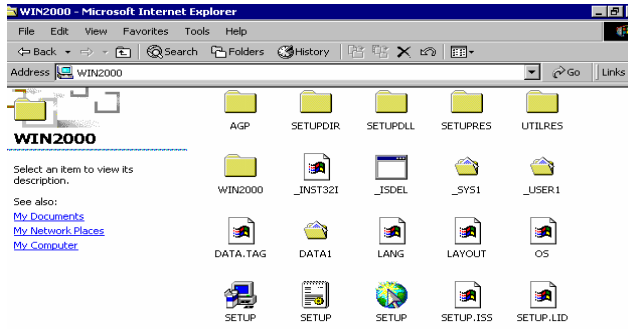
i. If the cursor is not in sync with your fingertip, click “Align...” to execute the alignment procedure again, or click “OK”



j. Now the Elo_Touch driver is installed.

5.1.3 VGA

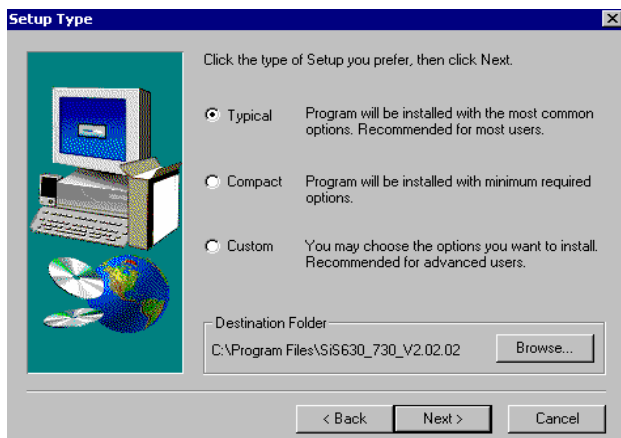
Driver path: <CD>:\B55\VGA)



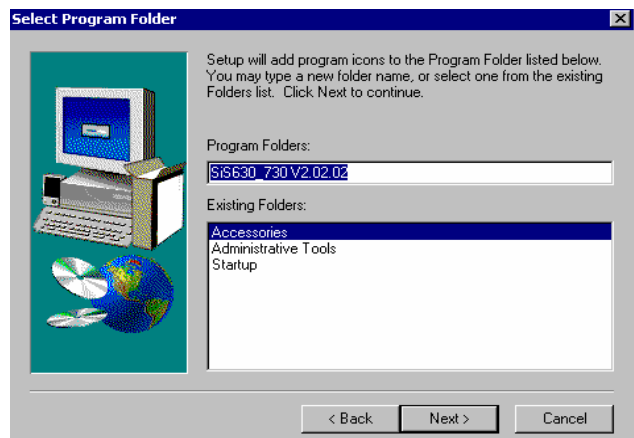
a. Click "SETUP" On the VGA2000 window.



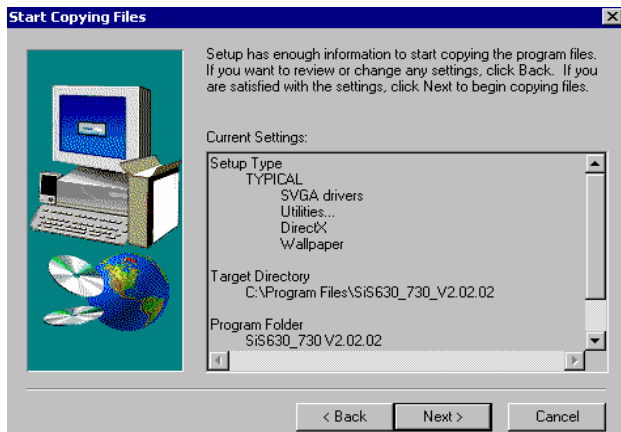
b. Click "Next" on the Welcome window.



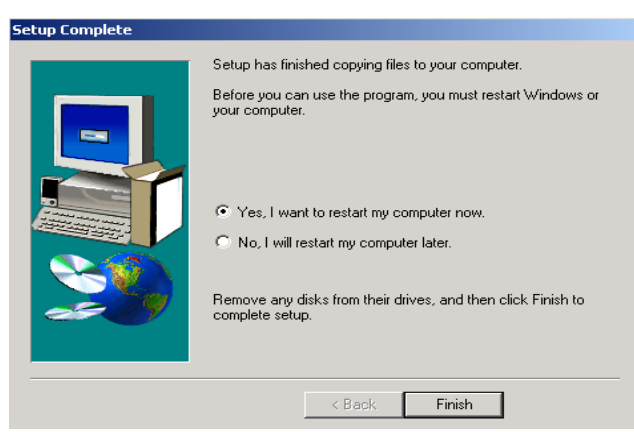
c. Click "Next" on the Setup Type window.



d. Click "Next" on the Select Program Folder window..



e. Click "Next" on the Select Copying Files window.



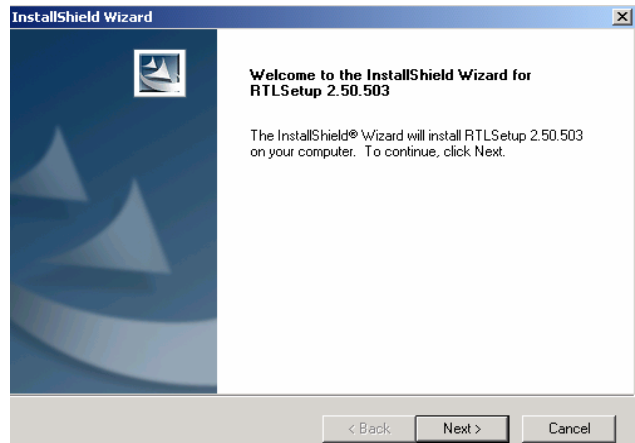
f. Click "Finish" on the Setup Complete window.

