P2WW-1512-17ENZ0

Fujitsu Scanner Control SDK

Version 2.1 L31

Reference Manual

FUJITSU

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- Should Customer have any questions concerning the contents of the Product, please feel free to contact our office.

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Abbreviations in This Manual

Conventions in this manual for platforms are as follows:
Windows® 2000 Professional :
Windows® 2000 Professional operating system

Windows® XP Professional :
Windows® XP Professional operating system

Windows® XP Home Edition :
Windows® XP Home Edition operating system

Windows Server® 2003 :
Windows Server® 2003 operating system

Windows Server® 2003 R2:
Windows Server® 2003 R2 operating system

Windows Vista® Home Basic:
Windows Vista® Home Basic operating system

Windows Vista® Home Premium:
Windows Vista® Home Premium operating system

Windows Vista® Business:
Windows Vista® Business operating system

Windows Vista® Enterprise:
Windows Vista® Enterprise operating system

Windows Vista® Ultimate:
Windows Vista® Ultimate operating system

Windows Server® 2008:
Windows Server 2008 operating system

Windows Server® 2008 R2:
Windows Server 2008 R2 operating system

Windows® 7 Home Premium:
Windows® 7 Home Premium operating system

Windows® 7 Professional:
Windows® 7 Professional operating system

Windows® 7 Enterprise:
Windows® 7 Enterprise operating system

Windows® 7 Ultimate:
Windows® 7 Ultimate operating system

If platforms do not need to be distinguished, Windows® is used.
If it is not necessary to distinguish between Windows® XP Professional and Windows® XP Home Edition, Windows® XP is used.
If it is not necessary to distinguish between Windows Server® 2003 and Windows Server® 2003 R2, Windows Server® 2003 is used.
If it is not necessary to distinguish between Windows Vista® Home Basic, Windows Vista® Home Premium, Windows Vista® Business, Windows Vista® Enterprise and Windows Vista®

Ultimate, Windows Vista® is used.
If it is not necessary to distinguish between Windows Server® 2008 and Windows Server® 2008 R2, Windows Server® 2008 is used.
If it is not necessary to distinguish between Windows® 7 Home Premium, Windows® 7 Professional, Windows® 7 Enterprise and Windows® 7 Ultimate, Windows® 7 is used.

Development tools are abbreviated as follows:

Visual Basic® . NET 2003:
Microsoft® Visual Basic ® .NET 2003 development system

Visual Basic® 2005:
Microsoft® Visual Basic ® 2005 development system

Visual Basic® 2008:
Microsoft® Visual Basic ® 2008 development system

Visual Basic® 2010:
Microsoft® Visual Basic ® 2010 development system

Visual C++® . NET 2003:
Microsoft® Visual C++ ® .NET 2003 development system

Visual C++® 2005:
Microsoft® Visual C++ ® 2005 development system

Visual C++® 2008:
Microsoft® Visual C++ ® 2008 development system

Visual C++® 2010:
Microsoft® Visual C++ ® 2010 development system

Visual C#® . NET 2003:
Microsoft® Visual C# ® .NET 2003 development system

Visual C#® 2005:
Microsoft® Visual C# ® 2005 development system

Visual C#® 2008:
Microsoft® Visual C# ® 2008 development system

Visual C#® 2010:
Microsoft® Visual C# ® 2010 development system

Java™ SE6:
Java SE Development Kit (JDK™) 6

If versions of the above development tools do not need to be distinguished, they are abbreviated as Visual Basic®.NET, Visual C++® .NET, Visual C#® .NET and Java™.

The device driver for the FUJITSU fi-series image scanner is abbreviated as follows:
FUJITSU TWAIN32 driver

Preface

We thank you very much for purchasing our "Fujitsu Scanner Control SDK."

This Product is a development tool kit for controlling the FUJITSU fi-series image scanner from an application.

It provides information and sample source codes for developing applications that scan image data using the TWAIN protocol compliant "FUJITSU TWAIN32 driver." You can use this product using computer languages such as Visual Basic® .NET, Visual C++® .NET, Visual C#® .NET and Java™ since it is provided as Windows® custom control format libraries (ActiveX Control).
Hereinafter the above custom control shall be called simply “this product” or “this SDK” in this manual.

This Product is intended for users who have knowledge of programming languages and Windows®.

For details about the FUJITSU fi-series image scanner, refer to the following web sites.

(Japanese) http://imagescanner.fujitsu.com/jp/
(English) http://imagescanner.fujitsu.com/

Be sure to read the README files of this Product and the FUJITSU TWAIN32 device driver before using this Product. The README files contain notes you should read before using this product as well as the latest additional information not included in the online help, etc.

[High Risk Activity]
The Customer acknowledges and agrees that the Product is designed, developed and manufactured as contemplated for general use, including without limitation, general office use, personal use, household use, and ordinary industrial use, but is not designed, developed and manufactured as contemplated for use accompanying fatal risks or dangers that, unless extremely high safety is secured, could lead directly to death, personal injury, severe physical damage or other loss (hereinafter “High Safety Required Use”), including without limitation, unclear reaction control in unclear facility, aircraft flight control, air traffic control, mass transport control, medical life support system, missile launch control in weapon system. The Customer, shall not use the Product without securing the sufficient safety required for the High Safety Required Use. In addition, PFU shall not be liable against the Customer and/or any third party for any claims or damages arising in connection with the High Safety Required Use of the Product.

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1. Overview and Product Features

1.1 Product Features

- This chapter describes the specifications for the Windows® custom control (ActiveX Control) to read image data using the "FUJITSU TWAIN32 driver" from the FUJITSU fi-series image scanner.
- Because this control supports the characteristics of the FUJITSU fi-series image scanner using the "FUJITSU TWAIN32 driver," it will help an application to read scan data more easily; applications do not need to be sensitive to differences in model.

1) Ease of calling from a Windows® application

Thanks to the Windows® custom control (ActiveX Control), you can easily call up the program in the combined development environment of Visual Basic® .NET, Visual C++® .NET, Visual C#® .NET and Java™.

2) Optimized for the FUJITSU fi-series image scanner

This product makes it possible to control high-level features of the FUJITSU fi-series image scanner without directly calling the complex TWAIN interface. In addition, you can use your scanner without bothering about differences between models. [1]

[1] Note that if a feature not available is specified like A3 scan for the scanner capable of scanning only up to A4 size, it will not be enabled.

1.2 System Requirements

1.2.1 Hardware environment

All of the following requirements shall be satisfied.

DOS/V compatible PC with Intel® Pentium® processor or higher, or functionally equivalent processor
CD-ROM drive
ASPI compliant SCSI card or USB 1.1 or later compliant hardware * Depends on your equipment and hardware environment.
Hard disk drive unit with 20MB free space or more
64MB RAM or more (including memory area required by the TWAIN driver)

1.2.2 Supported image scanners and options

The following FUJITSU fi-series image scanners are supported:

- fi-6800
- fi-6770
- fi-6770A
- fi-6750S
- fi-6670
- fi-6670A
- fi-6240Z
- fi-6240
- fi-6140Z
- fi-6140
- fi-6230Z
- fi-6230
- fi-6130Z
- fi-6130
- fi-6110
- fi-5950
- fi-5900C
- fi-5750C
- fi-5650C
- fi-5530C/C2
- fi-5220C
- fi-5120C
- fi-5110C
- fi-5015C
- fi-4860C2
- fi-4340C
- fi-60F

Note that the FUJITSU TWAIN32 driver which comes with the FUJITSU fi-series image scanner may not be used. Use the same version of the driver that comes with this Product.

The following options are supported:

- Imprinter (Endorser)
  - fi-680PRF, fi-680PRB imprinter (For fi-6800)
  - fi-667PR imprinter (For fi-6670/fi-6670A)
  - fi-614PR imprinter (For fi-6140/ fi-6140Z/fi-6130/ fi-6130Z)
  - fi-590PRB, fi-590PRF imprinter (For fi-5900C/fi-5950)
  - fi-553PRFR, fi-553PR imprinter (For fi-5530C/C2)

fi-512PR imprinter (For fi-5120C)
fi-486PRFR, fi-486PRRE imprinter (For fi-4860C2)
fi-434PR imprinter (For fi-4340C)
fi-565PR imprinter (For fi-5650C)

- Image processing board
  FI-IPC4D (For fi-4340C)

- Option image processing software
  FI-SIPC2 (For supported models and platforms, refer to the Web site of the fi-series image scanner.)
- Scanner-sharing device
  fi-5000N

1.2.3 Software environment

Platform

Any of the following shall be used.

Windows® 2000 Professional
Windows® XP Home Edition
Windows® XP Professional
Windows Server® 2003, Standard Edition
Windows Server® 2003 R2, Standard Edition
Windows Vista® Home Basic
Windows Vista® Home Premium
Windows Vista® Business
Windows Vista® Enterprise
Windows Vista® Ultimate
Windows Server® 2008 Standard
Windows Server® 2008 R2 Standard
Windows® 7 Home Premium
Windows® 7 Professonal
Windows® 7 Enterprise
Windows® 7 Ultimate

This product is a library for 32-bit applications. It can be used on the 64-bit operaing system but cannot be used for developing 64-bit applications.

Development environment

Any of the following shall be used.

Visual Basic® .NET 2003 *1
Visual Basic® 2005 *2, *3
Visual Basic® 2008 *4, *5
Visual Basic® 2010 *6
Visual C++® .NET 2003 *1
Visual C++® 2005 *2, *3
Visual C++® 2008 *4, *5
Visual C++® 2010 *6
Visual C#® .NET 2003 *1
Visual C#® 2005 *32 *3
Visual C#® 2008 *4, *5
Visual C#® 2010 *6
Java™ SE Development Kit (JDK™) 6 *7

Sample source codes and executable files that can be used in the above environments are attached to this Product. (Note that sample source codes are provided in either Japanese or English.)

*1: Visual Basic® .NET 2003, Visual C++® .NET 2003 and Visual C#® .NET 2003 are not supported in Windows Vista®, Windows Server® 2008 and Windows® 7.

*2: To use Visual Basic® 2005, Visual C++® 2005 and Visual C#® 2005 in Windows Server® 2003, Windows Server® 2003 Service Pack 1 needs to be applied.

*3: To use Visual Basic® 2005, Visual C++® 2005 and Visual C#® 2005 in Windows Vista® and Windows Server® 2008, Service Pack 1 and Visual Studio 2005 Service Pack 1 Update for Windows Vista needs to be applied.

*4: Visual Basic® 2008, Visual C++® 2008 and Visual C#® 2008 are not supported in Windows® 2000 Professional.

*5: To use Visual Basic® 2008, Visual C++® 2008 and Visual C#® 2008 in Windows Server® 2008 R2 and Windows® 7, Service Pack 1 needs to be applied.

*6: Visual Basic® 2010, Visual C++® 2010 and Visual C#® 2010 are not supported in Windows® 2000 Professional.

*7: When using Java, use the 32-bit version even if your operating system is 64-bit.

Others
This product does not support VRS.
To display this manual, use Adobe® Reader™ 7.0.8 or higher.

1.3 Setup CD Contents

The setup CD for this Product contains the following:

1) Fujitsu Scanner Control SDK V2.1L31 (Scanner control)
2) Fujitsu Scanner Control SDK V2.1L31 Reference Manual (This document)
3) Fujitsu Scanner Control SDK V2.1L31 (Sample source codes)
4) Fujitsu Scanner Control Runtime V2.1L31 (Necessary when distributing programs created)
5) Scanner Utility for Microsoft Windows FUJITSU TWAIN32 driver
6) Scanner Utility for Microsoft Windows FUJITSU TWAIN32 driver User's Guide

1.4 Compatibility

Run applications you have developed using Fujitsu Scanner Control SDK V2.1L31 in an SDK or runtime environment of higher version level.
Because applications developed using older versions of SDK can run in a newer runtime environment, when running applications using multiple versions of SDK, use the runtime environment on PCs provided by the latest version of SDK.

If you have developed an application using Scanner Control SDK V2.1L23A or earlier;
This product will output a message "Type 'AxFiScnLib.AxFiScn' is not defined"if the application has been developed in any of the following environments, causing you not to build the program normally. The reason is because the control included in this product has been upgraded.

- Visual Basic® .NET 2003
- Visual Basic® 2005
- Visual Basic® 2008
- Visual Basic® 2010
- Visual C#® .NET 2003
- Visual C#® 2005
- Visual C#® 2008
- Visual C#® 2010

Note the control is compatible among different versions, and therefore, does not affect the operations during execution of the application.

If you mistakenly installed this product in an environment where Scanner Control SDK V2.1L23A or earlier was used to develop the application, do either of the following:
-Rollng this product back to its original Scanner Control SDK

1) Uninstall this product.
2) Re-install the original version of Scanner Control SDK.

-Using this product

1) Uninstall this product.
2) Re-install the original version of Scanner Control SDK.
3) Open a project of the application, and delete the OCX pasted onto the form.
4) Delete “AxFiScnLib” and “FiScnLib” from the reference settings (*) in the solution explorer.
5) Delete all of “AxInterop.FiScnLib.dll” and “Interop.FiScnlib.dll” files stored in the project f olders such as “Bin” and “Obj.”
6) Install this protect.
7) Open a project of the application, and paste the OCX to the form.

Note: For Visual Basic® 2005 / Visual Basic® 2008 / Visual Basic® 2010, open the solution properties and select references.

2. How to Install the Product

2.1 Installing the Fujitsu Scanner Control SDK

2.1.1 Launching the installer

The following install items are available on the installer window:

- Fujitsu Scanner Contorl SDK V2.1
  Item relating to installation of Fujitsu Scanner Control SDK.
  Installs the SDK and runtime.
  Use the following procedure to install.

- FUJITSU TWAIN32 driver
  Item relating to installation of FUJITSU TWAIN32.
  * Please check the version of the FUJITSU TWAIN32 installed on your PC. If the version of the already installed driver is later than the version of FUJITSU TWAIN32 included in this SDK, do not install it.

- Microsoft® .NET Framework™
  Item relating to download of Microsoft® .NET Framework™.

- Adobe® Reader™
  Item relating to download of Adobe® Reader™.
  * Required to be installed to view the Reference Manual and User's Guide.

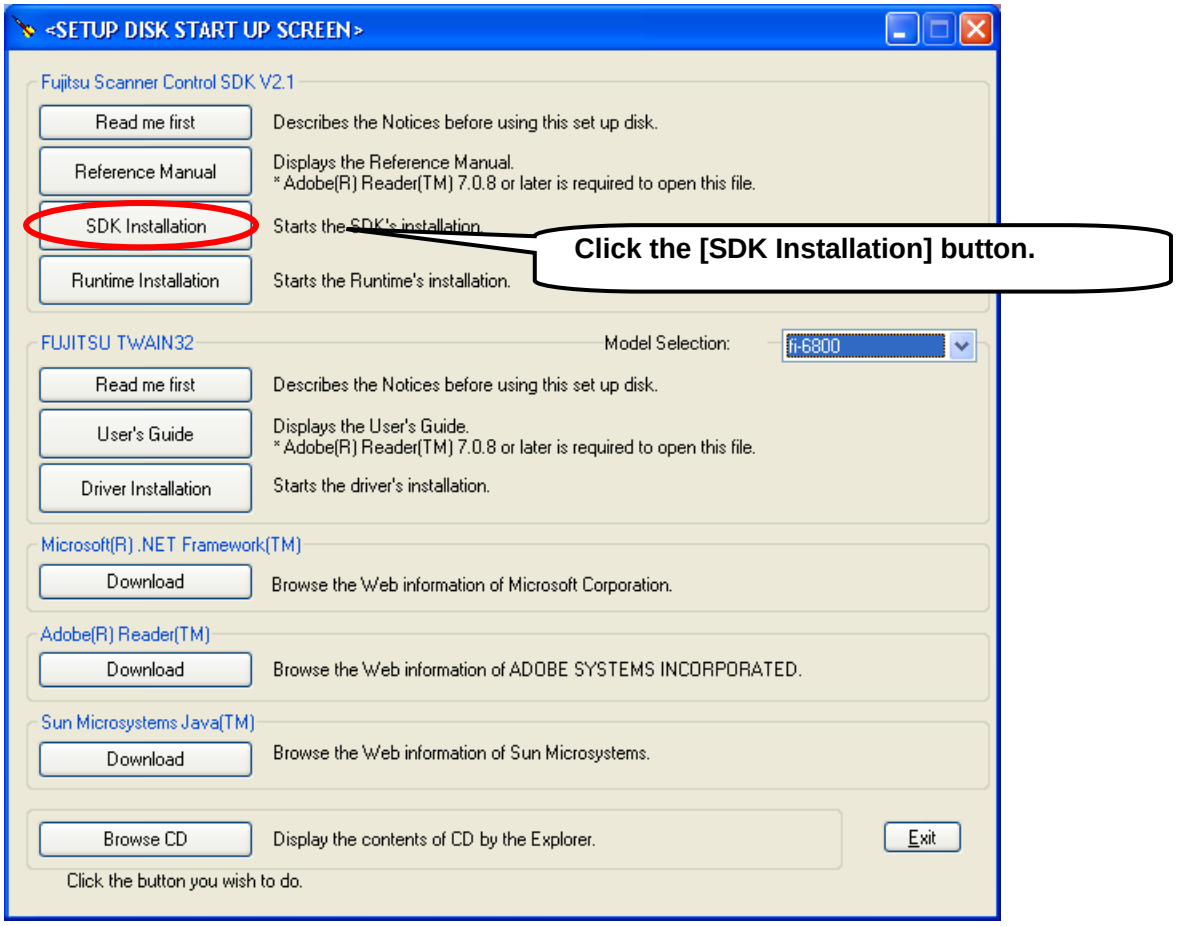
- Sun Microsystems Java™
  Item relating to download of Sun Microsystems Java™.

- Viewing the CD contents
  Launch the explorer to display the CD contents.

The following describes how to launch the installer.

Insert the "Fujitsu Scanner Control SDK CD-ROM" into the CD drive to display the following window.

Click the [SDK Installation] button in "Fujitsu Scanner Control SDK V2.1."

