

Chapter 1. WTS-NASX PCB repairing installment process

1-1 Hardware equipment requirement:

OS: Vista / XP / 2000

CPU: Pentium4 1G above

Memory: 256 MB RAM above (Ideal 512 MB)

Usable hard disk space: 60GB above (Ideal 120G above)

Floppy: 3.5" Diskette

CD-ROM: 32x

Image Card: 800×600 above, (recommended supporting 24bitColor)

Monitor: 17" color monitor (resolution 1024×768 and above; High Color)

USB port ×1

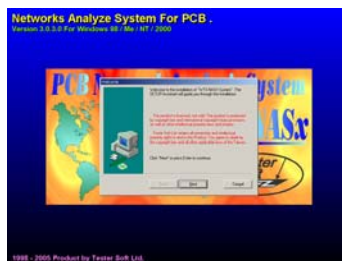
Mouse ×1

Printer ×1

1-2 Software installment process:

Applied OS : WIN98 / ME / XP / 2000 / Vista

Step1: Put installment CD to CD-ROM, will show out the “Welcome” message as following, if don't, please select diskette then point [setup.exe].



Step3: Execute next step, complete installment.

Step4: The diagram will appear out from tabletop.



Step7: Double click diagram to enter Tester Soft WTS-Nasx system.

Chapter 2. Operation Process

2-1 Software Process

Step1 : Unpack


Step2 : Layer selecting confirmation

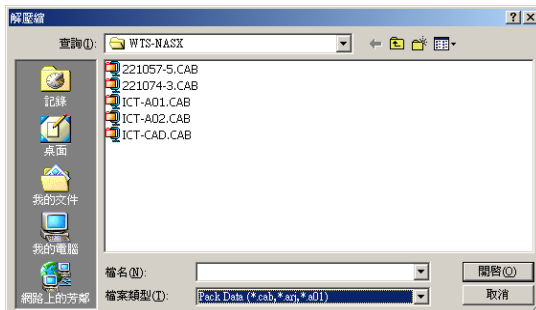
Step3 : Select repairing mode

Step4 : Start repairing

2-2 Operation explanation

Unpack

File→Unpack... Ctrl+P 



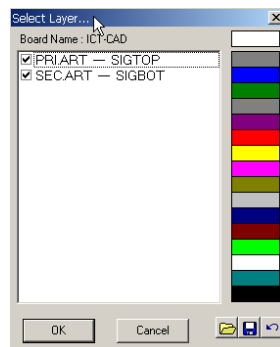
Select repairing data location

File Type : Working file

Dos version:*.arj*.a01

Win version:*.cab

Layer selection confirmation

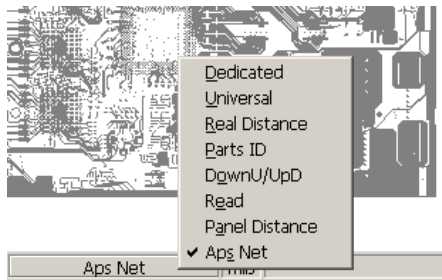


Select Layer

Layer order is very important; Error arrangement will affect repairing revelation.

As shown in left figure.

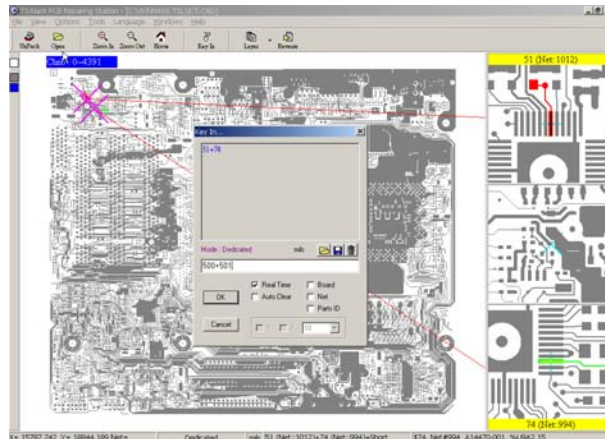
Select repairing mode



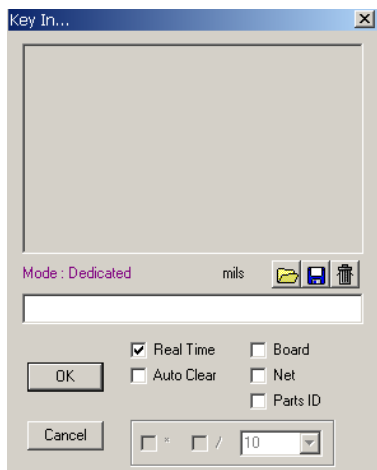
- Dedicate
- Universal
- Real Distance: Fly-probe mode
- Parts ID: ICT mode
- Panel Distance: ATG fly-probe mode

Start repairing

Selecting mode, key in the point no. directly.