5.1.4 LAN driver

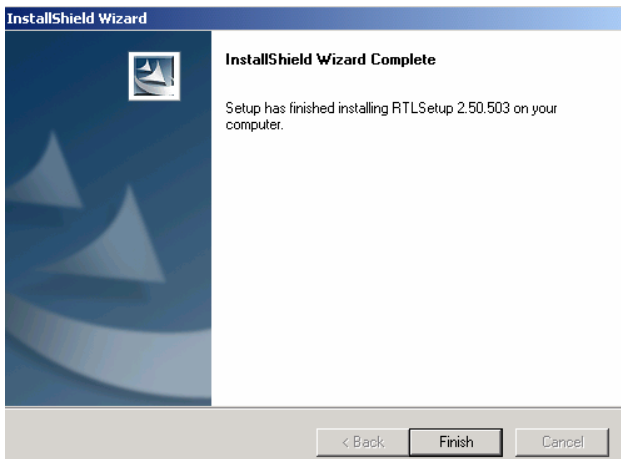
Driver path: <CD>: \Common\Lan_driver\R8139_810x



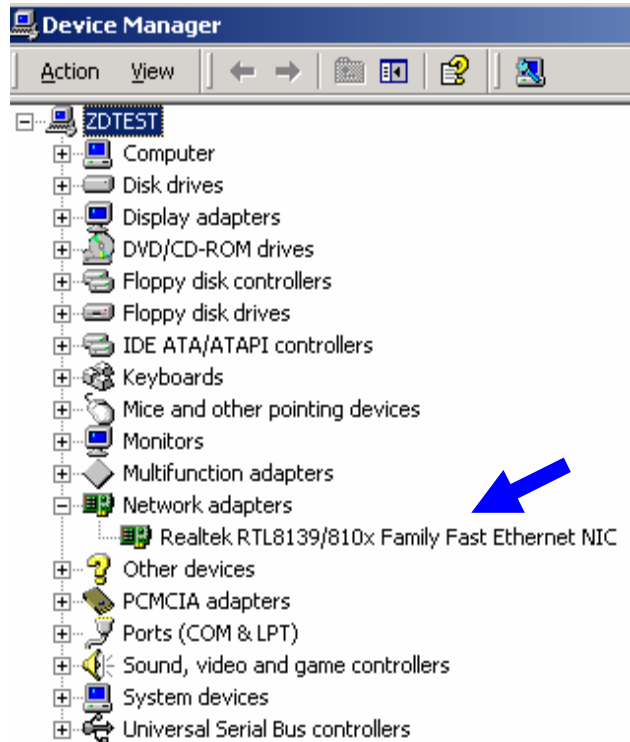
a. Click "Setup.exe".



b. Click "Next" on the InstallShield Wizard.



c. Click "Finish" on the InstallShield Wizard.



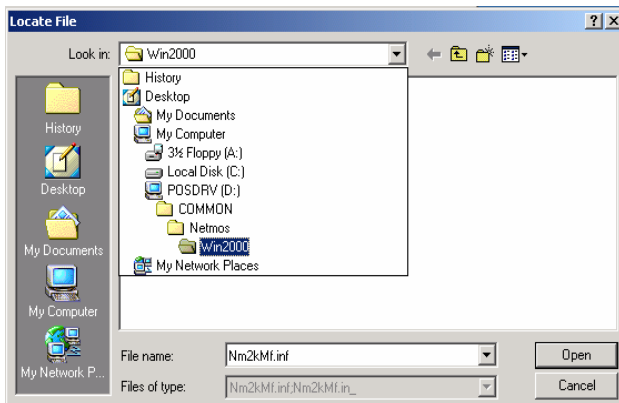
d. Now the Lan_driver is installed.

5.2 B75

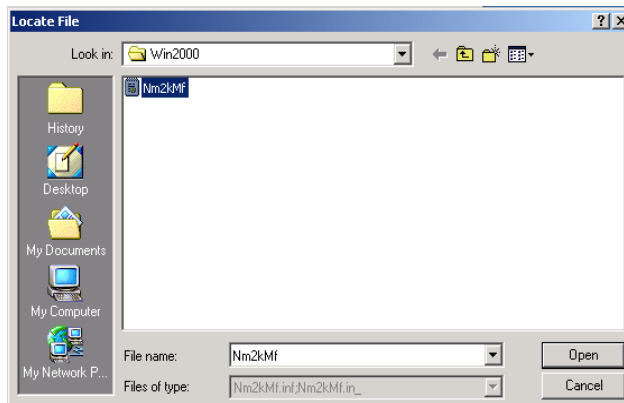
The following procedures are for Windows 2000. Other platforms are similar.