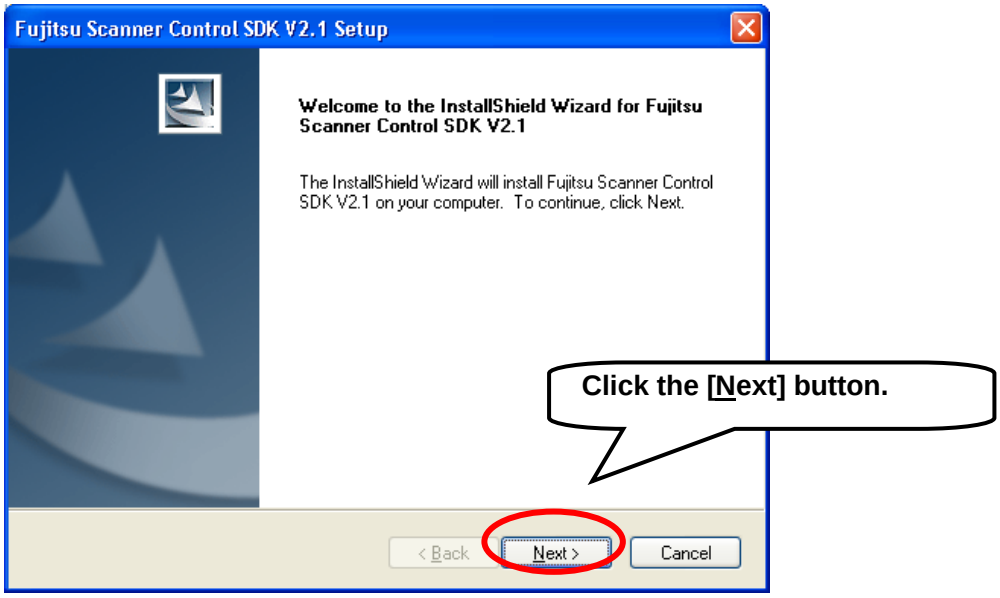


Caution
The above window may not be displayed if the CD drive of your PC is set to Auto Play Off. In that case, directly run "PDFLaunch.exe" of the [Bin] folder in the CD using the explorer.

- Login to your platform with user name with administrator rights to install (login as built-in Administrator to install on Windows® XP Home Edition).

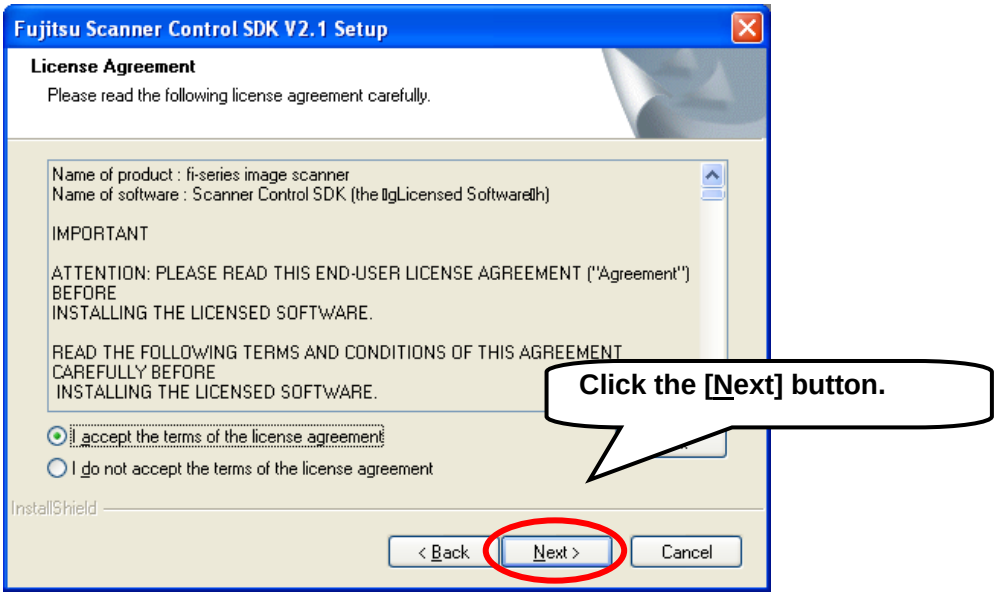
2.1.2 Starting installation

When installation is ready, the following dialog will appear. Click the [Next] button.



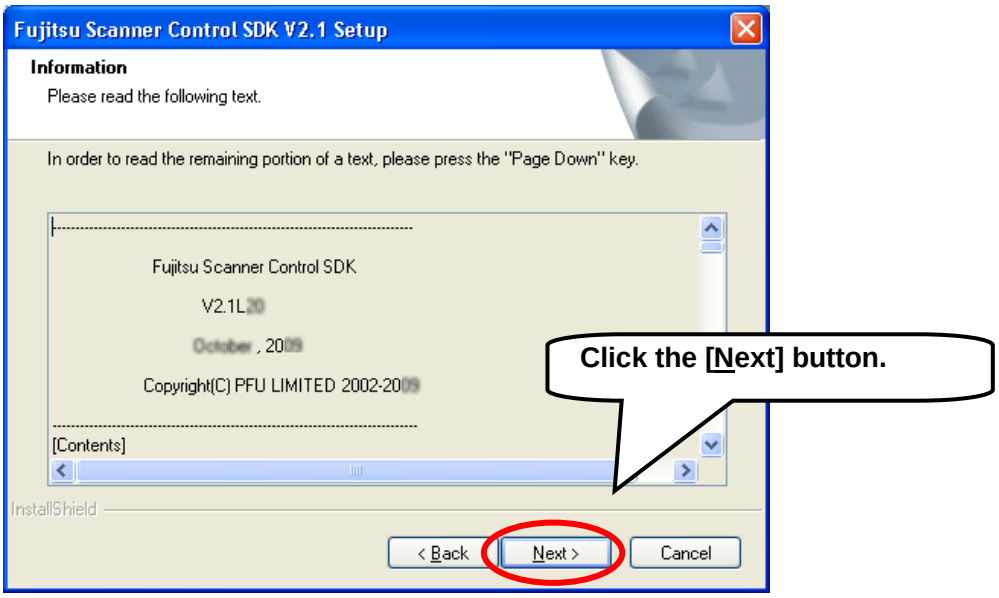
2.1.3 Product license

Read the License Agreement carefully. If you agree with the terms of use, select "I accept the terms of the license agreement", and click [Next].



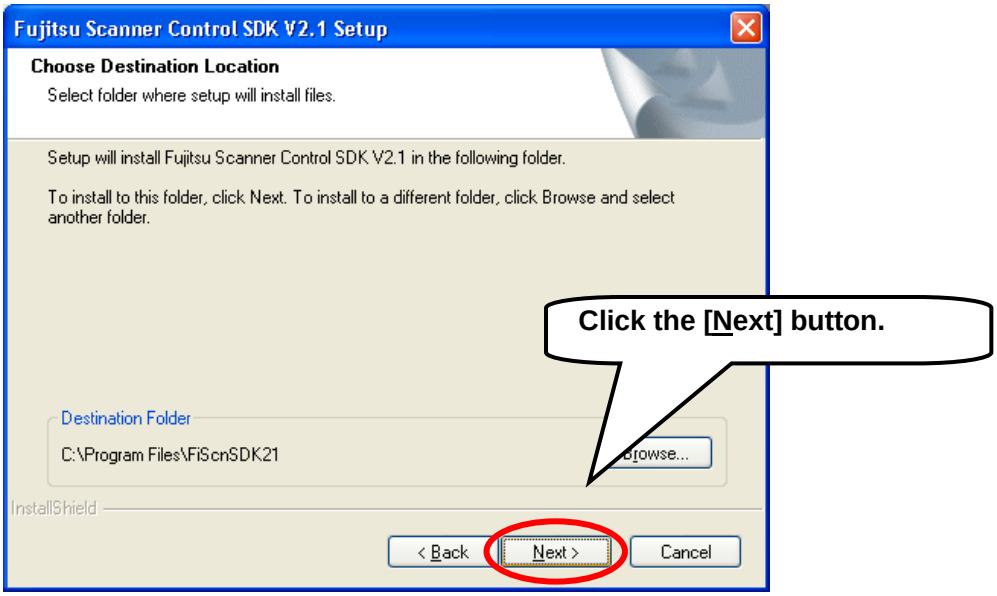
2.1.4 Checking the information

The information (Readme.txt) is displayed. Check the contents of the information and click the [Next] button.



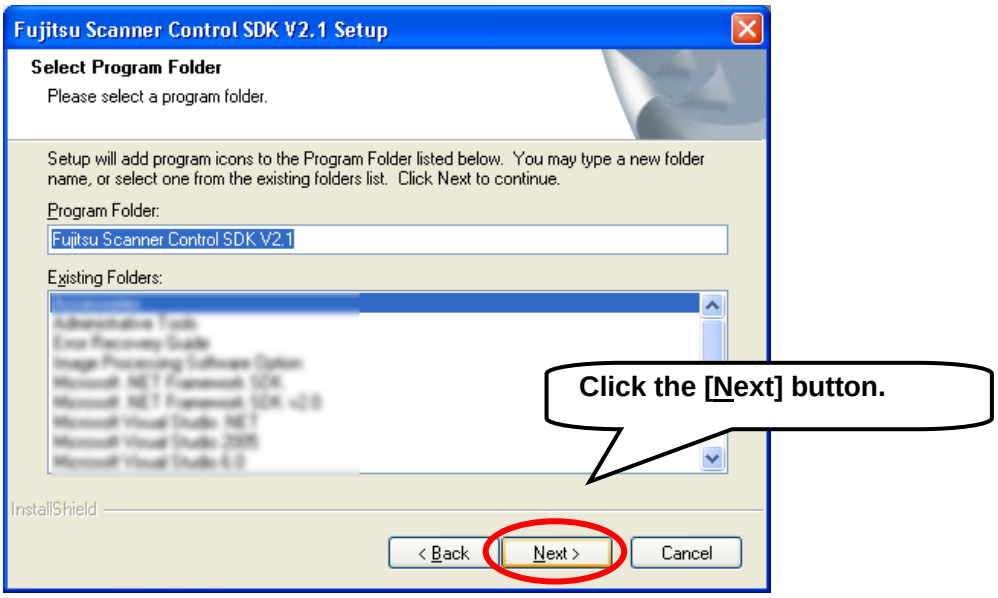
2.1.5 Selecting the destination folder

Click the [Next] button to install to the default folder displayed.
To change the destination location, click the [Browse...] button to install to another folder.



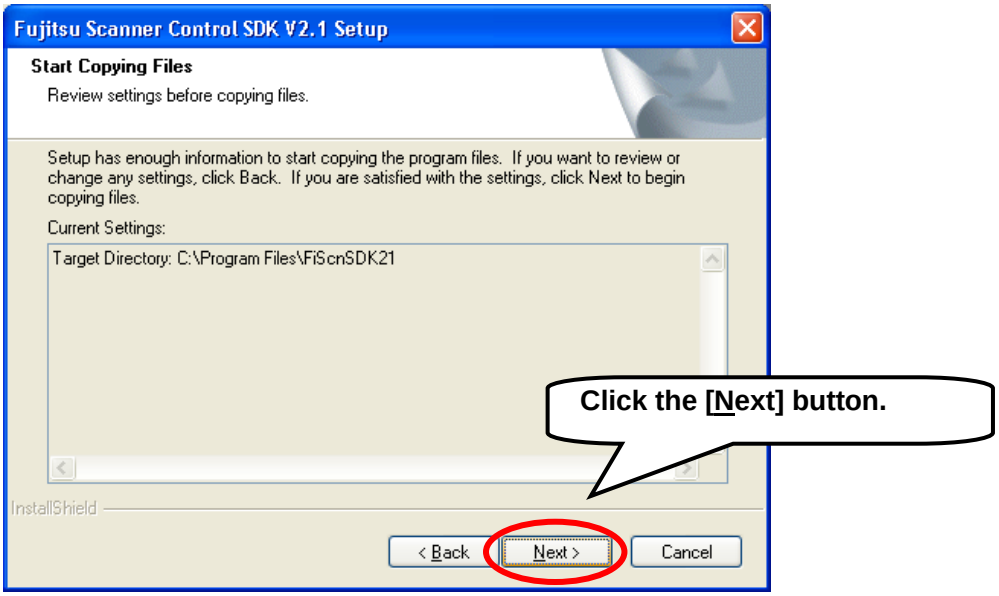
2.1.6 Selecting the program folder

Click the [Next] button to install to the default folder displayed.
To change the folder name, directly type a new folder name into [Program Folder] or select a folder from the [Existing Folders] list.



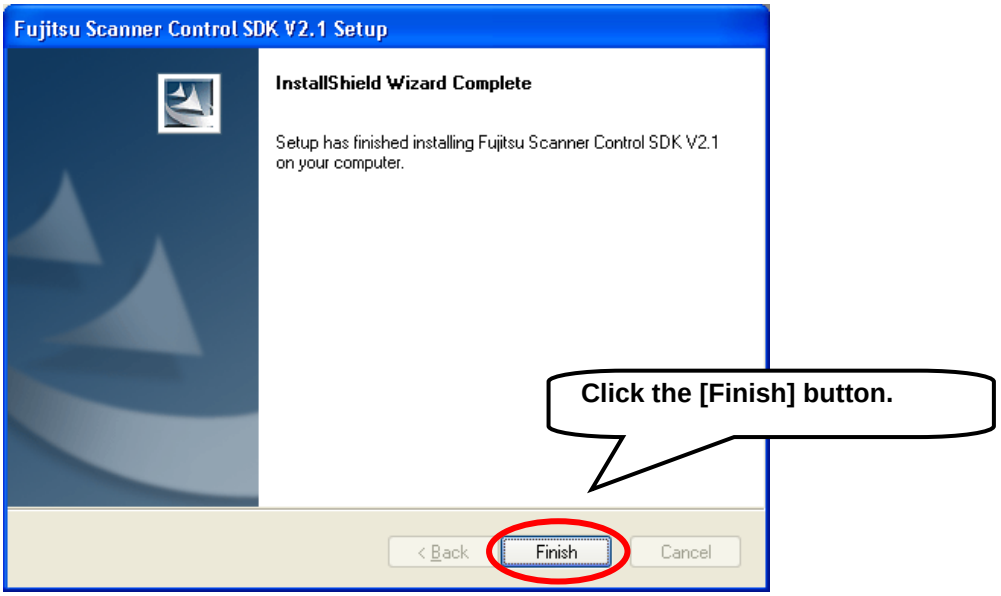
2.1.7 Start copying the files

Check the settings. If the settings are correct, click the [Next] button.
To change the settings, click the [Back] button.



2.1.8 Finishing installation

When the setup is complete with the necessary files copied, the following dialog will appear. Click the [Finish] button to finish the installation.



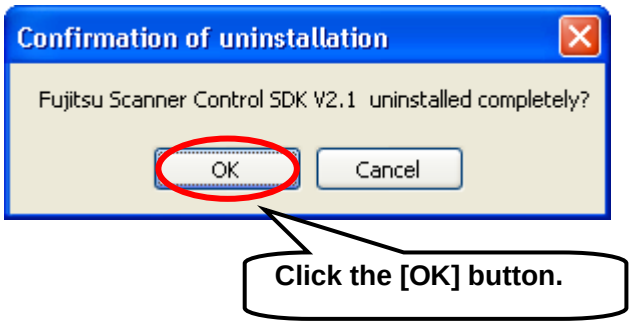
2.2 Uninstalling the Fujitsu Scanner Control SDK

To remove the Product, use the following procedure for uninstalling.

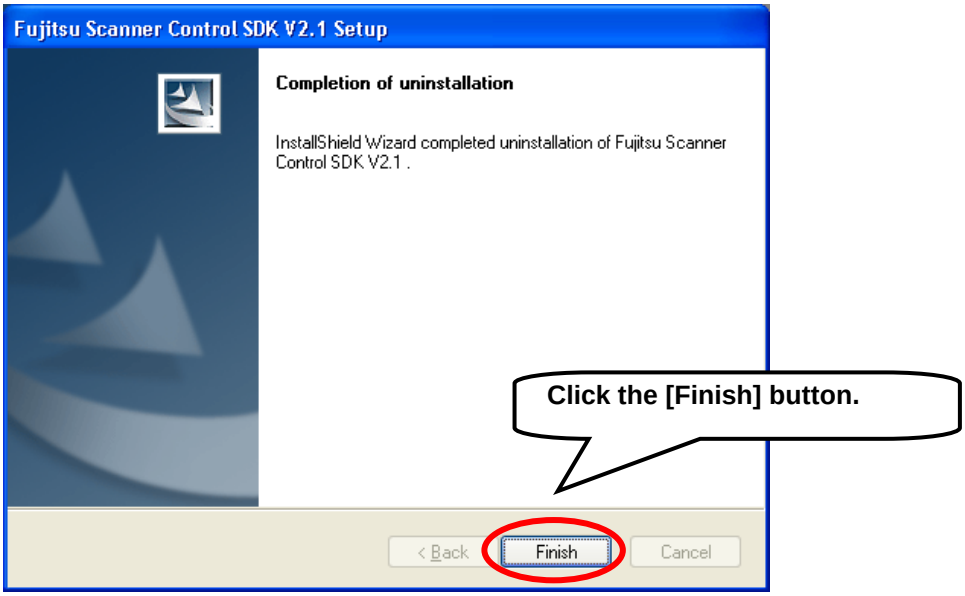
1. Double-click on the icons [Settings] - [Control Panel] - [Add/Remove Programs] from the [Start] button.
   (Double-click on the icons [Control Panel] - [Add/Remove Programs] on Windows® XP and Windows Server® 2003. Click on the icons [Control Panel] - [Programs Features] on Windows Vista®, Windows Server® 2008 and Windows® 7.)

2. When the list of the currently installed programs appears, select "Fujitsu Scanner Control SDK V2.0" and click the [Add/Remove] button.
   (Click the [Remove] button on Windows® XP and Windows Server® 2003.Click the [Uninstall] button on Windows Vista®, Windows Server® 2008 and Windows® 7.)

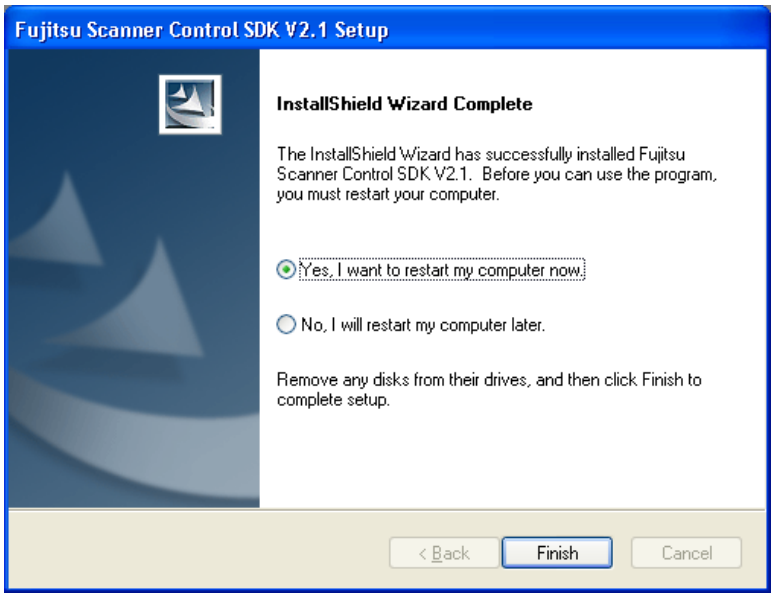
3. When the following dialog is displayed, click the [OK] button.