Key In Point No.



Mode :

- Dedicated
- Universal
- Real Distance
- ✓ Parts ID
- DgwnU/UpD
- Read
- Panel Distance
- Aps Net

- : Open series No. APS file.
- : Save APS record file
- : Clear temporary file record.

Unit switch : mils/mm

Real time : Real time repairing

Auto Clear : Clear temporary file record.

Board : Series No. pointing

Net. : Zoom-in Net.

Parts ID : Zoom-in Parts ID.

Dedicate : Point No.+Point No.

Universal : X+Y*X1/Y1

Flying Probe : X+Y*X1/Y1

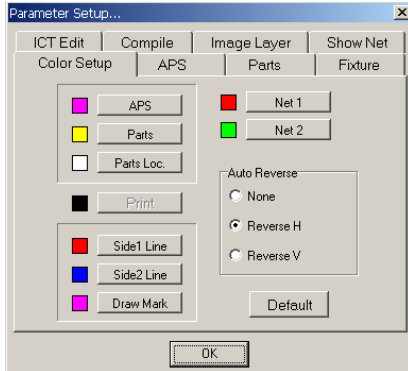
*+:Bottom fixture point

Top fixture point* separation

2-3 Parameter setting

Option → Parameter setting...

Color setup



Color setup

APS data/Parts/ Parts Loc. color setup

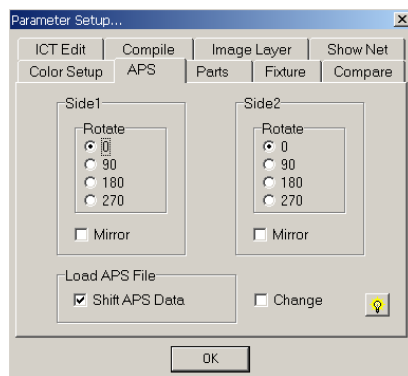
Net. 1/Net. 2: APS net.- Upper color setup

Side1/Side2 line: Line of APS location Color setup

Draw Mark: Setting mark color

Auto-reverse: Auto display reverse

APS data



APS data

Rotate: Rotate clockwise

Mirror: Mirror/right/left

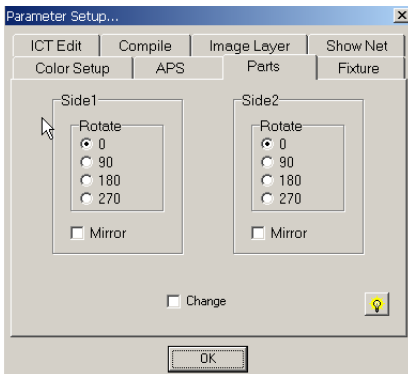
Change: Change/up/down

Shift APS data: Auto align Gerber image



:Execute

Parts data



Parts data

Rotate: Rotate clockwise

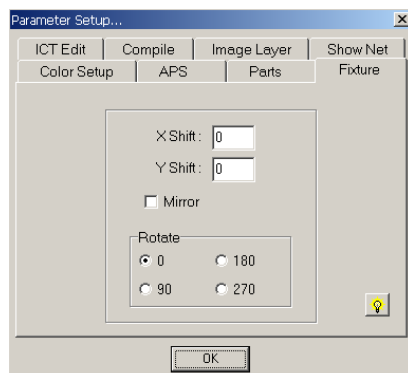
Mirror: Mirror/right/left

Change: Change/up/down



: Execute

Probe



Probe

X Shift: X Shift

Y Shift: Y Shift

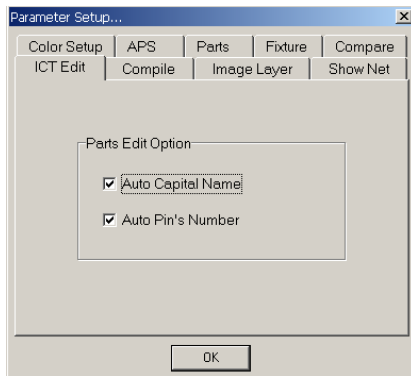
Mirror: Mirror right/left

Rotate: Rotate clockwise



: Execute

ICT Edit

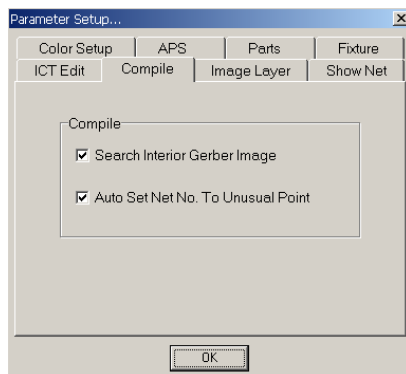


Parts Edit Option

Auto Capital Name : Key-in

Auto Pin's Number : Auto calculate to edit pin no.