5.2.1 NetMos

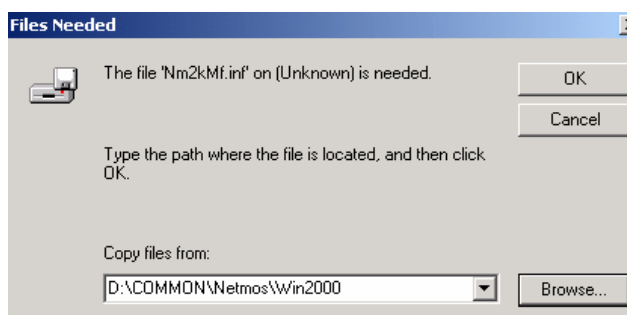
Driver path: <CD>:Common\Netmos



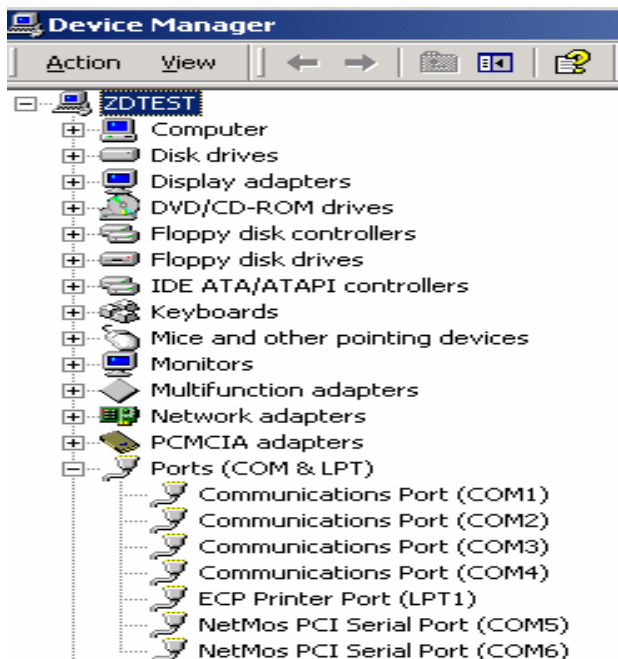
a. Indicate the location of the Netmos driver



b. Choose "Nm2kMf" in the Locate File window.



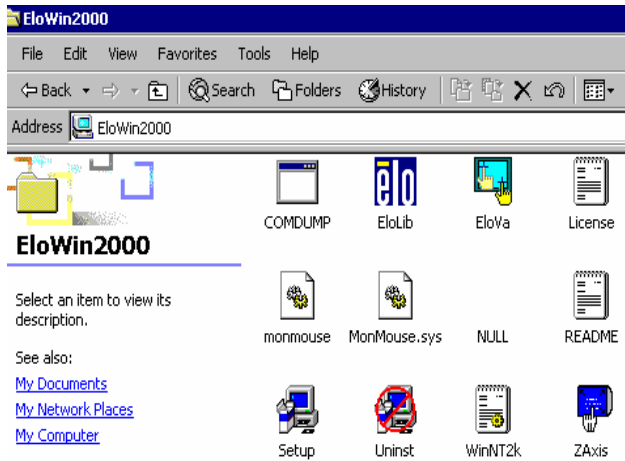
c. Click "OK" on the Files Needed window.



d. Now the Netmos driver is installed.

5.2.2 Elo_Touch

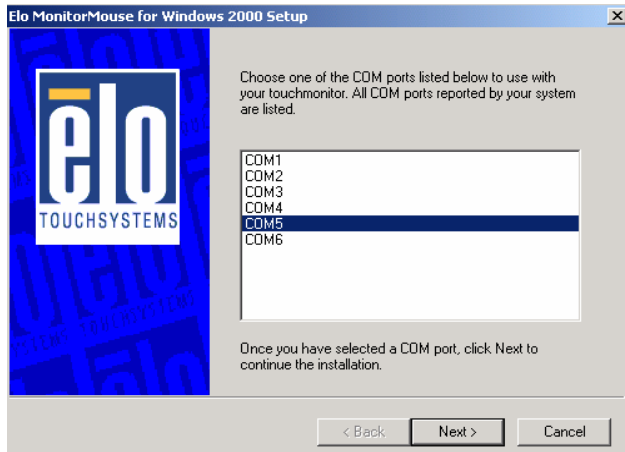
Driver path: <CD>:Common\Elo_Touch



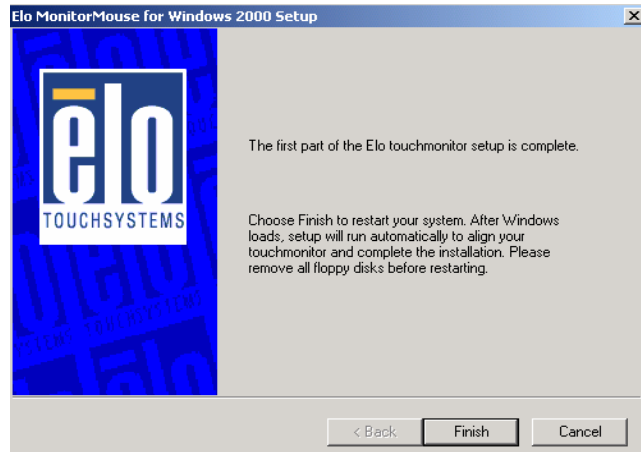
a. Click "Setup" on the EloWin2000 window.



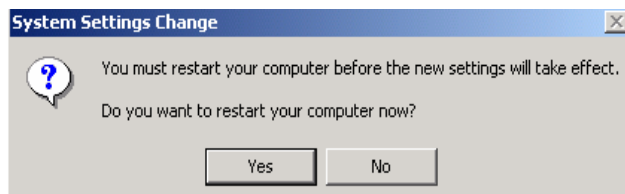
b. Click "Next" on the Elo MonitorMouse for Windows 2000 Setup window.