4. After the uninstallation is completed, the following dialog will be displayed. Click the [Finish] button.



When the dialog for restarting is displayed, select "Yes, I want to restart my computer now." And click the [Finish] button.



Caution

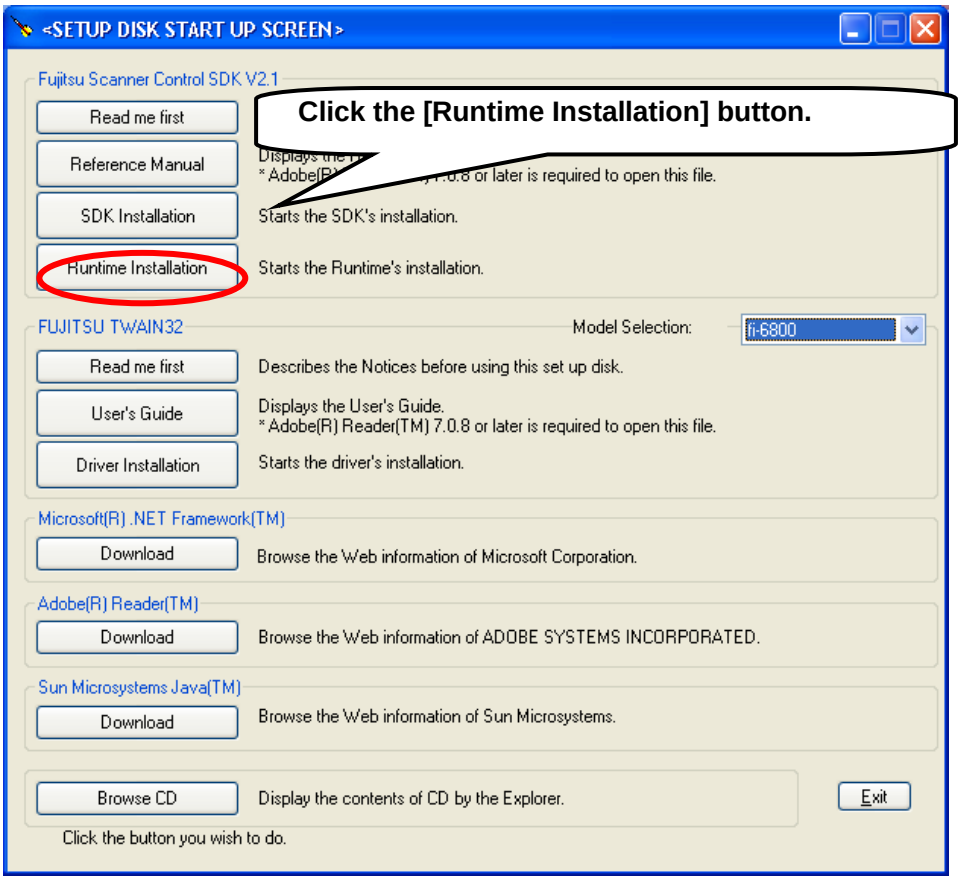
- Login to your platform with user name with administrator rights to uninstall (login as built-in Administrator to uninstall on Windows® XP Home Edition).

2.3 Installing the Fujitsu Scanner Control Runtime

2.3.1 Launching the installer

Insert the "Fujitsu Scanner Control SDK CD-ROM" into the CD drive to display the following window.

Click the [Runtime Installation] button in "Fujitsu Scanner Control SDK V2.1."



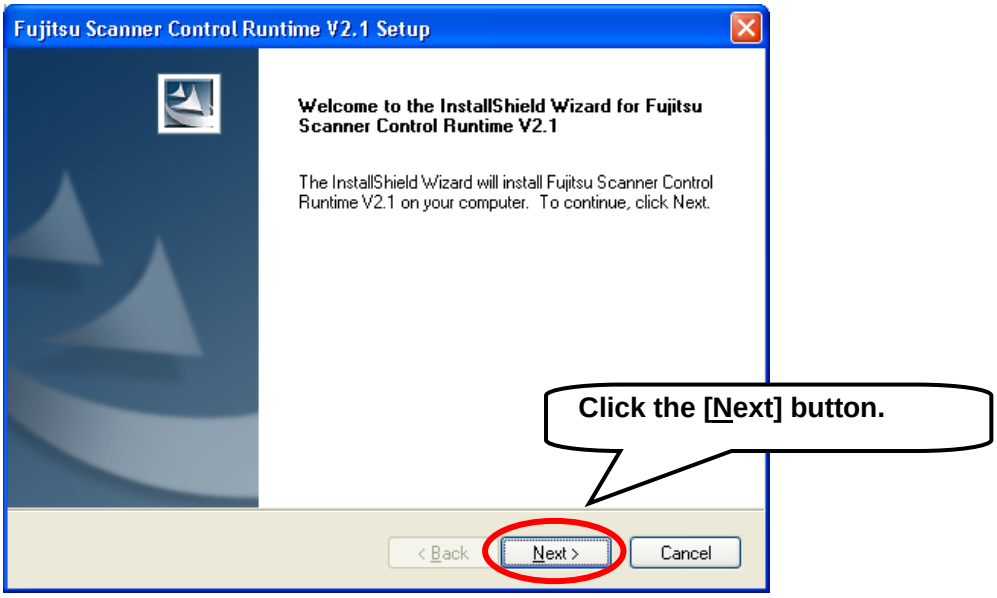
Caution

The above window may not be displayed if the CD drive of your PC is set to Auto Play Off. In that case, directly run "PDFLaunch.exe" of the [Bin] folder in the CD using the explorer.

- Login to your platform with user name with administrator rights to install (login as built-in Administrator to install on Windows® XP Home Edition).

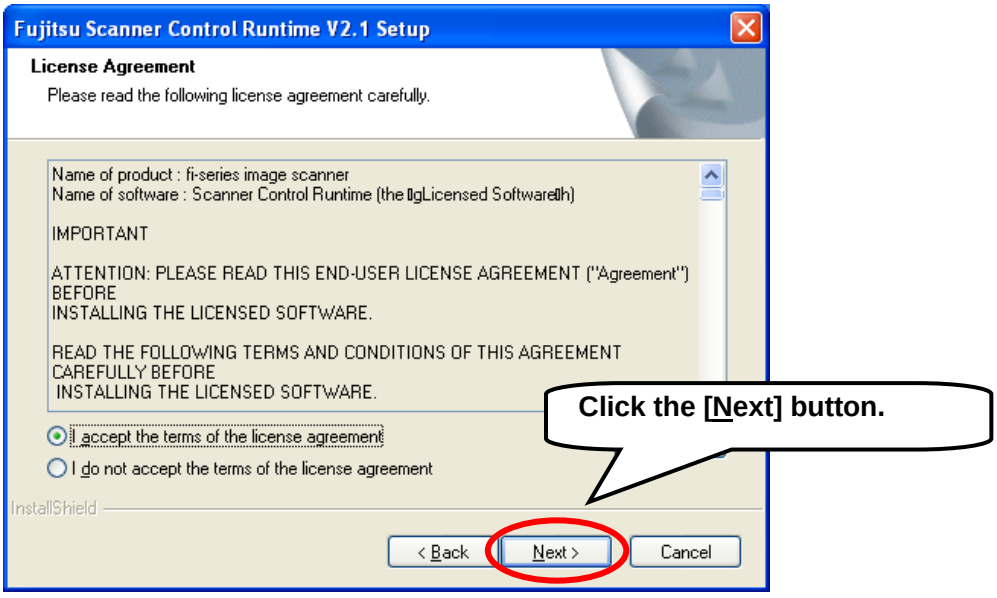
2.3.2 Starting the installation

When installation is ready, the following dialog will appear. Click the [Next] button.



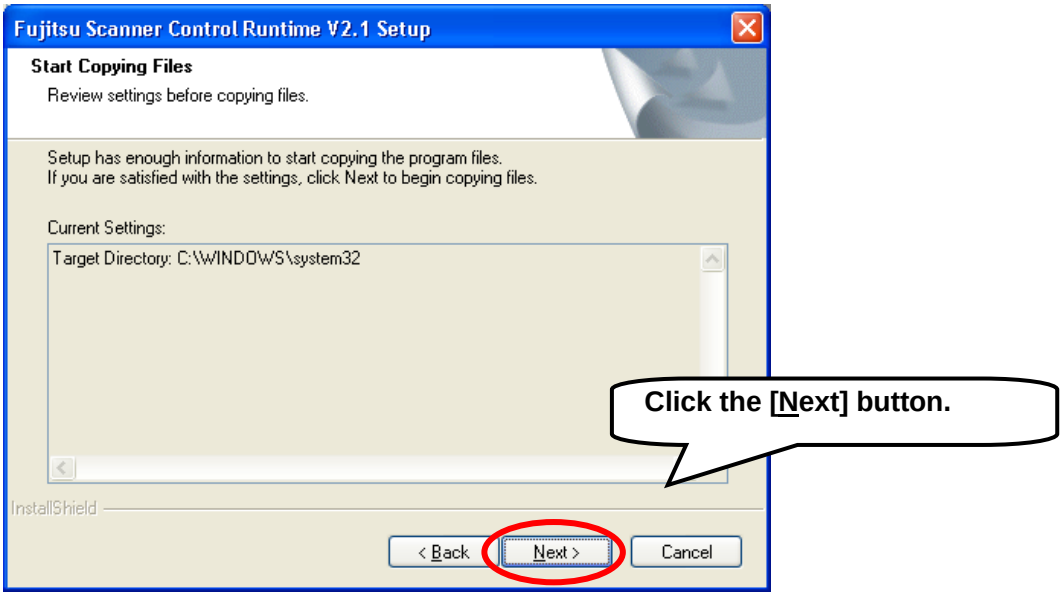
2.3.3 Product license

Read the License Agreement carefully. If you agree with the terms of use, select "I accept the terms of the license agreement", and click [Next].



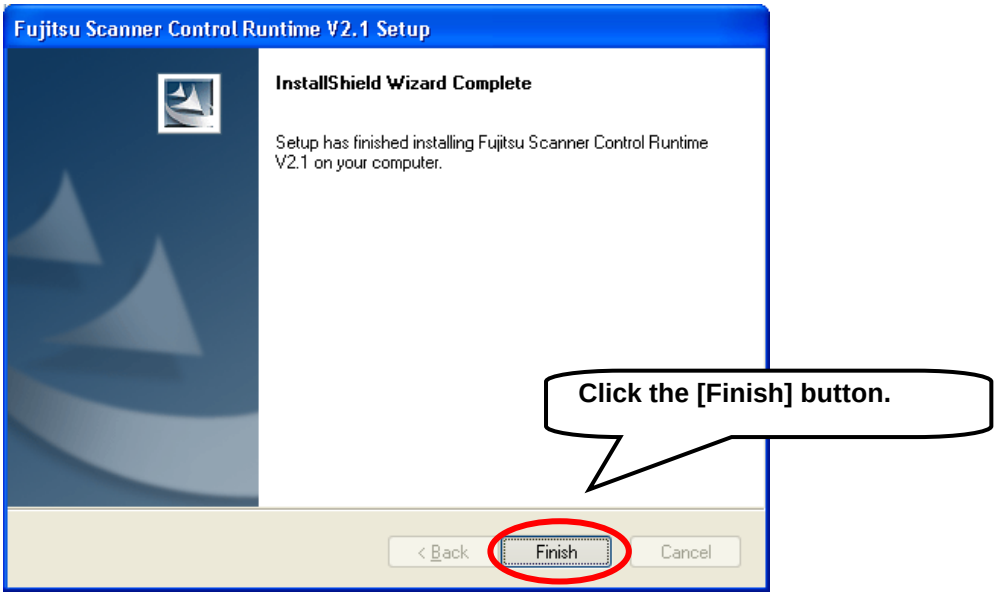
2.3.4 Start copying the files

Check the settings. If the settings are correct, click the [Next] button.
To change the settings, click the [Back] button.



2.3.5 Finishing installation

After the setup is completed with the necessary files copied, the following dialog will appear. Click the [Finish] button to finish the installation.



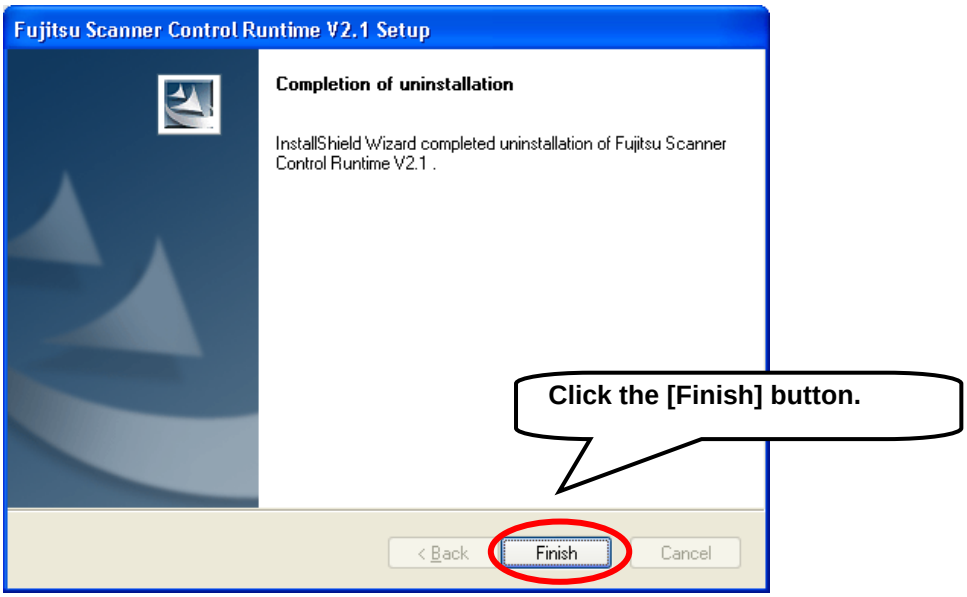
2.4 Uninstalling the Fujitsu Scanner Control Runtime

To remove the Product, use the following procedure for uninstalling.

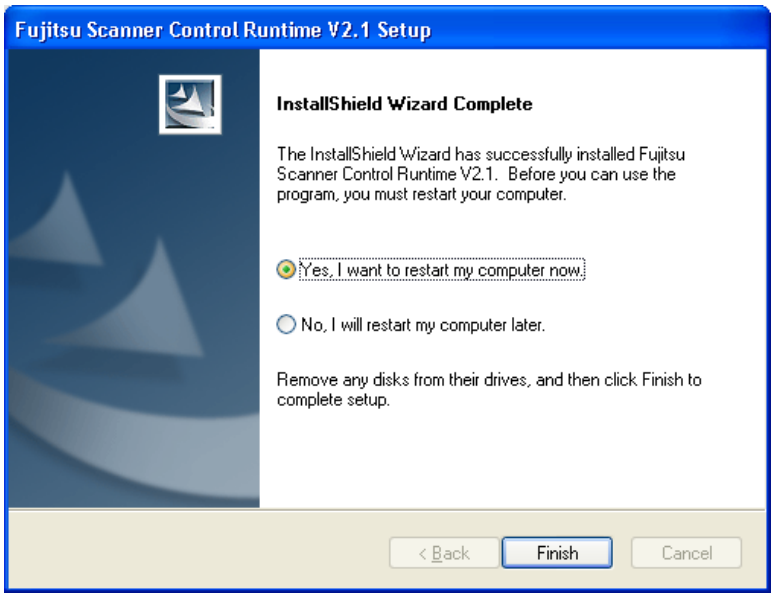
1. Double-click on the icons [Settings] - [Control Panel] - [Add/Remove Programs] from the [Start] button.
   (Double-click on the icons [Control Panel] - [Add/Remove Programs] on Windows® XP and Windows Server® 2003. Click on the icons [Control Panel] - [Programs Features] on Windows Vista®, Windows Server® 2008 and Windows® 7.)

2. When the list of the currently installed programs appears, select "Fujitsu Scanner Control Runtime V2.0" and click the [Add/Remove] button.
   (Click the [Remove] button on Windows® XP and Windows Server® 2003. Click the [Uninstall] button on Windows Vista®, Windows Server® 2008 and Windows® 7.)

3. After the uninstallation is completed, the following dialog will be displayed. Click the [Finish] button.



When the dialog for restarting is displayed, select "Yes, I want to restart my computer now." And click the [Finish] button.



Caution

- Login to your platform with user name with administrator rights to uninstall (login as built-in Administrator to uninstall on Windows® XP Home Edition).

2.5 How to Embed this SDK into a Project

For Visual Basic® .NET / Visual C++® .NET / Visual C#® .NET

(1) Rightclick the toolbox and select [Customize toolbox].
(2) Mark the component with the name "Fujitsu Scanner Control" in the tab screen of the COM component and click the [OK] button.
(3) The new Fujitsu Scanner Control icon will be displayed in the toolbox.

For Visual Basic® 2005 / Visual C++® 2005 / Visual C#® 2005 / Visual Basic® 2008 / Visual C++® 2008 / Visual C#® 2008 / Visual Basic® 2010 / Visual C++® 2010 / Visual C#® 2010

(1) Rightclick the toolbox and select [Choose Items…].
(2) Mark the component with the name "Fujitsu Scanner Control" in the tab screen of the COM component and click the [OK] button.
(3) The new Fujitsu Scanner Control icon will be displayed in the toolbox.

Caution

- Visual C++ ® 2010

If the following message appears when displaying a dialog box with the OCX pasted again, select [Yes].
“One or more ActiveX controls are in the current resource (*.rc) file. If you trust the resource file supplier, click Yes to initialize and use the ActiveX controls. Otherwise, clilck No to exit.”

For Java™

When using Eclipse V3.5.0, follow the steps below.
(1) Show the [Properties] dialog box from the [Project] drop-down list.
(2) Select [Java Build Path], and click the [Add External JARs...] button on the [Libraries] tab.
(3) On the [JAR Selection] dialog box, specify [<Program Files Common>\ Fujitsu \ Scanner Control SDK]*1 in the [Lock in] field, and [Fiscn.jar] in [File Name], and click the [Open] button.
(4) Click the [OK] button on the [Properties] dialog box.
(5) [Fiscn.jar] is shown in the project.

*1:If the system is installed in the C drive, the following is shown for <Program Files Common>.
For 32-bit operating system: [C:\ Program Files \ Common Files]
For 64-bit operating system: [C:\ Program Files (x86)\ Common Files]

2.6 How to Remove this SDK from the Project

For Visual Basic® .NET / Visual C++® .NET / Visual C#® .NET

(1) Rightclick the toolbox and select [Customize toolbox].
(2) Unmark the component with the name "Fujitsu Scanner Control" in the tab screen of the COM component and click the [OK] button.
(3) The Fujitsu Scanner Control icon will be deleted from the toolbox.