Compile



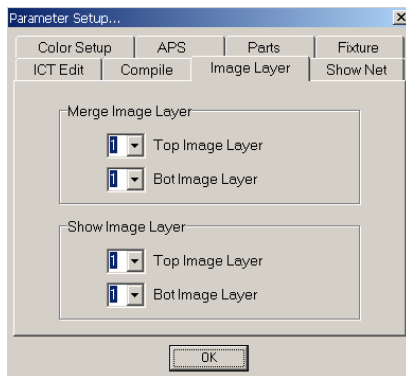
Compile

Search interior positive Gerber image :Compile to Gerber image

Auto Set Net No. To Unusual Point

When APS data without image compiling, will auto set Net. No., on the contrary, each point are the same Net. No.

Image layer



Merge Image Layer

Top Image Layer : Merge Top Layer

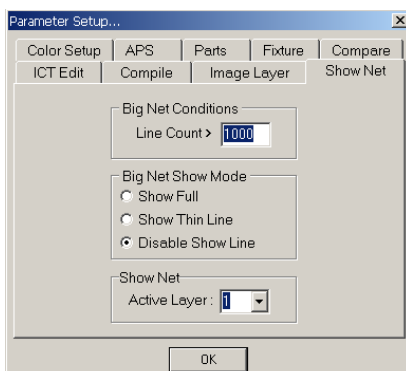
Bot Image Layer : Merge Bot Layer

Show Image Layer

Top Image Layer : Show Top Merge Layer

Bot Image Layer : Show Bot Layer

Show Net.



Big Net. Conditions

Line Count : Big Net. line count setup

Big Net. Show Mode

Show Full : Show Line & PAD

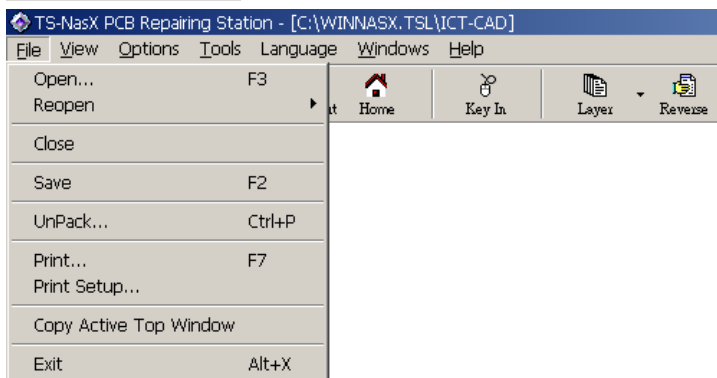
Show Thin Line: Construction shows line & PAD

Disable Show line : Show Pad only

Show Net.

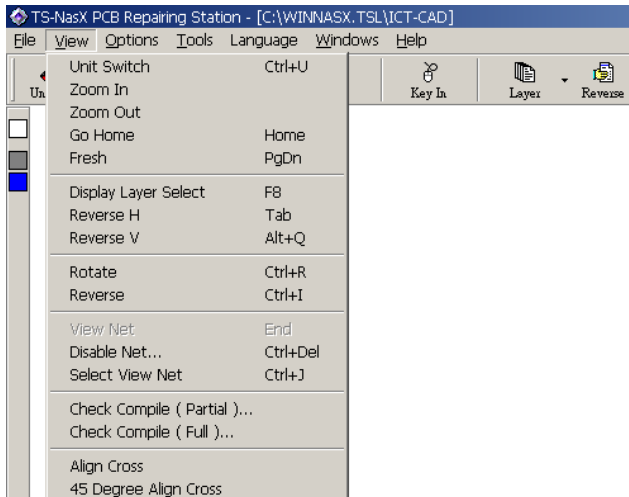
Active Layer : Control Layer count

2-4 Main Menu



File

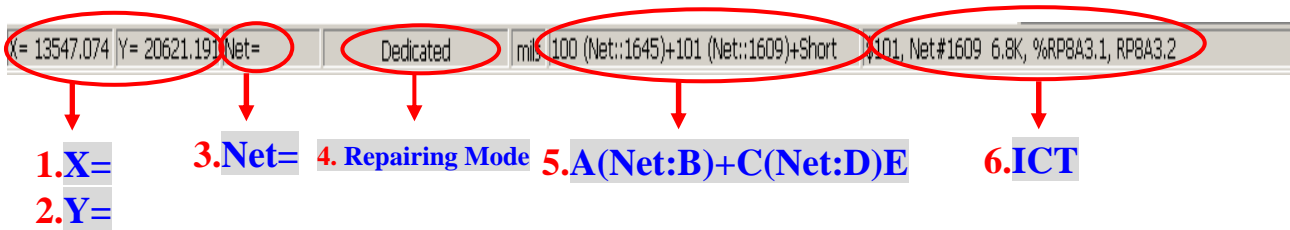
Open...	F3	: Open file
Reopen		: Reopen last file
Close		: Close file
Save	F2	: Save
Unpack...	Ctrl+P	: Unpack repairing data
Print ...	F7	: Print
Print setup...		: Print setup
Copy Active Top Window		: Save windows image to *.BMP file
Exit	Alt+X	: Exit system