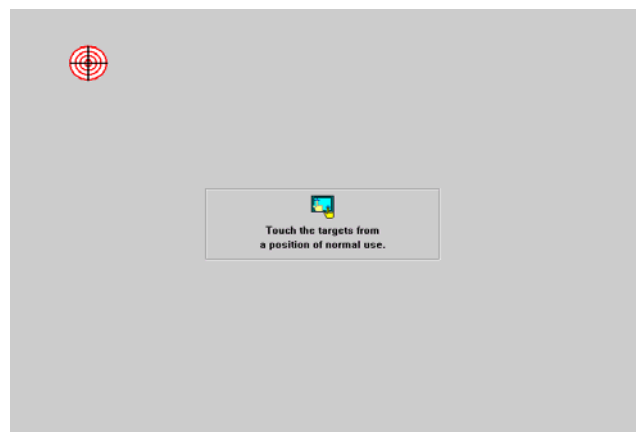
c. Choose "COM5" and click "Next" on the Elo MonitorMouse for Windows 2000 Setup window.



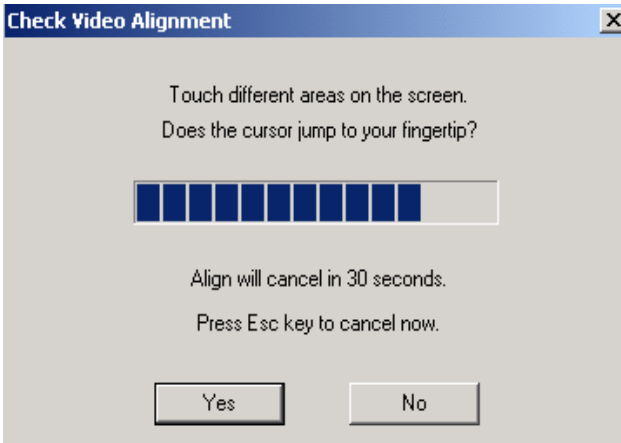
d. Click "Finish" on the Elo MonitorMouse for Windows 2000 Setup window.



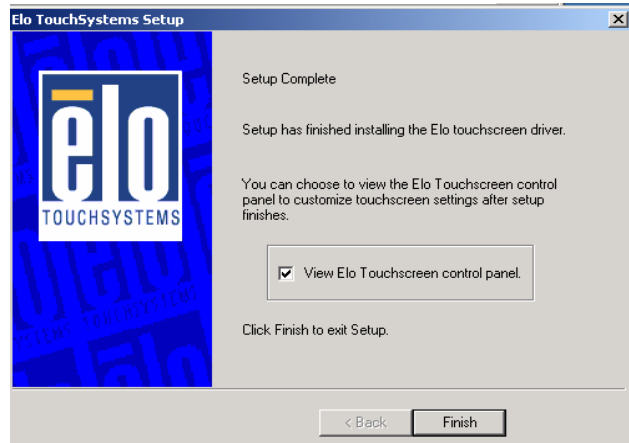
e. Click "Yes" on the System Settings Change.



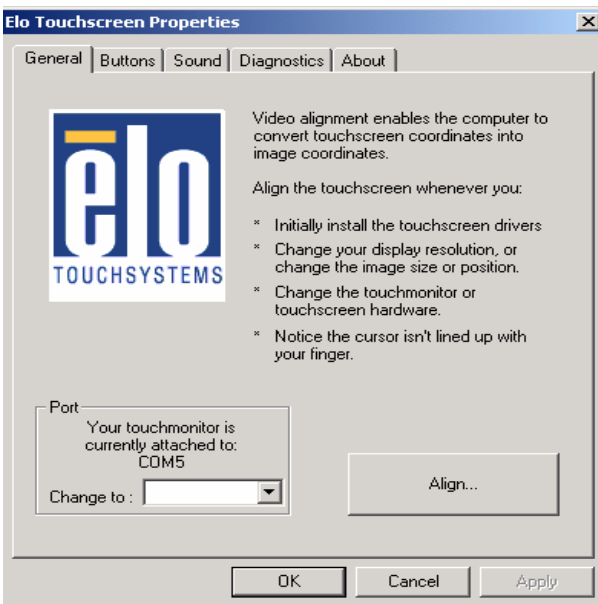
f. After the computer restarted, touch the targets with your finger for alignment.



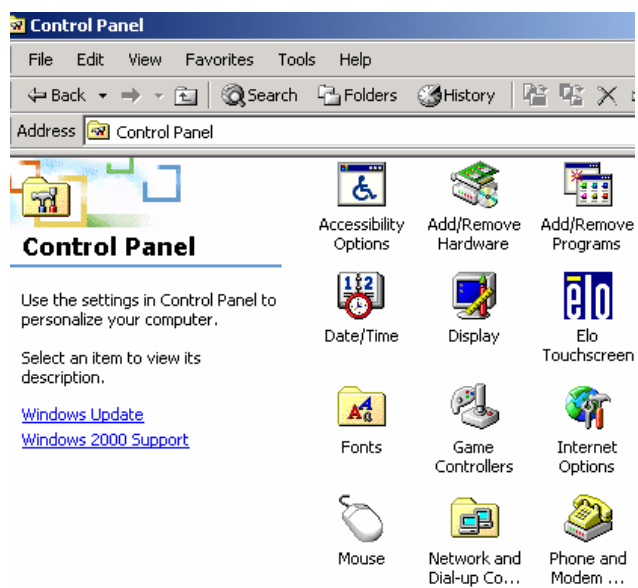
g. Click “Yes” on the Check Video Alignment window.



h. Click “Finish” on the “Elo TouchSystem Setup window.