For Visual Basic® 2005 / Visual C++® 2005 / Visual C#® 2005 / Visual Basic® 2008 / Visual C++® 2008 / Visual C#® 2008 / Visual Basic® 2010 / Visual C++® 2010 / Visual C#® 2010

(1) Rightclick the toolbox and select [Choose Items…].
(2) Unmark the component with the name "Fujitsu Scanner Control" in the tab screen of the COM component and click the [OK] button.
(3) The Fujitsu Scanner Control icon will be deleted from the toolbox.

For Java™

When using Eclipse V3.5.0, follow the steps below.
(1) Show the [Properties] dialog box from the [Project] drop-down list.
(2) Select [Java Build Path], and select [FiScn.jar] on the [Libraries] tab.
(3) Click the [Remove] button.
(4) Click the [OK] button on the [Properties] dialog box.
(5) [Fiscn.jar] will be deleted from the [Project].

2.7 How to Distribute Programs Developed

For distributing programs developed using the Product and making them run on other computers (PCs), it is necessary to distribute several files contained in the Product at the same time and make them installed to those computers (PCs). Notes on distribution are described as follows:

1) FUJITSU TWAIN32 driver

Do not make any alterations (directory structure, etc) including the Readme file. Required to be distributed and installed as is in the installer form contained in the CD. Distribute all files contained in the following directories at the same time:

a) When using the fi-6140Z, fi-6240Z, fi-6130Z, fi-6230Z
CD-ROM:\ Driver8

b) When using the fi-6110
CD-ROM:\ Driver7

c) When using the fi-6800, fi-5950
CD-ROM:\ Driver6

d) When using models other than fi-6110, fi-5950, fi-6800, fi-5015C, fi-4860C2, fi-4340C, fi-6140Z, fi-6240Z, fi-6130Z, fi-6230Z
CD-ROM:\ Driver5

e) When using the fi-60F
CD-ROM:\ Driver4

f) When using the fi-5015C
CD-ROM:\ Driver3

g) When using the fi-4340C
CD-ROM:\ Driver2

h) When using the fi-4860C2
CD-ROM:\ Driver1

2) Runtime libraries

Do not make any alterations (directory structure, etc) including the Readme file.
Make them installed, using the installer for "Fujitsu Scanner Control Runtime V2.1" attached to the CD, to the computers (PCs) that use the application. The scanner control files required for the application developed will be installed. Distribute all files contained in the following directories at the same time:

CD-ROM:\ FiScnRun

3) Other files

Not allowed for distribution.

Caution

To distribute to other PCs and run a program that is developed with Microsoft® Visual Basic® .NET, Microsoft® Visual C++® .NET, Microsoft® Visual C#® .NET, Microsoft® Visual Basic® 2005, Microsoft® Visual C++® 2005, Microsoft® Visual C#® 2005, Microsoft® Visual Basic® 2008, Microsoft® Visual C++® 2008, Microsoft® Visual C#® 2008, Microsoft® Visual Basic® 2010, Microsoft® Visual C++® 2010 or Microsoft® Visual C#® 2010, the same runtime libraries used in the environment for developing the application are necessary.
Redistribution packages of runtime libraries can be obtained from the Microsoft Web site (http://www.microsoft.com).

3. Reference

This chapter describes properties, methods, and events for when Visual Basic® .NET / Visual C++® .NET/ Visual C#® .NET are used.
When using Java™, select the following menu, and refer to the API document in HTML format. (Use Microsoft Internet Explorer 6.0 or later.)
[Start menu]→[Programs]→[Fujitsu Scanner Control SDK V2.1]→[Javadoc]

3.1 Property

3.1.1 Property list

The following table gives an overview of the supported Fujitsu Scanner Control SDK properties:

Property name	Description	Section
Group representing equipment properties		
ImageScanner	Gets the name of the image scanner.	3.1.34
IsExistsFB	Gets the device information regarding whether the flatbed (FB) is supported.	3.1.36
Driver properties (or feed method)		
CloseSourceUI	Sets whether or not to close the user interface (UI) of the source after scanning.	3.1.9
ErrorCode	Gets error information when methods end abnormally.	3.1.24
Indicator	Set whether to show the progress indicator while scanning.	3.1.35
LongPage	Sets the scanning of paper with a length greater than the maximum specifiable length (long page).	3.1.39
PageCount	Gets the scan page count.	3.1.44
PaperSupply	Sets the document feed method (flatbed, ADF, etc).	3.1.49
ScanCount	Specifies the document scan page count.	3.1.62
ShowSourceUI	Sets whether or not to display the user interface (UI) of the source.	3.1.66
SilentMode	Sets whether or not to signal (display) error messages.	3.1.67
SourceCurrentScan	Sets whether or not to scan with the current settings of the source.	3.1.71
TwainDS	Sets the TWAIN data source used for scanning.	3.1.74
Image format properties/destination		
CompressionType	Sets the data compression type.	3.1.10
FileCounter	Sets the serial numbers of files.	3.1.25
FileName	Sets the file name for storing the image. (Extension not included)	3.1.26
FileType	Sets the image data format of a file to output.	3.1.27
JpegQuality	Specifies the JPEG data compression level.	3.1.38
Overwrite	Specifies whether or not to overwrite files.	3.1.46
ScanTo	Sets how to output scan data (file, DIB handle, etc).	3.1.63

Property name	Description	Section
Image properties		
AutoSeparation	Sets the auto image area separation.	3.1.4
Background	Sets the background tracking.	3.1.5
Brightness	Specifies the brightness.	3.1.8
Contrast	Sets the contrast.	3.1.11
CustomGamma	Specifies a customized gamma value. Specifies the "custom value" when customization is set for the gamma pattern.	3.1.12
CustomPaperLength	Sets the length of a custom-sized document.	3.1.13
CustomPaperWidth	Sets the width of a custom-sized document.	3.1.14
CustomResolution	Specifies the scan resolution. (Custom)	3.1.15
Filter	Sets the dropout color.	3.1.28
Gamma	Sets the gamma pattern type (soft/sharp/download/custom).	3.1.29
GammaFile	Specifies a customized gamma pattern file.	3.1.30
Halftone	Specifies the halftone pattern.	3.1.31
HalftoneFile	Specifies the halftone pattern file.	3.1.32
Highlight	Set highlights.	3.1.33
Mirroring	Sets Flip Horizontal.	3.1.40
NoiseRemoval	Sets the dust removal function (function to automatically remove tiny dots in images, which are regarded as “dust”.)	3.1.42
Orientation	Sets the document orientation (portrait/landscape).	3.1.43
Outline	Sets the correction of the image outline.	3.1.44
PaperSize	Specifies the document size.	3.1.48
PixelType	Sets the pixel type (binary, gray, or color).	3.1.51
PreFiltering	Sets the ballpoint pen filtering.	3.1.52
RegionLeft	Specifies the left end of the scan area.	3.1.53
RegionLength	Specifies the length of the scan area.	3.1.54
RegionTop	Specifies the top of the scan area.	3.1.55
RegionWidth	Specifies the width of the scan area.	3.1.56
Resolution	Specifies the scan resolution. (Fixed style)	3.1.59
Reverse	Sets the black and white reversal.	3.1.60
SEE	Sets the selective enhancement.	3.1.64
Smoothing	Sets the OCR smoothing/background removal (function to smooth jagged lines of images and remove irregularities of the background).	3.1.70
Threshold	Sets the threshold.	3.1.72
ThresholdCurve	Sets the threshold curve for automatic binary scanning.	3.1.73
Shadow	Set shadows	3.1.65

Property name	Description	Section
Properties relating to behavior		
AutoBorderDetection	Sets the auto document size detection (detects the document size and outputs the scan image with the same size).	3.1.3
BackgroundColor	Sets the background color.	3.1.6
Binding	Sets the binding direction for duplex scanning.	3.1.7
DoubleFeed	Sets the double feed detection function (“DoubleFeed” refers to the phenomenon, when two or more sheets of paper are fed at one time).	3.1.16
Endorser	Sets whether or not to use the endorser/imprinter.	3.1.17
EndorserCountDirection	Specifies the step direction (increase/decrease) of the endorser/imprinter counter.	3.1.18
EndorserCounter	Sets the default of the endorser/imprinter counter.	3.1.19
EndorserCountStep	Sets the step count of the endorser/imprinter counter.	3.1.20
EndorserDirection	Sets the print direction of the endorser/imprinter.	3.1.21
EndorserOffset	Sets the print start position of the endorser/imprinter.	3.1.22
EndorserString	Sets the string to print with the endorser/imprinter.	3.1.23
JobControl	Specifies the job when detecting a special document (document in a particular shape).	3.1.37
MultiFeed	Sets the multifeed detection function (“MultiFeed” refers to the phenomenon, when two or more sheets of paper are fed at one time).	3.1.41
OverScan	Set overscan.	3.1.45
Rotation	Specifies the rotation angle for a scanned image.	3.1.61
SkipBlackPage	Sets the function to scan by skipping blank pages (black pages) for continuous ADF scanning.	3.1.68
SkipWhitePage	Sets the function to scan by skipping blank pages (white pages) for continuous ADF scanning.	3.1.69
UndefinedScanning	Sets the undefined scanning.	3.1.75
Unit	Set units (inch/centimeter/pixel).	3.1.76
Others		
ParentAppName	Specifies the parent application name.	3.1.50
Report	Sets how to output the scan result report.	3.1.57
ReportFile	Specifies the name of the file to which the scan result is output.	3.1.58

3.1.2 Example of use and conventions in this chapter

Feature
Describes the overview of the property

Coding Style
Shows the description method and style used for the property's coding.
Describes codes in accordance with the conventions of Visual Basic®.NET.
Example) [form.] scancontrolname.ScanTo [= Integer]

The content given between square brackets ([ ]) can be omitted.

Value
Gives the list and description of values that can be set or referenced.

Default
Describes the value for Control (OCX), which is the default when loaded.

Explanation
Describes the usage and function of the property. In addition, notes and restraints regarding correlated properties are also described if necessary.

Target method
Shows the list of methods that, when processed, change the property's state.

Related Properties
Shows all properties affecting each other.

Value Setting
Describes the state in which the value can be set. At the design stage, the building state (environment) of the application, which uses Control (OCX) or Java class in the development environment (Visual Basic®, Visual C++®, Visual C#®, Java, etc), and at the time of implementation, the state of the running application, which actually uses Control (OCX) or Java class.
Even if the value is set, its validity is unknown in reality. (Note that if the value goes beyond the setting range, its validity is known.) In fact, the validity of the value cannot be judged until a certain method is implemented.
There are two cases of the setting being disabled: Firstly, after the value is changed, an error may return when a certain method is implemented. Secondly, even if the value is changed, the value itself may be disregarded.

Value Reference
Describes the state in which the value can be referenced.
At the time of program implementation: shows the value supposed to be enabled in the target method that will be implemented, or shows the implementation result of one previous method.

Error Recovery
Describes the handling in the event of invalid setting or processing.

Compatibility and Restraints
Describes differences in functionality between versions, or restraints on functionality, should such be the case.

3.1.3 AutoBorderDetection .... automatic border detection

Feature
Sets the automatic document size detection function.

Coding Style
[form.] scancontrolname.**AutoBorderDetection** [= Boolean]

Value
True Detects the document size.
False Does not detect the document size.

Default
False Does not detect the document size.

Explanation
Detects the document size at the time of ADF scanning and outputs the scan image with the same size.
If the document is scanned askew, detects and automatically corrects the skew.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
BackgroundColor
OverScan
PaperSupply
UndefinedScanning

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
And if this property cannot be enabled depending on device type, sets it to "0 – False" when scanning to carry out a scan. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
The property name "AutoBoarderDetection" has been changed to "AutoBorderDetection" since V2.0L10. Operated correctly even if the old name "AutoBoarderDetection" is used, but this is provided as a compatible for recompiling the source program created by a version of SDK older than V2.0L10 as is using an SDK version V2.0L10 or later. Note that compiling may become impossible in the future, should a major up date of the version be conducted. Use the new property name "AutoBorderDetection" rather than "AutoBoarderDetection" in order to newly create applications or modify existing programs.

3.1.4 AutoSeparation .... automatic image area separation

Feature
Sets the automatic image area separation.

Coding Style
[form.] scancontrolname.**AutoSeparation** [= Short]

Value

0 – OFF	Does not execute the automatic image area separation.
1 – ON	Executes the automatic image area separation.

Default

0 – OFF	Does not execute the automatic image area separation.

Explanation
If the automatic image area separation is enabled (1-ON), line (character) and image (photo) areas are distinguished: the former being scanned in "binary (black and white)" mode, while the latter being scanned in "subtle black and white (halftone)" mode. This is especially suitable for documents consisting of pages filled with text and pages containing photographs.
This property is enabled only when "0 - Black & White" is set for the PixelType property.
Because this property is not supported in devices without an image processing board (which is incorporated in the fi-4860C2), it will be set to OFF (does not execute the auto image area separation) when executing a scan.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
Halftone
PixelType

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
If "1 – Grayscale" or "2 - RGB" has been set for the PixelType property, a scan will be executed without regard to this property. If the Halftone property is set to "0 - None," sets it to the "1 - Dither Pattern 0" (for dark photo image).
In devices not supporting this property, if "1 - ON" is set for this property, the halftone effect may appear on the image scanned.

Compatibility and Restraints
N/A

3.1.5 Background .... background tracking

Feature
Sets the background tracking.

Coding Style
[form.] scancontrolname.**Background** [= Integer]

Value

0 – OFF	No (disabled)
1 – ON	Yes (enabled)
2 – AUTO	Automatic

Default

0 – OFF	N/A

Explanation
Sets the background tracking (No/Yes/Auto).
* Background tracking refers to the function that automatically tracks and adjusts the contrast when scanning a document with background color other than white.
This function is effective for scanning documents whose ground color is not pure white like newspapers, for example.

Target method
StartScan

Related Properties
N/A

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
And if this property cannot be enabled depending on device type, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
N/A

3.1.6 BackgroundColor .... setting the background color (black or white background)

Feature
Sets the background color (black or white background)

Coding Style
[form.] scancontrolname. **BackgroundColor** [= Short]

Value

0 – OFF	No
1 – ON	Yes (Black or White)

Default

0 – OFF	No

Explanation
Sets the background color at the time of ADF scanning.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
AutoBorderDetection
OverScan
PaperSupply
UndefinedScanning

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
And if this property cannot be enabled depending on device type, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
The value 0-OFF and 1-ON are described as 0-White and 1-Black since V2.0L20. Note that both are the same behavior.

3.1.7 Binding.... duplex binding direction

Feature
Sets the binding direction for duplex scanning.

Coding Style
[form.] scancontrolname.**Binding** [= Short]

Value

0 – Side	Right and left binding
1 – Height	Top and bottom binding

Default

0 – Side	Right and left binding

Explanation
If the right and left binding "0 – Side" is specified, both images scanned are output as is.
If the top and bottom binding "1 – Height" is specified, only the scanned image of the back side is output half-turned.
This property is enabled only when "2 - ADF(Duplex)" is set for the PaperSupply property.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PaperSupply
ScanTo

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.

Compatibility and Restraints
N/A

3.1.8 Brightness .... brightness

Feature
Specifies the brightness.

Coding Style
[form.] scancontrolname.**Brightness** [= Short]

Value
Between 1(bright) and 255(dark).

Default
128

Explanation
Sets the brightness of images when scanning.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
AutoSeparation
Halftone
PixelType
PaperSupply
SEE

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range (value not between 1 and 255).
And if this property cannot be enabled depending on device type, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
N/A

3.1.9 CloseSourceUI .... exit setting for the user interface (UI) of the source

Feature
Sets whether or not to close the user interface (UI) of the source after scanning.

Coding Style
[form.] scancontrolname.**CloseSourceUI** [= Boolean]

Value

True	Closes the user interface of the source after scanning.
False	Does not close the user interface of the source after scanning.

Default

False	Does not close the user interface of the source after scanning.

Explanation
If this property is set to "True," automatically closes the user interface of the source after scanning.
This property is enabled only when the ShowSourceUI property is set to "True."
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
ShowSourceUI

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
If "False" is set for the ShowSourceUI property, a scan will be executed without regard to this property.

Compatibility and Restraints
N/A

3.1.10 CompressionType .... data compression type

Feature
Sets the data compression type,

Coding Style
[form.] scancontrolname.**CompressionType** [= Short]

Value

0 - No Compress	No (not compressing)
1 - CCITT G3(1D)	MH compression
2 - CCITT G3(2D) KFactor = 2	MR compression K Factor 2
3 - CCITT G3(2D) KFactor = 4	MR compression K Factor 4
4 - CCITT G4	MMR compression
5 - JPEG	JPEG compression
6 - Old JPEG	Old JPEG compression (TIFF file only)

Default

4 - CCITT G4	MMR compression

Explanation
Specifies the data compression type.
This property is enabled when the ScanTo property is set to "0 - File" and the FileType property is set to "1 - TIF," "2 - Multipage TIF," "4 - PDF" or "5 - Multipage PDF" or when the ScanTo property is set to "2 - Raw Image Handle." Otherwise, it will be disregarded.
When the FileType property is set to "0 - BMP", this property operates as if set to "0 - No Compress" regardless of the actual setting.
When the FileType property is set to "3 - JPEG", this property operates as if set to "5 - JPEG" regardless of the actual setting.
When the ScanTo property is set to "2 - Raw Image Handle", and this property is set to "6 - Old JPEG", this property operates as if set to "5 - JPEG".

For binary (black and white) compression, the suitable values to set for this property include "1 - CCITT G3(1D) ," " 2 - CCITT G3(2D) KFactor = 2," " 3 - CCITT G3(2D) Kfactor = 4" and "4 - CCITT G4." For color image compression with the PixelType property set to "2 – RGB," the suitable value to set for this property is "5 – JPEG."
However, for the compression to be carried out in such case (as the halftone is specified for the Halftone property - when a value from 1 to 4 is specified for this property) the expected compression rate cannot be guaranteed. Because the above compression shall be, in principle, specified for binary (black and white) images.

When the PixelType property is set to "1 - Grayscale" or "2 - RGB" and when it is specified that the compression is carried out by this property (its value set to "1 - CCITT G3(1D) ," " 2 - CCITT G3(2D) KFactor = 2," " 3 - CCITT G3(2D) Kfactor = 4" or "4 - CCITT G4"), scanning is done in binary (black and white) mode.

Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
FileType
JpegQuality
PaperSupply
PixelType

ScanTo

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
For invalid combinations specified, if the FileType property is set to either 4-PDF or 5-Multipage PDF, scanning will be done with the setting of 4-CCITT G4. Otherwise it will be done with the setting of 0-No Compress.