View

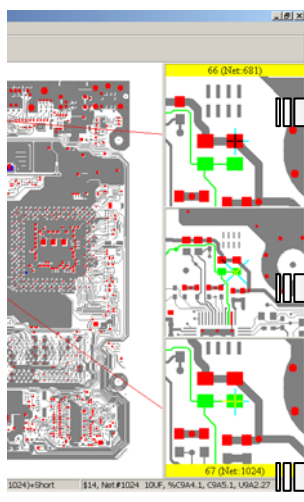
Unit switch	Ctrl+U	: Mils/MM switch
Zoom in		: Image zoom-in
Zoom out		: Image zoom-out
Go Home	Home	: Recovery scale
Fresh	PgDn	: Fresh
Display layer select	F8	: Layer select switch, open display layer, layer color setup
Reverse H	Tab	: Reverse right/left
Reverse V	Alt+Q	: Reverse up/down
Rotate		: Rotate clockwise
Reverse		: Image up/down exchange display
View Net.		: Net. No. mode display Net.
Align Cross		: Align cross display
45 Degree Align Cross		: 45 degree align across display

2-5 Status Bar



- 1.X= : Show X coordinate
- 2.Y= : Show Y coordinate
- 3.Net : Show Net. No. of the APS data pointed by mouse
- 4.Dedicate: repair mode switch-over
- 5.A(Net:B)+C(Net:D)E :
 - A→1st point No. or coordinate
 - B→1st Net. dsplay
 - C→2nd point No. or coordinate
 - D→2nd Net. No.
 - E→O/S display (Open/Short)
- 6.ICT : Net. No., Parts ID display

2-6 Observation bar



1st observation bar : Zoom-in 1st APS location

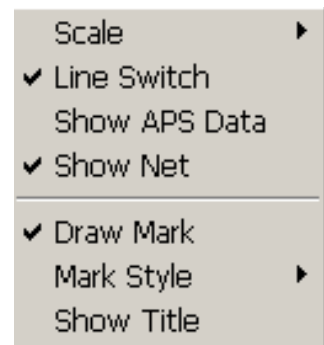
2nd observation bar : Real time zoom-in main windows location pointed by mouse

3rd observation bar : zoom-in 2nd APS location

1st observation windows-Parameter setting :

The mouse point to range of 1st observation window and press right button.

1. Scale : Adjust Zoom-in scale, the smaller the figure, the larger the magnificent fold.
2. Line Switch : Line switch display switch
3. Show APS data : APS data display switch
4. Show Net. : Net. display switch
5. Draw Mark : Mark display
6. Mark style : Select mark shape
7. Show title : Point Net. No. switch display

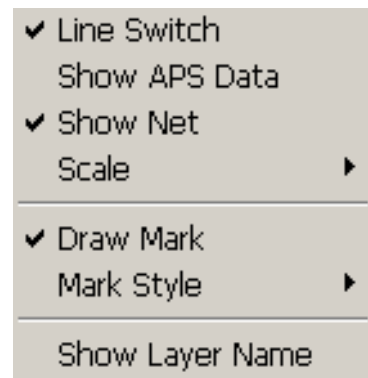


*The first and third window use common parameter setting.

2nd observation windows-Parameter setting :

The mouse point to range of 1st observation window and press right button.

1. Line switch : Line switch display switch
2. Show APS Data : APS data display switch
3. Show Net : Net. display switch
4. Scale : Adjust Zoom-in scale, the smaller the figure, the larger the magnificent fold.
5. Draw Mark : APS location display mark symbol
6. Mark style : Select mark shape
7. Show Layer name : Layer change display switch



2-7 Overview fast key

F3	Open
F4	Line switch display
F5	APS data display
F8	Laver select
F11	Top display
TAB	Reverse Vertical
/	Reverse/right/left
*	Reverse up/down
Delete	Clear Net. display
Ctrl+mouse right button	Point Net. display
Home	Recovery scale
+	Zoom-in
-	Zoom-out
Alt+N	.High illumination display
Space	Next Net. display
Page Up/Page Down	Fresh
End	Zoom-in Net.
Ctrl+Del	Close window
Ctrl+S	Parameter setting