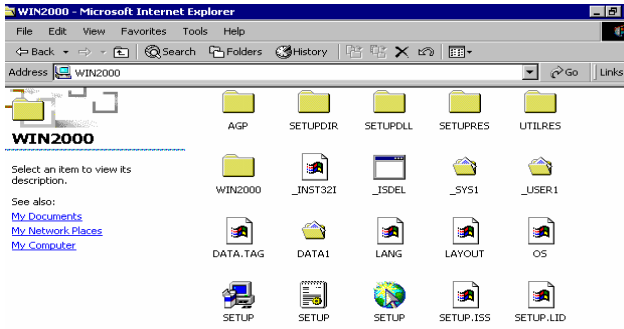
i. If the cursor is not in sync with your fingertip, click “Align...” to execute the alignment procedure again, or click “OK”



j. Now the Elo_Touch driver is installed.

5.2.3 VGA

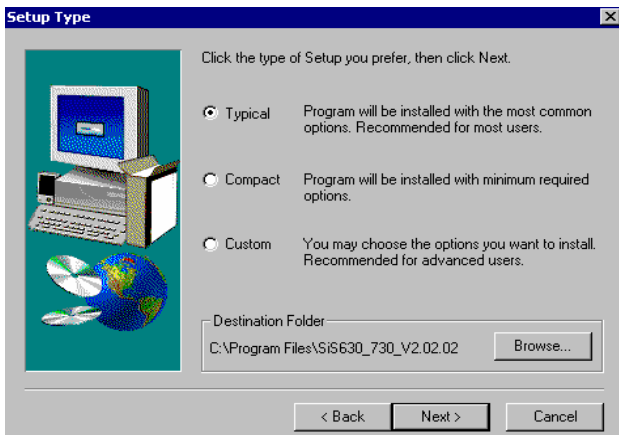
Driver path: <CD>:\B75



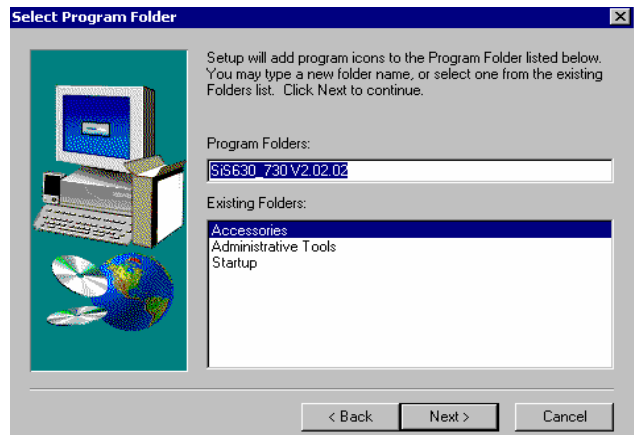
a. Click "SETUP" On the My Computer window.



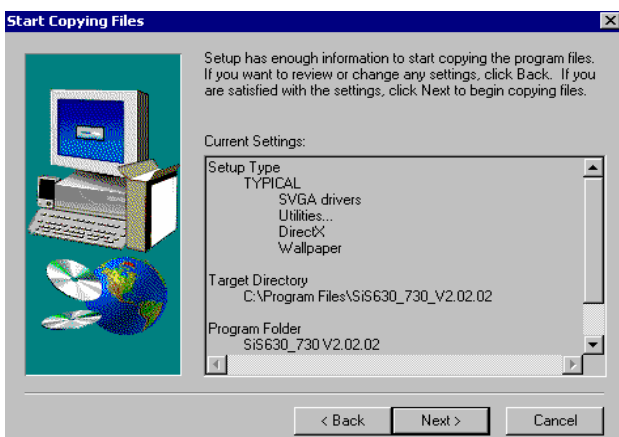
b. Click "Next" on the Welcome window.



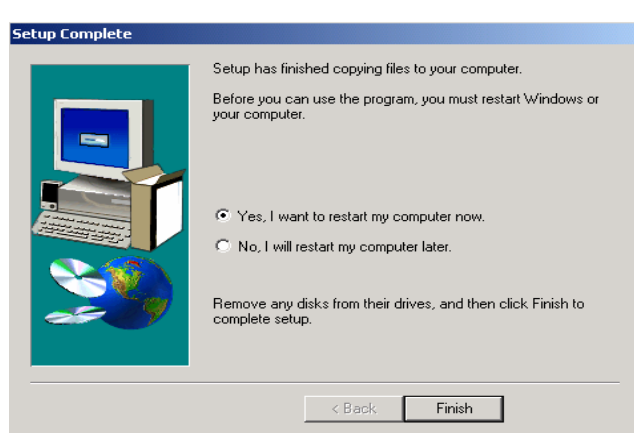
c. Click "Next" on the Setup Type window.



d. Click "Next" on the Select Program Folder window..



e. Click "Next" on the Select Copying Files window.