Compatibility and Restraints
N/A

3.1.11 Contrast .... contrast

Feature
Sets the contrast.

Coding Style
[form.] scancontrolname.**Contrast** [= Short]

Value
Between 1(low) and 255(high).

Default
128

Explanation
Sets the degree of difference between light and dark extremes for the scanned image. Configurable between 1 and 255.
The greater the value is, the darker the dark area and the lighter the light area of an image will be scanned.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PaperSupply

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range (value not between 1 and 255).

Compatibility and Restraints
N/A

3.1.12 CustomGamma .... custom gamma

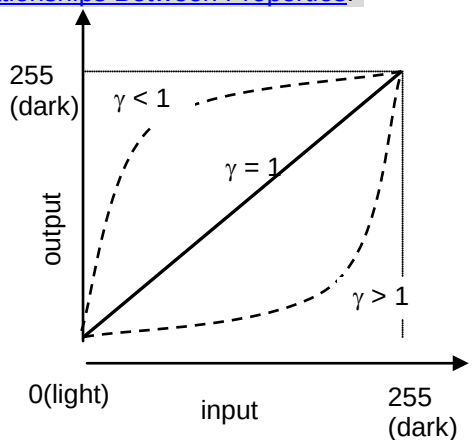
Feature
Specifies the gamma value.

Coding Style
[form.] scancontrolname.**CustomGamma** [= Single]

Value
Between 0.1 and 10.0.

Default
2.2

Explanation
Sets any gamma value (custom value).
This property is enabled only when the Gamma property is set to "4 - Custom."
<Gamma value>
Value for correcting the nonlinearity of an image, configurable between 0.1 and 10.0.
Linearity needs to be adjusted because while the sensor in the scanner gives linear output in relation to the density of the light reflected from a document, most output terminals (CRT, etc) do not give linear output in relation to the input.
Generally speaking, it is lighter if the gamma value is greater than 1, and darker if the gamma value is smaller than 1.
(The figure below shows relationship between gamma value (γ) and input/output value.)
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."



Target method
StartScan

Related Properties
Gamma
PaperSupply

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range (value not between 0.1 and 10.0).
This property is disregarded if the Gamma property is set to any value other than "4 - Custom."
And if this property cannot be enabled depending on device type, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
N/A

3.1.13 CustomPaperLength .... custom document length

Feature
Sets the length of a custom-sized document.

Coding Style
[form.] scancontrolname.**CustomPaperLength** [= Single]

Value
Sets the length of a custom-sized document.

Default
1

Explanation
Sets the scanning length.
This property is enabled only when the document size is set to "99 - Custom" for the PaperSize property.
Sets 2 inches (51 mm) and performs a scan when a value smaller than 2 inches (51 mm) is specified while the PaperSupply property is specified with "7 - ADF(CarrierSheet Clipping)."
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
LongPage
PaperSize
PaperSupply
Unit

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
No error check is done at the time of setting.
This property is disregarded if the PaperSize property is set to any value other than "99 - Custom."
And when long page document is NOT scanned specified by LongPage property, if the value set is longer than the physical length of the device, the value will be set to the physical length of the device when scanning to carry out a scan.
When long page document is scanned specified by LongPage property, the document longer than the physical length of the device can be scanned. But if the length excesses the maximum value of LongPage, the scanning is carried out with the maximum value of LongPage.
And if the value set is smaller than 1 inch (26 mm), the value will be set to 1 inch (26 mm) during prescan.

Compatibility and Restraints
At long page documents scanning, if the value set is longer than the maximum value of LongPage, scanning is carried out with maximum value that is possible to scan. However, it will not be changed to the maximum value after the property is executed.

3.1.14 CustomPaperWidth .... custom document width

Feature
Sets the width of a custom-sized document.

Coding Style
[form.] scancontrolname.**CustomPaperWidth** [= Single]

Value
Sets the width of a custom-sized document.

Default
1

Explanation
Sets the scanning width.
This property is enabled only when the document size is set to "99 - Custom" for the PaperSize property.
Sets 2 inches (51 mm) and performs a scan when a value smaller than 2 inches (51 mm) is specified while the PaperSupply property is specified with "7 - ADF(CarrierSheet Clipping)."
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PaperSize
PaperSupply
Unit

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
No error check is done at the time of setting.
This property is disregarded if the PaperSize property is set to any value other than "99 - Custom."
And if the value set is longer than the physical width of the device, the value will be set to the physical width of the device when scanning to carry out a scan.
And if the value set is smaller than 1 inch (26 mm), the value will be set to 1 inch (26 mm) during prescan.

Compatibility and Restraints
N/A

3.1.15 CustomResolution .... custom resolution

Feature
Specifies the scan resolution.

Coding Style
[form.] scancontrolname.**CustomResolution** [= Short]

Value
Between 50 and 1600 [dpi].

Default
300

Explanation
Sets the scan resolution.
This property is enabled only when the Resolution property is set to "99 - Custom."
However, even if the resolution is supported by the device, scanning may not be possible due to the size of a document to scan, etc.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
Resolution
PaperSize
PixelType

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range (value not between 50 and 1600).
And if the resolution not supported by the device is set, the default value will be set when scanning to carry out a scan.
* Available scan resolution varies with device.
Refer to the User's Guide for your device.
(* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
The default has been changed to 300 instead of 400 since V2.0L10.

3.1.16 DoubleFeed .... double feed detection

Feature

This property ceased to be supported after V2.0L10.

Compatibility and Restraints

This property is provided for compatibility.
Provided as a compatible for recompiling the source program created by a version of SDK older than V2.0L10 as is using an SDK version V2.0L10 or later. Note that compiling may become impossible in the future, should a major up date of the version be conducted. Use the MultiFeed property rather than this property to newly create applications or modify existing programs.

3.1.17 Endorser .... endorser/imprinter setting

Feature
Sets whether or not to use the endorser/imprinter.

Coding Style
[form.] scancontrolname.**Endorser** [= Boolean]

Value

True	Uses the endorser/imprinter.
False	Does not use the endorser/imprinter.

Default

False	Does not use the endorser/imprinter.

Explanation
Sets whether or not to use the endorser/imprinter.
Enabled for scanners with an endorser/imprinter option.
Some scanners support both the Pre-imprinter (Pre-endorser) and Post-imprinter (Post-endorser).If these two types of imprinters (endorsers) are installed together, the Post-imprinter (Post-endorser) has higher priority than the Pre-imprinter (Pre-endorser) for printing; if either of these imprinters (endorsers) is installed, and the installed one is used for printing.
Some scanners support both the Pre-imprinter (Pre-endorser) and Post-imprinter (Post-endorser). If these two types of imprinters (endorsers) are installed together, the Post-imprinter (Post-endorser) has higher priority than the Pre-imprinter (Pre-endorser) for printing; if either of these imprinters (endorsers) is installed, the installed one is used for printing.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PaperSupply

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
And if this property cannot be enabled depending on device type, sets it to "False" when scanning to carry out a scan. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
N/A

3.1.18 EndorserCountDirection

.... endorser/imprinter counter step direction setting

Feature
Sets the step direction of the endorser/imprinter counter.

Coding Style
[form.] scancontrolname.**EndorserCountDirection** [= Short]

Value

0 – Add	Adds.
1 – Del	Deletes.

Default

0 – Add	Adds.

Explanation
Sets the step direction (increase/decrease) of the endorser/imprinter counter.
This property is enabled only when the Endorser property is set to "True."
Enabled for scanners with an endorser/imprinter option. (* Refer to "5.1 Properties Enabled According to Devices.")
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
Endorser
EndorserCounter
EndorserCountStep
EndorserDirectoin
EndorserOffset
EndorserString

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.

Compatibility and Restraints
N/A

3.1.19 EndorserCounter .... endorser/imprinter counter default setting

Feature
Sets the default of the endorser/imprinter counter.

Coding Style
[form.] scancontrolname.**EndorserCounter** [= Integer]

Value
Between -1, 0 and 99999, or 0 and 16777215.
When -1 is set, the endorser/imprinter counter does not operate for printing.

Default
0

Explanation
Sets the default of the endorser/imprinter counter.
When -1 is set as the setting value, the endorser/imprinter counter does not operate for printing.
The setting value is 8 digits(0 - 16777215) if the letter string %08ud is included, and 5 digits (0 - 99999) if not included.
This property is enabled only when the Endorser property is set to "True."
Enabled for scanners with an endorser/imprinter option. (* Refer to "5.1 Properties Enabled According to Devices.")
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
Endorser
EndorserCountDirection
EndorserCountStep
EndorserDirectoin
EndorserOffset
EndorserString

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
The imprinter/endorser counter is reset to zero when the setting range (either in increment or decrement mode) is exceeded. For example, if the counter is of five digits, it is reset to zero when the maximum count (99999) is reached. Note that the counting results with an eight-digit counter vary depending on the scanner model to use. For details, refer to the instruction manual of the scanner driver.
If a paper jam or multifeed occurs during a scan with printing enabled, the printing counter value for the following scan may differ from the expected value. Therefore, before restarting the scan that was interrupted by an error, make sure to set the initial value of the printing counter.

Compatibility and Restraints

To determine whether the setting value of this property is beyond the setting range, Endorser String value at the time is referred to. Therefore, set the Endorser String before setting the Endorser Counter.

3.1.20 EndorserCountStep

.... endorser/imprinter counter step count setting

Feature
Sets the step count of the endorser/imprinter counter.

Coding Style
[form.] scancontrolname.**EndorserCountStep** [= Short]

Value

0 – None	No step count
1 – 1 Step	In increments of one step count.
2 – 2 Step	In increments of two step counts.

Default

1 – 1 Step	In increments of one step count.

Explanation
Sets the step count of the endorser/imprinter counter.
This property is enabled only when the Endorser property is set to "True."
Enabled for scanners with an endorser/imprinter option. (* Refer to "5.1 Properties Enabled According to Devices.")
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
Endorser
EndorserCountDirection
EndorserCounter
EndorserDirectoin
EndorserOffset
EndorserString

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.

Compatibility and Restraints
N/A

3.1.21 EndorserDirection

.... endorser/imprinter print direction setting

Feature
Sets the print direction of the endorser/imprinter.

Coding Style
[form.] scancontrolname.**EndorserDirection** [= Short]

Value

1 – ToUnder	Prints from top to bottom.
3 – ToUpper	Prints from bottom to top.

Default

1 – ToUnder	Prints from top to bottom.

Explanation
Sets the counter print direction of the endorser/imprinter,
This property is enabled only when the Endorser property is set to "True."
Enabled for scanners with an endorser/imprinter option. (* Refer to "5.1 Properties Enabled According to Devices.")
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
Endorser
EndorserCountDirection
EndorserCounter
EndorserCountStep
EndorserOffset
EndorserString

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.

Compatibility and Restraints
N/A

3.1.22 EndorserOffset .... endorser/imprinter start print position setting

Feature
Sets the print start position of the endorser/imprinter.

Coding Style
[form.] scancontrolname.**EndorserOffset** [= Single]

Value
Sets the print start position of the endorser/imprinter.

Default
0

Explanation
Sets the print start position of the endorser/imprinter.
This property is enabled only when the Endorser property is set to "True."
Enabled for scanners with an endorser/imprinter option. (* Refer to "5.1 Properties Enabled According to Devices.")
For the printable area of the endorser/imprinter, refer to the User's Guide for your device.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
Endorser
EndorserCountDirection
EndorserCounter
EndorserDirectoin
EndorserCountStep
EndorserString
Unit

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Even if a value except a printable range is set, printing will be done the maximum of a print possibility range.

Compatibility and Restraints
N/A

3.1.23 EndorserString .... endorser/imprinter string setting

Feature
Sets the string for the endorser/imprinter.

Coding Style
[form.] scancontrolname.**EndorserString** [= String]

Value
40 alphanumeric characters or less
Alphabets : A - Z, a - z
Numbers : 0, 1 - 9
Symbols : ! " # $ % & ' ( ) * + , - . / : ; < = > ? @ [\ ] ^ _ ` { | } ~
Others : (space)

Default
"" (empty character string)

Explanation
Sets the string for the endorser/imprinter.
The specified character string is suffixed with the Counter (a five-digit or eight-digit number) and printed on the document with the Endorser/Imprinter.
This property is enabled only when the Endorser property is set to "True."
Enabled for scanners with an endorser/imprinter option. (* Refer to "5.1 Properties Enabled According to Devices.")
For the maximum number of characters for the endorser/imprinter, refer to the User's Guide for your device.
If you print "%", you must specify it as "%%". For details about other values, refer to the TWAIN driver help.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
Endorser
EndorserCountDirection
EndorserCounter
EndorserCountStep
EndorserDirectoin
EndorserOffset

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
The number of characters (including the Counter) printable with Endorser/Imprinter is limited, and those exceed the maximum number are not printed.

Compatibility and Restraints
N/A

3.1.24 ErrorCode .... error information acquisition

Feature
Gets error information.

Coding Style
[Long =] [form.] scancontrolname.**ErrorCode**

Value
N/A Property only for value reference purpose.

Default
0x00000000 : EC_SUCCESS No error

Explanation
Property to get error information when methods end abnormally.
Initialized to EC_SUCCESS when methods are called.
See the Error List in section "5.2 Error code and how to fix error."

Target method
All methods except AboutBox.

Related Properties
SilentMode

Value Setting
Not possible.

Value Reference
When implemented.

Error Recovery
For how to handle errors, refer to "5.2 Error code and how to fix error."

Compatibility and Restraints
-Includes errors displayed by the driver.
-Depending on the specifications of the scanner, a paper jam (0x00000003:EC_JAM) may be reported at the next scan, not at the completion of the target document processing.
Specifically, it is the case where the document does not pass the top sensor after the leading end of the document reaches the top sensor inside the scanner.
-Owing to the specifications of the fi-5015C scanner, a paper jam (0x00000003:EC_JAM) or “the ClearPage function is not supported” (0x00000028:EC_ERROR_CLEARPAGE) may be reported when the StartScan method or the ClearPage method is executed without ejecting the document. In case of such an error, manually remove the document from the scanner, and then retry the method.

3.1.25 FileCounter .... file serial number setting

Feature
Sets the serial numbers of files.

Coding Style
[form.] scancontrolname.**FileCounter** [= Integer]

Value
Between 0 and 65535.

Default
1

Explanation
Sets the beginning of a "serial number" for the file name when saving.
The file actually created will be "FileName property" plus "serial number."extension. (For "Multipage TIFF" and "Multipage PDF," the value of the FileCounter property when the StartScan method is called will be used for the file name, and the filename remains the same until a scan is complete (until the StartScan call ends).
This property is incremented (increased by 1 count) every time a sheet (page) is scanned. (For "Multipage TIFF" and "Multipage PDF," too, the number of scanned sheets (pages) will be increased from when the StartScan method is called until a scan is complete (until the StartScan call ends).
If the scan count exceeds 65535, it will be reset to 1 to continue scanning.
If duplex scanning is specified, this property is incremented by 2 per sheet (face and back - 2 pages).
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan
OpenScanner

Related Properties
FileType
ScanCount

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range (value not between 0 and 65535).

Compatibility and Restraints
N/A

3.1.26 FileName .... file name

Feature
Sets the file name for storing the image. (Extension not included)

Coding Style
[form.] scancontrolname.**FileName** [= String]

Value
The file name for storing the image (string that ends with NULL, including the absolute path name).
Extension does not need to be included because it will be given by the Control (OCX).

Default
"" (empty character string)

Explanation
Sets the file name to be output (does not need to set extension).
This property is enabled only when the ScanTo property is set to "0 - File."
In addition, the file name to be actually created will include the file name set with this property, a 3-digit serial number, and the extension of the image data format set for the FileType.
For example:
FileType = "1-TIFF"
if set to FileName = "C: \ IMAGE \ IMG"
and when three pages are scanned,
the three image files - IMG001.tif, IMG002.tif, and IMG003.tif - will be created in the C: \ IMAGE \ folder.
In case files with such names are already present, the files will be handled according to what is specified for the Overwrite property.
\ * ? " < > | If any of these characters is included, files cannot be created.
It is possible to add a serial number with the specified number of digits to the specified position by specifying # for the file name.
1 - 5 digits can be specified using #.
Example)
img# → img1
img###vvv → img001vvv
img#####v → img00001v
If the serial number is advanced by one place, the places totally required for it are automatically secured.
For example:
If set to FileName = "C:\ IMAGE \ IMG#"
and when ten pages are scanned, the file named IMG10 will be created for the tenth page.

Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
ScanTo
FileCounter
FileType
Overwrite

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
No error check is done at the time of setting.
When scanning, checks whether or not it is possible to create the file using the file name actually set. Sets the error code like EC_CANNOT_MAKE and returns RC_FAILURE when the file name set is not correct (like when files cannot be created).
If "" (empty character string) is set, displays the file name input dialog (Windows® shared dialog) when scanning.

Compatibility and Restraints
Do not use # for folder names. Otherwise, files will not be created correctly.

3.1.27 FileType .... file format (image data format)

Feature
Sets the file format .

Coding Style
[form.] scancontrolname.**FileType** [= Short]

Value

0 – BMP	Windows Bitmap file
1 - TIFF	TIFF file
2 - Multipage TIFF	Multipage TIFF file
3 – JPEG	JPEG file
4 - PDF	PDF file
5 - Multipage PDF	Multipage PDF file
6 - Multi Image Output	Multi-image output(Black and white: TIFF file, Others: JPEG file)
7 – Auto Color Detection	Auto color detction(Black and white: TIFF file, Others: JPEG file)

Default

1 - TIFF	TIFF file

Explanation
Sets the image data format of a file to output.
This property is enabled only when the ScanTo property is set to "0 - File."
(This property will be disregarded if any value other than the above is set.)
-To set "1 - TIF" and "2 - Multipage TIFF" for this property and "1 - Grayscale" or "2 - RGB" for the PixelType property, be sure to set "0 - No Compress", "5 - JPEG" or "6 - Old JPEG" for the CompressionType property.
-To set "3 - JPEG" for this property, be sure to set "1 - Grayscale" or "2 - RGB" for the PixelType property.
-To set "4 - PDF" and "5 - Multipage PDF" for this property:
- If the PixelType property is set to "0 - Black&White," set any value other than "5 – JPEG" for the Compression Type property. (Unconditionally saved using MMR compression if "5 - JPEG" is specified.)
- If the PixelType property is set to "1 - Grayscale," be sure to set "0 – No Compress" for the CompressionType property. (Unconditionally saved with its color increased to RGB and using JPEG compression if other value is specified.)
- If the PixelType property is set to "2 - RGB," be sure to set "0 - No Compress" or "5 - JPEG" for the CompressionType property. (Unconditionally saved using JPEG compression if other value is specified.)
-When setting "6 - Multi Image Output" for this property
- Binary (black and white) and non-binary images must be output in the same page. Enable Multi Image Output in the TWAIN driver, or select "Generate B&W and Color images simultaneously" in the Image Processing Software Option.
- The CompressionType property is disabled. For TIFF files, the compression format will be CCITT G4, and for JPEG files, it will be JPEG.
The same file name will be used for the TIFF and JPEG files from the identical page (only the extensions will be different).
-When setting "7 - Auto Color Detection" for this property
- Enable "Auto Color Detectionn" in the TWAIN driver.
- The CompressionType property is disabled. For TIFF files, the compression format will be CCITT G4, and for JPEG files, it will be JPEG.
- TIFF files and JPEG files are counted separately by the page counter.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
ScanTo
CompressionType
PixelType
JpegQuality
ScanCount

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.