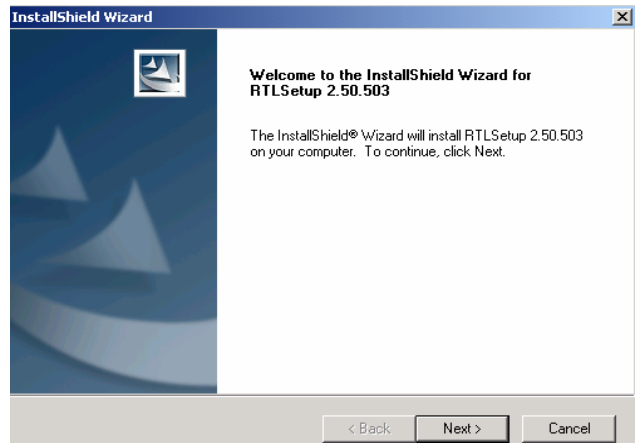
f. Click "Finish" on the Setup Complete window.

5.2.4 LAN driver

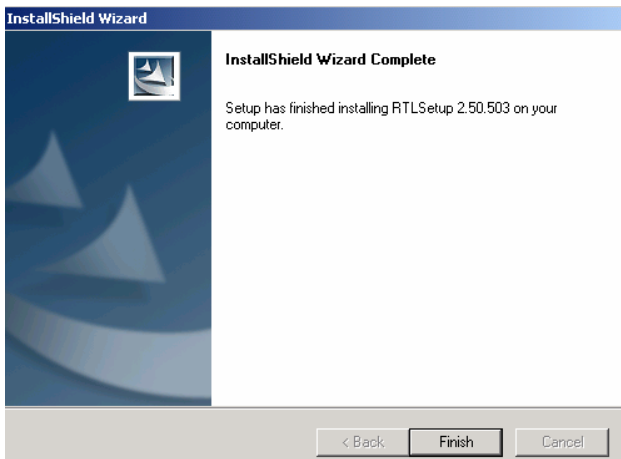
Driver path: <CD>: \Common\Lan_driver\R8139_810x



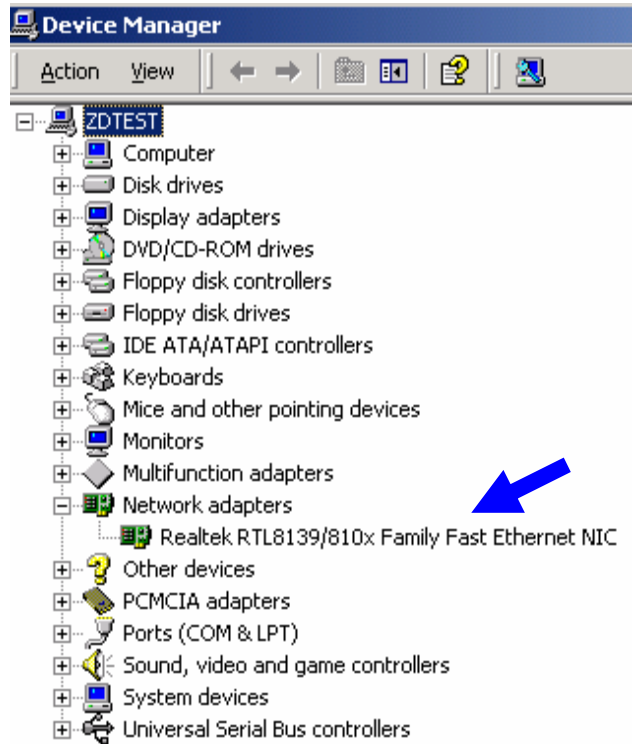
a. Click "Setup.exe".



b. Click "Next" on the InstallShield Wizard.



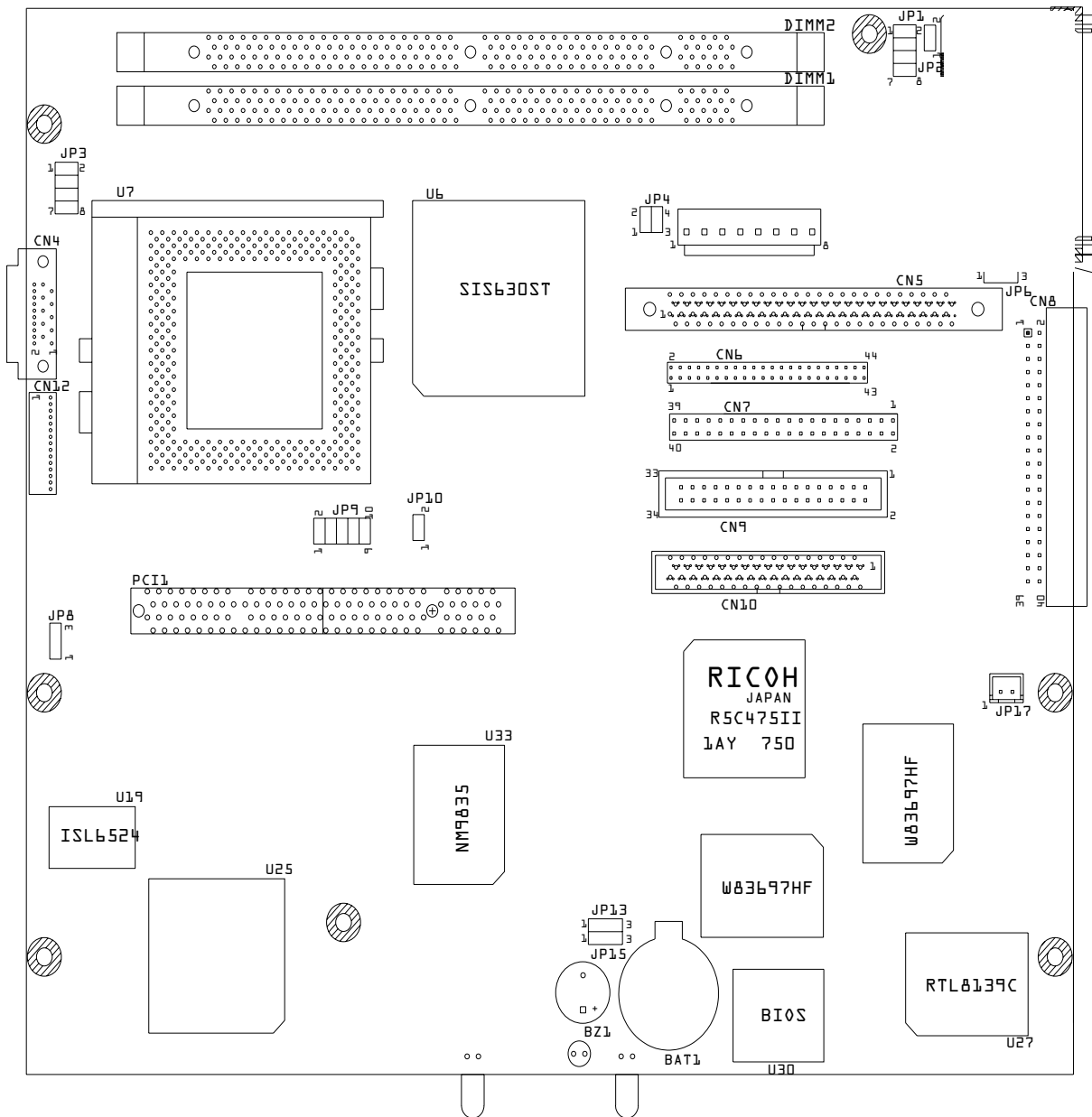
c. Click "Finish" on the InstallShield Wizard.