Compatibility and Restraints
N/A

3.1.28 Filter .... dropout color

Feature
Sets the dropout color.

Coding Style
[form.] scancontrolname. **Filter** [= Short]

Value

0 – Green	Drops out green.
1 – Red	Drops out red.
2 – Blue	Drops out blue.
3 – None	None or Specified by device (Specifies the dropout color specified by the device.)
4 – White	Drops out white.
99– Custom1	Specify the Pattern 1, which is configured using the user interface of the source.
100– Custom2	Specify the Pattern 2, which is configured using the user interface of the source.
101– Custom3	Specify the Pattern 3, which is configured using the user interface of the source.

Default

0 – Green	Drops out green.

Explanation
Of green, red, blue, and white, capable of scanning by removing any of the color information you have selected. For example, when scanning black letters with red outlines, it is possible to scan only black letters by selecting red for this property to scan.
For scanner with the custom pattern option, you can specify custom patterns that have been configured through the user interface of the source.
For information about the custom pattern, see the Operation's Guide of the driver.
This property is enabled only when the PixelType property is set to "0 - Black & White" or "1 - Grayscale." Otherwise, it will be disregarded.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
ScanTo
PixelType

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
If a value is specified beyond the range, the value will not be updated.
Depending on the scanners, some setting values are not supported. (* See section "5.1 Properties Enabled According to Devices.")
If an unsupported value on the scanner is specified, the driver changes the setting value to another valid one when scanning is performed.
For scanning with a specified custom pattern, if the StartScan method is issued before the custom pattern is specified, an error such as RC_CANCEL or RC_FAILURE occurs. The value obtained from the ErrorCode property is indefinite.

Compatibility and Restraints

N/A

3.1.29 Gamma .... gamma adjustment

Feature
Sets the gamma adjustment mode.

Coding Style
[form.] scancontrolname. **Gamma** [= Short]

Value

0 – None	N/A
1 – Soft	Soft
2 – Sharp	Sharp
3 - Gamma Pattern File	Download (Specifies the gamma pattern file.)
4 – Custom	Custom (Specifies the gamma value.)

Explanation
Sets the nonlinearity correction for images.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Default
0 - None

Target method
StartScan

Related Properties
CustomGamma
GammaFile
PaperSupply

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
If this property cannot be enabled depending on device type, a scan will be carried out without regard to this property when scanning.
And because some values are not supported depending on devices, in such a case, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
In V1.0, the value 2-Sharp is described as 2-Hard. Note that both are the same value.

3.1.30 GammaFile .... gamma pattern file name

Feature
Specifies the gamma pattern file.

Coding Style
[form.] scancontrolname.**GammaFile** [= String]

Value
Gamma pattern file name (string that ends with NULL, including the absolute path name).

Default
"" (empty character string)

Explanation
Sets any gamma pattern file.
For pattern files, refer to the User's Manual for your scanner driver.

Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
Gamma

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
When the Gamma property is set to value other than "3 - Gamma Pattern File," this property is ignored. If specified character strings are null, or if no configured files exist, set the Gamma property to "0 - None" and scan the document.

Compatibility and Restraints
N/A

3.1.31 Halftone .... halftone

Feature
Sets the halftone pattern.

Coding Style
[form.] scancontrolname.**Halftone** [= Short]

Value

0 - None	N/A
1 - Dither Pattern 0	For dark photo images
2 - Dither Pattern 1	For a mixture of dark letters and photos
3 - Dither Pattern 2	For light photo images
4 - Dither Pattern 3	For a mixture of light letters and photos
5 - Dither Pattern File	Download (Specifies the halftone pattern file.)
6 - Error Diffusion	Error diffusion method

Default

0 – None	N/A

Explanation
This property sets a pattern to be used for halftone.
Halftone expresses grayscale images in pseudo gradation using halftone dots (pattern). It is possible to select the dither pattern (1-4) incorporated in the device, download (5), or error diffusion method (6).
Halftone is suitable for scanning images with shading like photos.
This property is enabled only when "0 - Black & White" is set for the PixelType property.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
CompressionType
PixelType
HalftoneFile

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
If "1 - Grayscale" or "2 - RGB" has been set for the PixelType property, a scan will be executed without regard to this property.
And because some values are not supported depending on devices, in such a case, a scan will be carried out by setting this property as "1 - Dither Pattern 0" when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
N/A

3.1.32 HalftoneFile .... halftone pattern file

Feature
Specifies the halftone pattern file.

Coding Style
[form.] scancontrolname.**HalftoneFile** [= String]

Value
Halftone pattern file name (string that ends with NULL, including the absolute path name).

Default
"" (empty character string)

Explanation
Specifies any halftone pattern file.
For pattern files, refer to the User's Manual for your scanner driver.
This property is enabled only when "0 - Black & White" is set for the PixelType property and "5 - Dither Pattern File" is set for the Halftone property.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PixelType
Halftone

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
This property is disregarded when "0 - Black & White" is set for the PixelType property and any value other than "5 - Dither Pattern File" is set for the Halftone property.
If an empty string is set, or if there is no file set, sets the Halftone property as "0 - None" when scanning to carry out a scan.
If the setting for the Halftone property as "5 - Dither Pattern File" (which specifies halftone pattern file) is not supported depending on devices, sets the Halftone property as "1 - Dither Pattern 0 " when scanning to carry out a scan. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
N/A

3.1.33 Highlight .... highlight

Feature
Sets highlights.

Coding Style
[form.] scancontrolname.**Highlight** [= Short]

Value
Between 1 and 255.

Default
230

Explanation
Sets highlighting for images when scanning.
This property is enabled only when either "1 - Grayscale" or "2 - RGB" is set as the PixelType property.
When setting "1 - Grayscale" for the PixelType property, set "4 - Custom" for the Gamma property.
This property is invalid when the PaperSupply property is set as "4 - ADF(CarrierSheet Spread A3)", "5 - ADF(CarrierSheet Spread DL)", "6 - ADF(CarrierSheet Spread B4)", or "7 - ADF(CarrierSheet Clipping)".
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
Gamma
PaperSupply
PixelType

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range (value not between 1 and 255).
If this property cannot be enabled depending on device type, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
N/A

3.1.34 ImageScanner .... image scanner name acquisition

Feature
Gets the product name of the image scanner.

Coding Style
[form.] scancontrolname.**ImageScanner** [String =]

Value
N/A Property only for value reference purpose.

Default
"" (empty character string)

Explanation
Gets the product name of the FUJITSU fi-series image scanner connected.
(Example: "fi - 5220Cdj")

Target method
OpenScanner

Related Properties
N/A

Value Setting
Not possible.

Value Reference
When implemented.

Error Recovery
N/A

Compatibility and Restraints
Reference this property after calling the OpenScanner method. (This property is configured by the OpenScanner method.)

3.1.35 Indicator .... progress indicator setting

Feature
Sets whether to show the progress indicator while scanning.

Coding Style
[form.] scancontrolname.**Indicator** [Boolean =]

Value

True	Show the progress indicator.
False	Do not show the progress indicator.

Default

True	Show the progress indicator.

Explanation
Sets whether to show the progress indicator while scanning.
This property is enabled only when the ShowSourceUI property is "False".
If the ShowSourceUI property is set to "True", the Indicator property operates as if set to "True" regardless of its actual setting.

Target method
StartScan

Related Properties
ShowSourceUI

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
N/A

Compatibility and Restraints
N/A

3.1.36 IsExistsFB .... image scanner's flatbed (FB) support

Feature
Gets the device information regarding whether flatbed (FB) is supported.

Coding Style
[form.] scancontrolname.**IsExistsFB** [Boolean =]

Value
N/A Property only for value reference purpose.

Default

True	Supported.
False	Unsupported.

Explanation
Gets the device information regarding whether the image scanner currently connected supports flatbed (FB).

Target method
OpenScanner

Related Properties
PaperSupply

Value Setting
Not possible.

Value Reference
When implemented.

Error Recovery
N/A

Compatibility and Restraints
Get the value after calling the OpenScanner method.
(This property is configured by the OpenScanner method.)

3.1.37 JobControl .... job control setting

Feature
Sets the job control.
* Job control refers to the process control when a special document (document in a particular shape) is detected.

Coding Style
[form.] scancontrolname.**JobControl** [= Short]

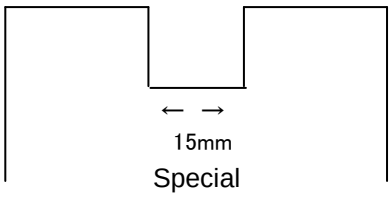
Value

0 – None	Does not detect special documents.
1 – Include and Continue	Scans special documents and continues.
2 – Include and Stop	Scans special documents and aborts.
3 – Exclude and Continue	Skips special documents and continues.
4 – Exclude and Stop	Skips special documents and aborts.

Default

0 – None	Does not detect special documents.

Explanation
Sets the job control.
If a special document is detected during ADF continuous scanning, issues a DetectJobSeparator event to control the job in accordance with the above setting (1-4).
(When the setting has been made with the UI of the driver, the above event is issued without regard to this property.)
For details, refer to the DetectJobSeparator event.
* The special document refers to the document with A4 width or greater, and its front end being shaped as shown in the figure below, having a cutout of 15mm per side in the middle.



Special document (Front end)

Target method
StartScan

Related Properties
N/A

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
Because this property is not supported depending on devices, it may be disabled. (* Refer to "5.1 Properties Enabled According to Devices.")
* For the details of special documents (documents in a particular shape), refer to the User's Guide for your device.

Compatibility and Restraints
N/A

3.1.38 JpegQuality.... Jpeg data compression level

Feature
Specifies the JPEG data compression level.

Coding Style
[form.] scancontrolname.**JpegQuality** [= Short]

Value

0 – Level1	Compression level 1	(Size given top priority)
1 – Level2	Compression level 2	
2 – Level3	Compression level 3	
3 – Level4	Compression level 4	
4 – Level5	Compression level 5	
5 – Level6	Compression level 6	
6 – Level7	Compression level 7	(Image quality given top priority)

Default

3 – Level4	Compression level 4

Explanation
Specifies the JPEG data compression level.
This property is enabled when the ScanTo property is set to "0 - File," and the FileType property is set to "3 - JPEG," "4 - PDF" or "5 - Multipage PDF" and when the PixelType property is set to any value other than "0 - Black & White." In addition, it is also enabled when the ScanTo property is set to "2 - Raw Image Handle." Otherwise, it will be disregarded.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
ScanTo
FileType
PixelType
CompressionType

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.

Compatibility and Restraints
N/A

3.1.39 LongPage .... Long document (long page) scan setting

Feature
Sets the scanning of paper with a length greater than the maximum specifiable length (long page).

Coding Style
[form.] scancontrolname. **LongPage** [= Boolean]

Value

True	Scans long documents (long page).
False	Does not scan long documents (long page).

Default

False	Does not scan long documents (long page).

Explanation
Enables the scanning of long paper (long page) that cannot be scanned with the setting for regular sizes (A4, A3, etc).
This property is enabled only when "99 - Custom" is set for the PaperSize property, and the settings of the CustomPaperWidth property and the CustomPaperLength property will be referenced for the length and width of a long page.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
CustomPaperWidth
CustomPaperLength
PaperSize
PaperSupply
ScanTo

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery

Disregarded when any value other than "99 - Custom" is specified for the PaperSize property, "3 - ADF(BackSide)" is specified for the PaperSupply property.

If this property cannot be enabled depending on device type, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

* Scannable length varies with device. Refer to "5.1 Properties Enabled According to Devices."

Compatibility and Restraints

N/A

3.1.40 Mirroring .... mirror image (flip horizontal)

Feature
Sets Flip Horizontal.

Coding Style
[form.] scancontrolname.**Mirroring** [= Boolean]

Value

True	Uses Flip Horizontal.
False	Does not use Flip Horizontal.

Default

False	Does not use Flip Horizontal.

Explanation
Sets whether or not to use Flip Horizontal.
This property is enabled only when "0 - Black & White" is set for the PixelType property.
Because this property is not supported in devices without an image processing board (which is incorporated in the fi-4860C2), in such a case, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

Target method
StartScan

Related Properties
PixelType

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
If "1 – Grayscale" or "2 - RGB" has been set for the PixelType property, a scan will be executed without regard to this property.

Compatibility and Restraints
N/A

3.1.41 MultiFeed .... multifeed detection

Feature
Detects multifeed (two or more sheets of document feed at one time).

Coding Style
[form.] scancontrolname. **MultiFeed** [= Short]

Value

0 – None	Disabled.
1 – Mode0	Device setting.
2 – Mode1	Detects difference in thickness/detects overlapping.
3 – Mode2	Detects difference in length.
4 – Mode3	Detects difference in length and thickness/detects overlapping and difference in length.

Default

0 – None	Disabled.

Explanation
Detects multifeed (two or more sheets of document feed at one time). When any value other than disabled is specified for this property, if multifeed is detected the device will stop and the error message "Multifeed detected (Code: DS32006)" coming from the TWAIN driver will be displayed.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PaperSupply
SilentMode

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
And if this property cannot be enabled depending on device type, a scan will be carried out regarding the setting for this property as "0 - None" when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
Multiple documents that feed at the same time may be scanned as an image.

3.1.42 NoiseRemoval .... dust removal mode

Feature
Function to automatically remove tiny dots in images by regarding them as dust.

Coding Style
[form.] scancontrolname.**NoiseRemoval** [= Short]

Value

0 – None	Disabled.
1 – Matrix2	Removes dust of 2 x 2 dot matrix or smaller.
2 – Matrix3	Removes dust of 3 x 3 dot matrix or smaller.
3 – Matrix4	Removes dust of 4 x 4 dot matrix or smaller.
4 – Matrix5	Removes dust of 5 x 5 dot matrix or smaller.

Default

0 – None	Disabled.

Explanation
Regards small black dots on the white area of an image or small white dots on the black area of an image as dust to automatically remove.
This property is enabled only when the PixelType property is set to "0 - Black & White" and "0" is specified for the Threshold property. Otherwise, it will be disregarded.
Because this property is not supported in devices without an image processing board (which is incorporated in the fi-4860C2), in such a case, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PixelType
Threshold

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.

Compatibility and Restraints
N/A

3.1.43 Orientation .... document orientation setting

Feature
Sets the orientation of a document.

Coding Style
[form.] scancontrolname.**Orientation** [= Short]

Value

0 – Portrait	Portrait
1 – Landscape	Landscape

Default

0 – Portrait	Portrait

Explanation
Sets the orientation (portrait/landscape) of a document.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PaperSize
PaperSupply

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
"1 - Landscape" cannot be set depending on document size or scanner to use.
Example) PaperSize "0 - A3(297 x 420mm)"
In addition, there is the case that the image data which I read of is chipped off.
Example) fi-60F, PaperSize "11 – PostCard (100 x 149mm) ","12 - Photo(89 x 127mm)"

Compatibility and Restraints
N/A

3.1.44 Outline .... outline correction

Feature
Sets the outline correction function.

Coding Style
[form.] scancontrolname.**Outline** [= Short]

Value
When PixelType is binary (black and white):

0 - None	N/A
1 - Outline Emphasis Low	Low (Outline emphasis)
2 - Outline Emphasis Mid	Medium (Outline emphasis)
3 - Outline Emphasis High	High (Outline emphasis)
4 - Outline Smooth	Outline smoothing
5 - Edge Extract	Edge extraction

When PixelType is RGB color:

0 - None	N/A
1 - Outline Emphasis Low	Low (Outline emphasis)
2 - Outline Emphasis Mid	Medium (Outline emphasis)
3 - Outline Emphasis High	High (Outline emphasis)
5 - De-Screen Level 1	De-Screen level 1
6 - De-Screen Level 2	De-Screen level 2
7 - De-Screen Level 3	De-Screen level 3
8 - De-Screen Level 4	De-Screen level 4

When PixelType is Grayscale:

0 - None	N/A

Default

0 - None	N/A

Explanation
Sets the outline correction function by making a selection from the above list.
Outline emphasis: Outputs the scanned image with its outline emphasized.
Three levels (low/medium/high) are selectable.
Outline smoothing: Smoothes the jagged edges.
Edge extraction: Outputs the edges of an image.
De-Screen Level: Smoothes the inside of an image and carries out de-screening.
The higher the level, the smoother the image.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PaperSupply
PixelType

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery

Value will not be updated if set beyond the setting range.
And if this property cannot be enabled due to the setting for the PixelType property, a scan will be carried out without regard to this property when scanning. And if this property cannot be enabled depending on device type, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints

NThis property depends on the value specified as the PixelType property. Follow the procedure below to use this property.

1. Before setting the PixelType property, set this property to "0 - None".
2. Set the PixelType property.
3. Set this property as necessary.

3.1.45 OverScan .... overscan setting

Feature
Sets overscan.

Coding Style
[form.] scancontrolname.**OverScan** [= Short]

Value

0 - OFF	Perform overscan.
1 - ON	Do not perform overscan.

Default

0 - OFF	Perform overscan.

Explanation
Sets overscan.
Scans in a size slightly larger than that of actual document.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
AutoBorderDetection
BackgroundColor
PaperSupply
UndefinedScanning

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
And if this property cannot be enabled depending on device type, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
N/A

3.1.46 Overwrite .... file overwrite setting

Feature
Sets whether or not to overwrite files.

Coding Style
[form.] scancontrolname.**Overwrite** [= Short]

Value

0 – OFF(Mode0)	Does not overwrite (When file type is TIFF, JPEG or BMP without using “Image Processing Software Option “, processes the number of sheets specified for the ScanCount property up to the last sheet even if a file with the same name exists.)
1 – ON	Overwrites.
2 – Confirm(Mode0)	Displays the confirmation message box. (Displayed even in SilentMode.)
3 – OFF(Mode1)	Does not overwrite. (If a file with the same name exists, aborts scanning.)
4 – Confirm(Mode1)	Displays the confirmation message box. (Turned to the same operation as "3 - OFF(Mode1)" in SilentMode.)

Default

2 – Confirm(Mode0)	Displays the confirmation message box.

Explanation
Sets whether or not to overwrite a file when saving, if a file with the same name exists.
- If a file with the same name exists when the property is set to "0 - OFF(Mode0)" or "3 - OFF(Mode1) ," scanning will be aborted and the file will not be overwritten. (Data will be destroyed.)
- If a file with the same name exists when the property is set to "1 - ON," the file will be overwritten.
- If a file with the same name exists when the property is set to "2 - Confirm(Mode0)" or "4 - Confirm(Mode1)," the overwriting confirmation message box will appear. If you press the [Yes] button, the file will be overwritten. If you press the [No] button, scanning will be aborted and the file will not be overwritten. (Data will be destroyed.)
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
ScanTo "0 - File"
SilentMode

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value not updated if set to other than the specified range.

Compatibility and Restraints
- Mode0 and Mode1 were introduced in V2.0L10. Mode1 is recommended. Mode0 is a compatible mode that enables applications developed using V1.0 to behave in the same way.

3.1.47 PageCount .... scan page count acquisition

Feature
Gets the scan page count.

Coding Style
[form.] scancontrolname.**PageCount** [= Short]

Value
N/A Property only for value reference purpose.

Default
Number of pages scanned.

Explanation
Gets the scan page count.
Initializes PageCount to 0 when calling StartScan to get the page count (number of pages) scanned.
Only one page (with one page image) is scanned when the PaperSupply property is specified with "4 - ADF(CarrierSheet Spread A3)", "5 - ADF(CarrierSheet Spread DL)", or "6 - ADF(CarrierSheet Spread B4).” One page (with two individual page images on it) is scanned when the property is specified with "7 - ADF(CarrierSheet Clipping).""

Target method
StartScan

Related Properties
ScanTo

Value Setting
When designed and when implemented.

Value Reference
Not possible.

Error Recovery
N/A

Compatibility and Restraints
N/A

3.1.48 PaperSize .... document size

Feature
Sets the document size.

Coding Style
[form.] scancontrolname.**PaperSize** [= Short]

Value
0 - A3 (297 x 420mm)
1 - A4 (210 x 297mm)
2 - A5 (148 x 210mm)
3 - A6 (105 x 148mm)
4 - B4 (257 x 364mm)
5 - B5 (182 x 257mm)
6 - B6 (128 x 182mm)

7 - Letter (8.5 x 11inch)	(= 216 x 279mm)
8 - Legal (8.5 x 14inch)	(= 216 x 356mm)
9 - Executive (7.25 x 10.5inch)	(= 184 x 267mm)
10 - Double Letter (11 x 17inch)	(= 279 x 432mm)
11 – PostCard (100 x 149mm)	Postcard size
12 - Photo(89 x 127mm)	4 x 6 inch photo size
13 - Card(55 x 91mm)	Business card size

99 - Custom

Default
1 - A4 (210 x 297mm)

Explanation
Sets the document size to scan by making a selection from the above list.

Target method
StartScan

Related Properties
CustomPaperWidth
CustomPaperLength
LongPage
PaperSupply

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
When the device does not support the settings of "0 - A3 297 x 420mm)," "4 - B4 (257 x 364mm)" and "10 - Double Letter (11 x 17inch)" on the device, sets "1 - A4 (210 x 297mm)" when scanning to carry out a scan.
Also when the settings of "11-PostCard", "12-Photo" and "13-Card" are not supported, sets "99 - Custom" when scanning to carry out a scan.
And when the setting of "3 - A6 (105 x 148mm)" is not supported, sets "1 - A4 (210 x 297mm)" when scanning to carry out a scan. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints

Only TWAIN compliant document sizes are supported.

The document orientation specified for business cards was changed from portrait to landscape in V2.0L10.

When Custom is selected, even if you can enter a standard paper size (e.g. 55x91mm), the user interface of the source may display the paper size as Custom with a standard paper size.

3.1.49 PaperSupply .... paper feed method

Feature
Sets the paper feed method.

Coding Style
[form.] scancontrolname.**PaperSupply** [= Short]

Value

0 - Flatbed	Flatbed
1 - ADF	ADF(Face scan)
2 - ADF(Duplex)	ADF(Duplex scan)
3 - ADF(BackSide)	ADF(Back scan)
4 - ADF(CarrierSheet Spread A3)	A3 double-page spread images scanned using the Carrier Sheet
5 - ADF(CarrierSheet Spread DL)	Double-letter double-page spread images scanned using the Carrier Sheet
6 - ADF(CarrierSheet Spread B4)	B4 double-page spread images scanned using the Carrier Sheet
7 - ADF(CarrierSheet Clipping)	Separate outputs of front and back side images scanned using the Carrier Sheet
10 - ADF(CarrierSheet Spread A3)	A3 double-page spread images scanned using the Carrier Sheet
11 - ADF(CarrierSheet Spread DL)	Double-letter double-page spread images scanned using the Carrier Sheet
12 - ADF(CarrierSheet Spread B4)	B4 double-page spread images scanned using the Carrier Sheet
13 - ADF(CarrierSheet Spread Auto)	Automatic detection double-page spread images scanned using the Carrier Sheet
14 - ADF(CarrierSheet Clipping All)	Carrier Sheet Size Clipping Front images scanned using the Carrier Sheet
15 - ADF(CarrierSheet Clipping A4)	A4 Clipping Front images scanned using the Carrier Sheet
16 - ADF(CarrierSheet Clipping A5)	A5 Clipping Front images scanned using the Carrier Sheet
17 - ADF(CarrierSheet Clipping A6)	A6 Clipping Front images scanned using the Carrier Sheet
18 - ADF(CarrierSheet Clipping POST)	POST Card Clipping Front images scanned using the Carrier Sheet
19 - ADF(CarrierSheet Clipping B5)	B5 Clipping Front images scanned using the Carrier Sheet
20 - ADF(CarrierSheet Clipping B6)	B6 Clipping Front images scanned using the Carrier Sheet
21 - ADF(CarrierSheet Clipping LT)	Letter Clipping Front images scanned using the Carrier Sheet
22 - ADF(CarrierSheet Clipping CARD_T)	Card Clipping Front images scanned using the Carrier Sheet
23 - ADF(CarrierSheet Clipping CARD_Y)	Card landscape Clipping Front images scanned using the Carrier Sheet
24 - ADF(CarrierSheet Clipping PHOTO_ET)	Photo E portrait Clipping Front images scanned using the Carrier Sheet
25 - ADF(CarrierSheet Clipping PHOTO_EY)	Photo E landscape Clipping Front images scanned using the Carrier Sheet
26 - ADF(CarrierSheet Clipping PHOTO_LT)	Photo L portrait Clipping Front images scanned using the Carrier Sheet
27 - ADF(CarrierSheet Clipping PHOTO_LY)	Photo L landscape Clipping Front images scanned using the Carrier Sheet

28 - ADF(CarrierSheet Clipping PHOTO_LLT)	Photo LL portrait Clipping Front images scanned using the Carrier Sheet
29 - ADF(CarrierSheet Clipping PHOTO_LLY)	Photo LL landscape Clipping Front images scanned using the Carrier Sheet
30 - ADF(CarrierSheet Clipping Auto)	Automatic detection Clipping Front images scanned using the Carrier Sheet
31 - ADF(CarrierSheet Clipping Custom)	Custom Clipping Front images scanned using the Carrier Sheet
32 – ADF(CarrierSheet Clipping Duplex All)	Carrier Sheet Size Clipping Duplex images scanned using the Carrier Sheet
33 – ADF(CarrierSheet Clipping Duplex A4)	A4 Clipping Duplex images scanned using the Carrier Sheet
34 – ADF(CarrierSheet Clipping Duplex A5)	A5 Clipping Duplex images scanned using the Carrier Sheet
35 – ADF(CarrierSheet Clipping Duplex A6)	A6 Clipping Duplex images scanned using the Carrier Sheet
36 – ADF(CarrierSheet Clipping Duplex POST)	POST Card Clipping Duplex images scanned using the Carrier Sheet
37 – ADF(CarrierSheet Clipping Duplex B5)	B5 Clipping Duplex images scanned using the Carrier Sheet
38 – ADF(CarrierSheet Clipping Duplex B6)	B6 Clipping Duplex images scanned using the Carrier Sheet
39 – ADF(CarrierSheet Clipping Duplex LT)	Letter Clipping Duplex images scanned using the Carrier Sheet
40 – ADF(CarrierSheet Clipping Duplex CARD_T)	Card Clipping Duplex images scanned using the Carrier Sheet
41 – ADF(CarrierSheet Clipping Duplex CARD_Y)	Card landscape Clipping Duplex images scanned using the Carrier Sheet
42 – ADF(CarrierSheet Clipping Duplex PHOTO_ET)	Photo E portrait Clipping Duplex images scanned using the Carrier Sheet
43 – ADF(CarrierSheet Clipping Duplex PHOTO_EY)	Photo E landscape Clipping Duplex images scanned using the Carrier Sheet
44 – ADF(CarrierSheet Clipping Duplex PHOTO_LT)	Photo L portrait Clipping Duplex images scanned using the Carrier Sheet
45 – ADF(CarrierSheet Clipping Duplex PHOTO_LY)	Photo L landscape Clipping Duplex images scanned using the Carrier Sheet
46 – ADF(CarrierSheet Clipping Duplex PHOTO_LLT)	Photo LL portrait Clipping Duplex images scanned using the Carrier Sheet
47 – ADF(CarrierSheet Clipping Duplex PHOTO_LLY)	Photo LL landscape Clipping Duplex images scanned using the Carrier Sheet
48 – ADF(CarrierSheet Clipping Duplex Auto)	Automatic detection Clipping Duplex images scanned using the Carrier Sheet
49 – ADF(CarrierSheet Clipping Duplex Custom)	Custom Clipping Duplex images scanned using the Carrier Sheet

Default

1 – ADF ADF (Face scan)

Explanation

Selects the paper feed method for scanning.

Flatbed: Fixes the document on the document table to scan one at

a time.

ADF (Auto Document Feeder):	Places multiple documents on the ADF, feeds them one by one to carry out a continuous scan. This makes it possible to scan only one side (face or back) and simultaneously scan both sides according to the setting.
CarrierSheet:	Load a single document inserted inside the Carrier Sheet onto the ADF and scan it in duplex scan mode. Only one page (two facing spread pages combined as one entire image, or two different pages on one image) is scanned. Depending on the detection error around the folded part of the document, some part of the image may be lacked. In such case, place the document about 1mm inside from the edge of the Carrier Sheet. Note this is not recommended for scanning that requires image accuracy.

When "2 – ADF (Duplex)" (ADF duplex scan) is specified, if the ScanCount property is set to 1 (1-page scan), only the face of a document will be scanned.
Specify "2 - RGB" for the PixelType property for scanning when "4 - ADF(CarrierSheet Spread A3)", "5 - ADF(CarrierSheet Spread DL)", "6 - ADF(CarrierSheet Spread B4)" , or "7 - ADF(CarrierSheet Clipping)" is specified.
To set "10 - ADF(CarrierSheet Spread A3)" - "49 - ADF(CarrierSheet Clipping Duplex Custom)" for this property, be sure to set "0 - File" or "1 - Dib Handle" for the ScanTo property.
Note: Settings of other properties may not be effective (i.e., settings are ignored) depending on the value specified for this property. Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
IsExistsFB
PageCount
PaperSize
ScanCount

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
If some devices do not support "0 - Flatbed," "1 - ADF" will be set when scanning to carry out a scan.
If "2 – ADF (Duplex)," is not supported depending on devices, "1 - ADF" will be set when scanning to carry out a scan.
And if "3 – ADF (BackSide)," is not supported depending on devices, "1 - ADF" will be set when scanning to carry out a scan.
(* Refer to "5.1 Properties Enabled According to Devices.")
If an error occurs in the middle of ADF scanning, some devices may go to the scanning of a next page.
Depending on the scanner you are using, the scanning operation is NOT garantteed if parameters "4 - ADF(CarrierSheet Spread A3)" - "49 - ADF(CarrierSheet Clipping Duplex Custom)" are not supported.
(* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
If the "ShowSourceUI" property is set to "True", and this property is set from "24 – ADF(CarrierSheet Clipping PHOTO_ET)" to "29 - ADF(CarrierSheet Clipping PHOTO_LLY)"

or "42 - ADF(CarrierSheet Clipping Duplex PHOTO_ET)" to "47 - ADF(CarrierSheet Clipping Duplex PHOTO_LLY" on a non-Japanese operating system, "Letter" is shown for the paper size of the source user interface.

3.1.50 ParentAppName .... specifying the parent application name

Feature

This property ceased to be supported after V1.0L22.

Compatibility and Restraints

This property is provided for compatibility.
Provided as a compatible for recompiling the source program created by a version of SDK older than V1.0L22 as is using an SDK version V1.0L22 or later. Note that compiling may become impossible in the future, should a major up date of the version be conducted. Do not use this property when newly developing applications.

3.1.51 PixelType .... pixel type

Feature
Sets the pixel type.

Coding Style
[form.] scancontrolname.**PixelType** [= Short]

Value

0 - Black & White	Binary (Black and White)
1 - Grayscale	Grayscale
2 - RGB	RGB color

Default

0 - Black & White	Binary (Black and White)

Explanation
Sets the scan pixel type.
To scan by setting Grayscale for the PixelType property:
- When the data is output to file (ScanTo property is set to "0- File"), or when data is passed via memory (ScanTo property is set to "2 - RawImageHandle")
  -Set the FileType property as "0 - BMP" or "3 - JPEG"
  -Set "1 - TIF," "2 - Multipage TIFF," "4 - PDF" or "5 - Multipage PDF" for the FileType property and then set "0 - No Compress" for the CompressionType property.
- Pass by DIB handle (if "1 - Dib Handle" is set for the ScanTo property)
  There is no property in particular to set.

Note that at the time of output to file or pass by memory, this property may be forcibly set to "0 - Black & White."
(If the CompressionType property is set to "1 - CCITT G3(1D)," " 2 - CCITT G3(2D) KFactor = 2," " 3 - CCITT G3(2D) Kfactor = 4" or "4 - CCITT G4," that setting is given higher priority and a scan will be carried out by setting this property as "0 - Black & White.")
Also, the setting for this property cannot be enabled depending on the setting for the Outline property.
- If the Outline property is set to "0-3" or "5," PixelType=binary(black and white) and PixelType=RGB are enabled. If not enabled, the value will not be updated.
- When the Outline property is set to "4," and when PixelType=binary(black and white) is enabled, if this property cannot be enabled, the value will not be updated.
- When the Outline property is set to "6-8," and when PixelType=RGB is enabled, if this property cannot be enabled, the value will not be updated.

Therefore, if you want to change the status when the Outline property is set to "4" and PixelType=binary (black and white) to the status of PixelType=RGB, set the Outline parameter as "0" once, then change the PixelType to RGB.

Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
CompressionType
FileType
JpegQuality
Outline
PaperSupply
ScanTo

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.

Compatibility and Restraints
-In V1.0, at the time of pass by memory (when "2 - Raw Image Handle" is set for the ScanTo property), "0 - No Compress" is set for the CompressionType property, while in V2.0L10 or later, the above setting does not need to be made.
This property depends on the value specified as the Outline property. To specify this property, set the Outline property to "0 - None" in advance.

3.1.52 PreFiltering .... ballpoint pen filtering

Feature
Sets the ballpoint pen filtering mode.

Coding Style
[form.] scancontrolname.**PreFiltering** [= Boolean]

Value

True	Enables the ball point pen filtering mode.
False	Disables the ball point pen filtering mode.

Default

False	Disables the ball point pen filtering mode.

Explanation
When scanning documents written with a ballpoint pen, because the reflected light of ballpoint pen ink is not homogeneous, part of a letter may drop out. If this setting is enabled, filtering will be carried out to correct broken and thin lines.
This property is enabled only when the PixelType property is set to "0 - Black & White" and "0" is specified for the Threshold property. Otherwise, it will be disregarded.
Because this property is not supported in devices without an image processing board (which is incorporated in the fi-4860C2), in such a case, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PixelType
Threshold

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
N/A

Compatibility and Restraints
N/A

3.1.53 RegionLeft .... Left Edge of the Scanning Area

Feature
Configures the left edge of the scanning area.

Coding Style
[form.] scancontrolname.**RegionLeft** [= Single]

Value
The left edge of the scanning area.

Default
0

Explanation
Specify the left edge of the scanning area.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
CustomPaperWidth
PaperSize
PaperSupply
RegionTop
RegionWidth
RegionLength
Unit

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
No error check is done at the time of setting.
When the scanning area specified by the RegionLeft, RegionTop, RegionWidth, and RegionLength properties does not form a square (when a negative value is configured), these four properties are set to "0" and the whole document is scanned.
Also, the scanning area specified by the RegionLeft property does not fit into the document size (area) specified by either the PaperSize property or the CustomPaperWidth property, this property is set to "0" at scanning.

Compatibility and Restraints
N/A

3.1.54 RegionLength .... Length of the Scanning Area

Feature
Configures the length of the scanning area.

Coding Style
[form.] scancontrolname.**RegionLength** [= Single]

Value
The length of the scanning area.

Default
0

Explanation
Specify the length of the scanning area.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
CustomPaperWidth
CustomPaperLength
PaperSize
PaperSupply
RegionLeft
RegionTop
RegionWidth
Unit

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
No error check is done at the time of setting.
When the RegionWidth and RegionLength properties are set to "0," the scan is performed on the document size specified by the PaperSize, CustomPaperWidth, and CustomPaperLength properties.
When the scanning area specified by the RegionLeft, RegionTop, RegionWidth, and RegionLength properties does not form a square (when a negative value is configured), these four properties are set to "0" and the whole document is scanned.
If the length of the scanning area is set to less than one inch, the length is rounded up to one inch at scanning.
If the length of the scanning area is set to less than one inch (26 mm), the length is rounded up to one inch (26 mm) at scanning.

Compatibility and Restraints
N/A

3.1.55 RegionTop .... Top Edge of the Scanning Area

Feature
Configures the top edge of the scanning area.

Coding Style
[form.] scancontrolname.**RegionTop** [= Single]

Value
The top edge of the scanning area.

Default
0

Explanation
Specify the top edge of the scanning area.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
CustomPaperLength
PaperSize
PaperSupply
RegionLeft
RegionWidth
RegionLength
Unit

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
No error check is done at the time of setting.
When the scanning area specified by the RegionLeft, RegionTop, RegionWidth, and RegionLength properties does not form a square (when a negative value is configured), these four properties are set to "0" and the whole document is scanned.
Also, the top edge of the scanning area specified by the RegionTop property does not fit into the document size (area) specified by either the PaperSize property or the CustomPaperLength property, this property is set to "0" at scanning.