d. Now the Lan_driver is installed.

6. Jumper Setting

6.1 B55 M/B



6.1.1 Power Supply Type

* Factory Default Setting

Function	JP6
ATX Power	*2-3 SHORT
AT Power	1-2 SHORT

6.1.2 CMOS Operation Mode

Function	JP13 (SHORT)	JP15 (SHORT)
CMOS Normal	*1-2	*1-2
CMOS (Clear)	2-3	2-3

Note:

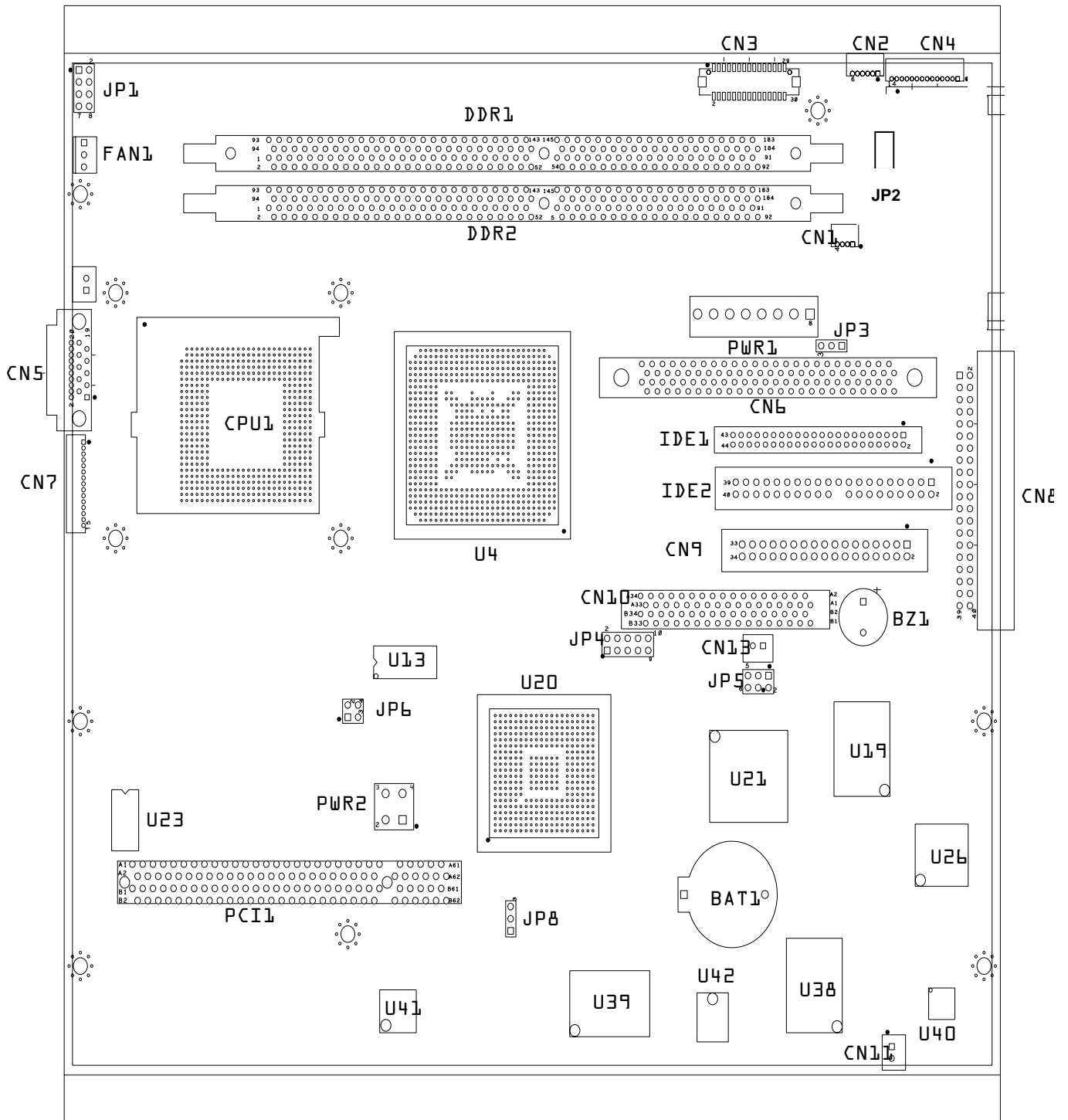
OPEN



SHORT



6.2 B75 M/B



6.2.1 CPU FAN Speed Control

* Factory Default Setting

Function	JP1 (SHORT)
Full Speed	1-2*
Middle Speed	3-4
Slow Speed	5-6
System Control	7-8

6.2.2 Compact Flash IDE Selection

Function	JP2
Master	*SHORT
Slave	OPEN

6.2.3 Power Mode Selection

Function	JP3 (SHORT)	JP5 (SHORT)
ATX Mode	1-2*	1-2*
		3-4
		5-6
AT Mode	2-3	1-3 2-4

6.2.4 Clear CMOS

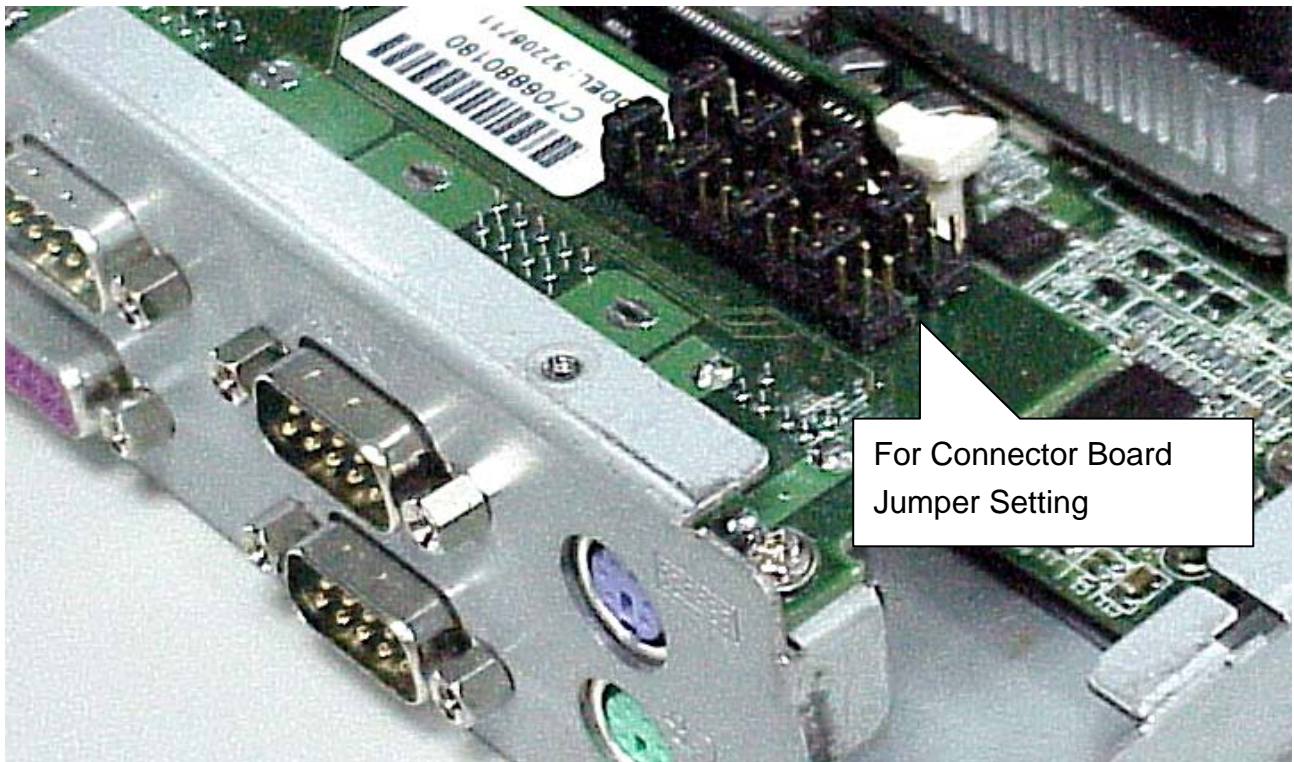
Function	JP8 (SHORT)
Clear	2-3
Normal	1-2*

Note:

OPEN 

SHORT 

6.3 I/O Connector



6.3.1 COM1/COM2 Jumper Setting : JP1

* Factory Default Setting

COM1						COM2					
1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24
RI-1	+12V	+5V	DCD-1	+12V	+5V	RI-2	+12V	+5V	DCD-2	+12V	+5V
*			*			*			*		
PIN9			PIN1			PIN9			PIN1		

6.3.2 COM3/COM4 Jumper Setting : JP2

COM3						COM4					
1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24
RI-3	+12V	+5V	DCD-3	+12V	+5V	RI-4	+12V	+5V	DCD-4	+12V	+5V
*			*			*			*		
PIN9			PIN1			PIN9			PIN1		