Compatibility and Restraints
N/A

3.1.56 RegionWidth .... Width of the Scanning Area

Feature
Configures the width of the scanning area.

Coding Style
[form.] scancontrolname.**RegionWidth** [= Single]

Value
The width of the scanning area.

Default
0

Explanation
Specify the width (horizontal direction) of the scanning area.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
CustomPaperWidth
CustomPaperLength
PaperSize
PaperSupply
RegionLeft
RegionTop
RegionLength
Unit

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
No error check is done at the time of setting.
When the RegionWidth and RegionLength properties are set to "0," the scan is performed on the document size specified by the PaperSize, CustomPaperWidth, and CustomPaperLength properties.
When the scanning area specified by the RegionLeft, RegionTop, RegionWidth, and RegionLength properties does not form a square (when a negative value is configured), these four properties are set to "0" and the whole document is scanned.
If the width of the scanning area is set to less than one inch (26 mm), the width is rounded up to one inch (26 mm) at scanning.

Also, the scanning area specified by the RegionWidth property does not fit into the document size specified by either the PaperSize property or the CustomPaperWidth property, this property is adjusted to fit into the document size (area) at scanning.

Compatibility and Restraints
N/A

3.1.57 Report .... Report Output

Feature
Configures the output method of the scan result.

Coding Style
[form.] scancontrolname.**Report** [= Short]

Value

0 – OFF	No reporting of the result
1 – Display	Output the result on the screen (dialog box display)
2 – File	Output the result to a file
3 – Display+File	Output the result to the screen and a file

Default

0 – OFF	No reporting of the result

Explanation
Specify the output method of the scan result.
Duration from when the scan start button is pressed till the completion of the scan in ppm/ipm units, and scan attributes (resolution, document size, image type, etc.) are output. The output is produced after the driver is closed. If another scan is performed without closing the driver screen, the result is output immediately before closing the driver.

Target method
StartScan

Related Properties
ReportFile

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
The value is not updated when any value outside the range is specified.
The result is not output when the number of scanned pages is 0 (no scanning has been performed) or an error occurred during the scan.

Compatibility and Restraints
N/A

3.1.58 ReportFile .... Report File Name

Feature
Configures the file name for the scan result.

Coding Style
[form.] scancontrolname.**ReportFile** [= String]

Value
The file name for storing the scan result (a character string which includes the absolute path and terminates with a null).

Default
"" (empty character string)

Explanation
Specify a file name when outputting the scan result into a file.
This property is valid only when the Report property is set to "2 - File" or "3 - Display+File."
Duration from when the scan start button is pressed till the completion of the scan in ppm/ipm units, and scan attributes (resolution, document size, image type, etc.) are output. The output is produced after the driver is closed. If another scan is performed without closing the driver screen, the result is output immediately before closing the driver.
Note: Specification of this property is enabled or disabled (ignored) depending on the setting values of other properties. Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
Report

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
This property is ignored at scanning if the Report property is set to anything other than "2 - File" or "3 - Display+File."
The file name is checked at the execution. The process terminates without writing the result to the file if the file name is invalid or a write error occurred.
A file without the scan result may be created when the disk space is insufficient.
The operation is not guaranteed if a relative path is specified. The file may be created in an unintended location.
Also, the result is not output when the number of scanned pages is 0 (no scanning has been performed) or an error occurred during the scan.

Compatibility and Restraints
N/A

3.1.59 Resolution .... Standard Resolution

Feature
Specifies the scan resolution.

Coding Style
[form.] scancontrolname.**Resolution** [= Short]

Value
0 - 200x200 [dpi]
1 - 240x240 [dpi]
2 - 300x300 [dpi]
3 - 400x400 [dpi]
4 - 500x500 [dpi]
5 - 600x600 [dpi]
6 - 700x700 [dpi]
7 - 800x800 [dpi]
99 - Custom

Default
2 - 300x300 [dpi]

Explanation
Select and configure the resolution for scanning from the above settable values.
Scanning may not be possible in relation to the document size even if the resolution is supported by the device.
Example) "7 - 800 x 800" is specified on the document size A3 for a scan.

Target method
StartScan

Related Properties
CustomResolution
PaperSize

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
If the specified resolution is not supported by the device, the default value is applied at scanning.
Note: Supported resolutions vary by devices.
Refer to "Operator Guide" included in your device.
(* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
The default has been changed to 2 instead of 3 since V2.0L10.

3.1.60 Reverse .... Black and White Inversion

Feature
Configures whether to invert black and white.

Coding Style
[form.] scancontrolname.**Reverse** [= Boolean]

Value

True	Apply the black and white inversion process
False	Do not apply the black and white inversion process

Default

False	Do not apply the black and white inversion process

Explanation
Specify whether to apply the black and white inversion process.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PaperSupply
PixelType

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
This property may not be valid in relation to the PixelType property depending on devices. In such cases, the PixelType property takes precedence and the scan process is performed with the default value of the Reverse property.

Compatibility and Restraints
N/A

3.1.61 Rotation .... Rotation Angle

Feature
Configures the rotation angle of the scanned image.

Coding Style
[form.] scancontrolname.**Rotation** [= Short]

Value

0 – None	No rotation
1 – R90	Rotate 90 degrees to the right
2 – R180	Rotate 180 degrees to the right
3 – R270	Rotate 270 degrees to the right

Default

0 – None	No rotation

Explanation
Rotate the scanned image by the specified degree and output the image.
Specify the degree to rotate the scanned image.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PaperSupply
ScanTo

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.

Compatibility and Restraints
N/A

3.1.62 ScanCount .... Number of Pages to be Scanned

Feature
Configures the number of pages to scan.

Coding Style
[form.] scancontrolname.**ScanCount** [= Short]

Value
-1 or any value between 1 and 32767 (number of pages)
All pages on the ADF are scanned if "-1" is specified.
("0" is not valid)

Default
"-1" (all pages on the ADF)

Explanation
Specify the number of pages to be scanned in once when performing a continuous scan from the ADF.
This property is valid only when the PaperSupply property is set to "1 - ADF," "2 - ADF (Duplex)," or "3 - ADF (BackSide)."
The scan is performed only once if "0 - Flatbed" is specified.
Also, if "2 - ADF (Duplex)" is specified whilst this property is set to "1," only the front side of the page is scanned. Specify "2" to this property (total of the front and reverse sides is 2 pages) when both sides of the document should be scanned.
When 16384 or more is specified for this property, and the FileType property is set with "6 - Multi Image Output", scanning is performed 32766 times.
Note: Specification of this property is enabled or disabled (ignored) depending on the setting values of other properties. Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
FileType
PaperSupply

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
When the number of pages loaded on the ADF is fewer than the number specified in this property, RC_FAILURE is returned after scanning all pages from the ADF. At this time, the ErrorCode property is set with a value "EC_NOT_ENOUGH_PAPER." Reload the document and call the StartScan method to continue scanning.

Compatibility and Restraints
When the number of pages loaded on the ADF is more than the number specified in this property, the last page specified in ScanCount property is not completely ejected by the device.

3.1.63 ScanTo .... Output Method of Scanned Data

Feature
Configures the output method of scanned data.

Coding Style
[form.] scancontrolname.**ScanTo** [= Short]

Value
One of the following methods to output scanned data.

0 – File	File
1 – Dib Handle	DIB handle (Unsupported in Java)
2 – Raw Image Handle	Memory (Unsupported in Java)

Default

0 – File	File

Explanation
Specify the output method of data scanned by an image scanner.
- Data is output as a file when "0 - File" is specified.
  Specify the FileName property and FileType property.
- A ScanToDib event is issued and the DIB handle is passed when "1 - Dib Handle" is specified.
  For details, refer to the ScanToDib event.
- A ScanToRaw event is issued and the memory handle is passed when "2 - Raw Image Handle" is specified. For details, refer to the ScanToRaw event.

Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
When "0 - File" is specified.
FileName
FileType
When "2 – Raw Image Handle " is specified.
PaperSupply

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.

Compatibility and Restraints
For Java, only the value "0 - File" is available.

3.1.64 SEE .... Selectable Edge Enhancement

Feature
Configures whether to apply selectable edge enhancement.

Coding Style
[form.] scancontrolname.**SEE** [= Short]

Value

0 – OFF	Do not apply selectable edge enhancement
1 – ON	Apply selectable edge enhancement

Default

0 – OFF	Do not apply selectable edge enhancement

Explanation
Specify the selectable edge enhancement processing (SEE: Selectable Edge Enhancement).
Line drawings (characters) and photo images are scanned at half tone and the edge enhancement process is applied on the line drawing sections.
This process is suitable to emphasize characters in a document containing characters and photos.
This property is valid only when the PixelType property is set to "0 - Black & White", the AutoSeparation property is set to "0 - OFF" and the Halftone property is set to any value other than "0 - None".
Note: Specification of this property is enabled or disabled (ignored) depending on the setting values of other properties. Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
AutoSeparation
Halftone
PixelType

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
This property is ignored at scanning if the PixelType property is set to "1 - Grayscale" or "2 - RGB" or the AutoSeparation property is set to "1 - ON."
If the Halftone property is set to "0 - None," change it to "1 - Dither Pattern 0" (for dark images).

On the scanner that does not support this property, if it is set to "1 - ON," the Halftone effect may be produced on the scanned image.

Compatibility and Restraints
N/A

3.1.65 Shadow .... shadow

Feature
Sets shadows.

Coding Style
[form.] scancontrolname.**Shadow** [= Short]

Value
Between 0 and 254.

Default
10

Explanation
Specify shadowing for images when scanning.
This property is enabled only when either "1 - Grayscale" or "2 - RGB" is set for the PixelType property.
It is not possible to set a value higher than that specified as the Highlight property.
This property is invalid when the PaperSupply property is set as "4 - ADF(CarrierSheet Spread A3)", "5 - ADF(CarrierSheet Spread DL)", "6 - ADF(CarrierSheet Spread B4)", or "7 - ADF(CarrierSheet Clipping)".
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
Gamma
Highlight
PaperSupply
PixelType

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if the specified value exceeds the available range (0 to 254) or the value set for the Highlight property.
If this property cannot be enabled depending on device type, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
The applicable value range for this property depends on the current Highlight property value. Therefore, the Highlight property must be set first.

3.1.66 ShowSourceUI .... Source User Interface (UI) Display

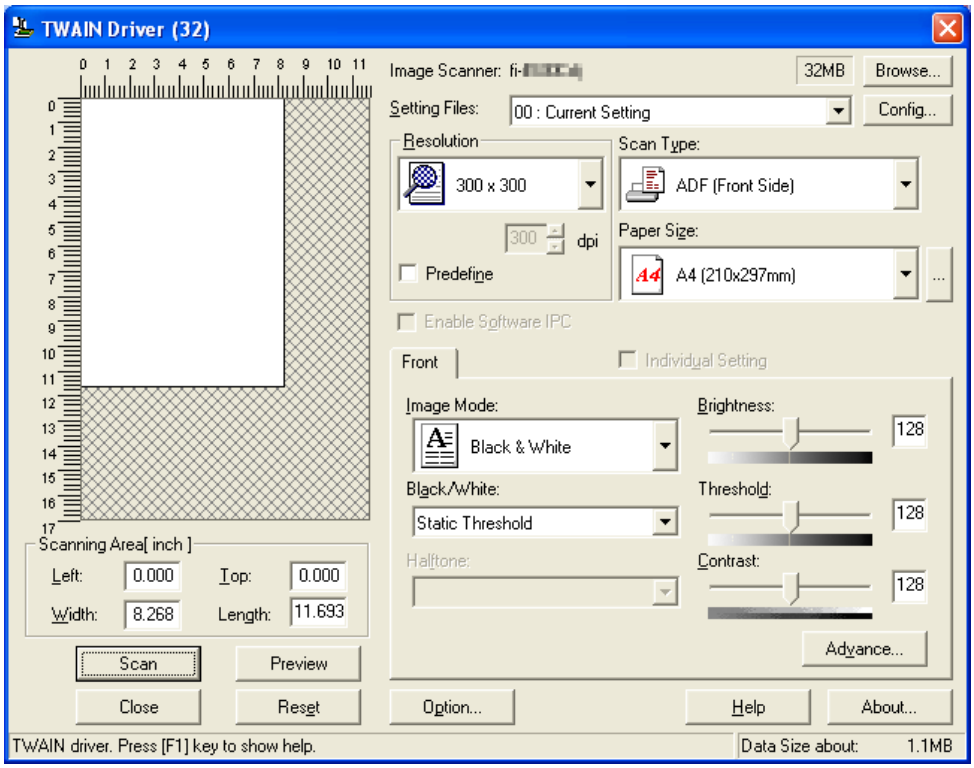
Feature
Configures whether to display the source user interface (UI).

Coding Style
[form.] scancontrolname.**ShowSourceUI** [= Boolean]

Value
True Display the source user interface
False Do not display the source user interface

Default
True Display the source user interface

Explanation
Specify whether to display the source user interface (UI) at scanning.
This should be set to "False" when performing an automatic scanning process.



Example of a user interface display

If the source user interface (UI) is closed using either the close box or the [Close] button without scanning, the StartScan method reports RC_SUCCESS in the return value.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PaperSupply

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
N/A

Compatibility and Restraints
N/A

3.1.67 SilentMode .... Silent Mode

Feature
Configures whether to execute the source in silent mode.

Coding Style
[form.] scancontrolname.**SilentMode** [= Boolean]

Value
True Silent mode
False Normal mode

Default
False Normal mode

Explanation
Specify whether to execute the source in silent mode (the mode without any notifications such as error messages).
No error messages are output if "True" is specified.
Error messages are output as of normal mode if "False" is specified.

Target method
StartScan

Related Properties
ErrorCode

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Error message display should be handled by applications. Refer to the ErrorCode property about details on errors.

Compatibility and Restraints
Errors at opening the source may be output even if this property is set to "True."
Example) "Please wait for the scanner lamp to warm up."
"A general fault of the MSG_OPENDS response.(Internally) There has been a sharing violation. Twain source may be in use. (Code: DS50171)"
"Communication failed. Make sure that the power is on, the cable is firmly connected, and the scanner is not used by another application. For details refer to FUJITSU TWAIN 32 Scanner Driver User's Guide.(Code: DS42019)"

3.1.68 SkipBlackPage .... Skip Black Pages

Feature
Configures whether to skip blank pages (black pages) when scanning continuously from an ADF.

Coding Style
[form.] scancontrolname.**SkipBlackPage** [= Short]

Value
0 - Do not skip
1 - 15 - The ratio of white dots in the black page by 0.2% increments. The maximum 3.0% can be specified.

Default
0 - Do not skip

Explanation
Specify whether to skip blank pages (black pages) when scanning continuously from an ADF.
A page is recognized as a blank page when the ratio of white dots is equal or less than the specified value.
Values of the FileCounter property and PageCounter property are not updated on pages skipped.
This property is valid only when the PixelType property is set to "0 - Black & White."
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PaperSupply
PixelType
ScanTo

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
This property is ignored when the device does not support this property. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
Enabling this function makes the scanner to change the Cache Mode to [Ram cache] or [Use Both Memory] if the source UI for cache settings is other than [Ram cache] or [Use Both Memory].

3.1.69 SkipWhitePage .... Skip White Pages

Feature
Configures whether to skip blank pages (white pages) when scanning continuously from an ADF.

Coding Style
[form.] scancontrolname.**SkipWhitePage** [= Short]

Value
0 - Do not skip
1 - 15 - The ratio of black dots in the white page by 0.2% increments when the PixelType property is set to "0 - Black & White." The maximum 3.0% can be specified. When the PixelType property is set to "1 - Grayscale" or "2 - RGB," the specified value between 1 and 15 is re-evaluated into five levels. Skipping is more likely as a larger value is specified.

Default
0 - Do not skip

Explanation
Specify whether to skip blank pages (white pages) when scanning continuously from an ADF.
A page is recognized as a blank page when the ratio of black dots is equal or less than the specified value.
Values of the FileCounter property and PageCounter property are not updated on pages skipped.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PaperSupply
PixelType
ScanTo

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
This property is ignored when the device does not support this property. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
Enabling this function makes the scanner to change the Cache Mode to [Ram cache] or [Use Both Memory] if the source UI for cache settings is other than [Ram cache] or [Use Both Memory].

3.1.70 Smoothing .... OCR Smoothing Mode / Background Removal

Feature
Configures the function smoothing rough lines and removes unevenness from the background.

Coding Style
[form.] scancontrolname.**Smoothing** [= Boolean]

Value

True	Enable smoothing mode
False	Disable smoothing mode

Default

False	Disables smoothing mode

Explanation
This function will smooth rough lines and removes unevenness from the background.
This property is enabled only when the PixelType property is set to "0 - Black & White" and "0" is specified for the Threshold property. Otherwise, it will be disregarded.
Because this property is not supported in devices without an image processing board (which is incorporated in the fi-4860C2), in such a case, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")
Note: Specification of this property is enabled or disabled (ignored) depending on the setting values of other properties. Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PixelType
Threshold

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
N/A

Compatibility and Restraints
N/A

3.1.71 SourceCurrentScan .... Scan with the Source Current Value

Feature
Configures whether to scan with the source current value.

Coding Style
[form.] scancontrolname.**SourceCurrentScan** [= Boolean]

Value
True Scan with the source current value
False Scan with the value set in the OCX property

Default
False Scan with the value set in the OCX property

Explanation
Specify whether to use the value currently set on the source at scanning.
When this property is set to "True," the scan process is performed with the value currently set on the source.
The following properties are valid when this property is set to "True." (Any other properties except the followings are invalid.)
ScanTo
FileType
FileName
CompressionType
ScanCount
ShowSourceUI
SilentMode
FileCounter
JpegQuality
Indecator

If this property is set False, this control changes the following source parameter to execute a scan task.
・Multi Image setting ->The setting is disabled temporarily, but the source parameter is not changed.
*For information about the Multi Image setting, see the Operator's Guide of the scanner driver.

Target method
StartScan

Related Properties
CompressionType
FileCounter
FileName
FileType
Indicator
JpegQuality
ScanCount
ScanTo
ShowSourceUI
SilentMode

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
N/A

Compatibility and Restraints
N/A

3.1.72 Threshold .... Threshold

Feature
Configures the threshold.

Coding Style
[form.] scancontrolname.**Threshold** [= Short]

Value
Between 0 and 255.
Automatic binarization mode is applied when "0" is specified.
Note: Automatic binarization mode adjusts this property automatically in order to binaries the image.

Default
128

Explanation
Specify the threshold value for the binarization process.
This property is valid only when the PixelType property is set to "0 - Black & White" and the Halftone property is set to "0 - None."

Target method
StartScan

Related Properties
Halftone
PixelType

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range (value not between 0 and 255).
This property is ignored at scanning unless the PixelType property is set to "0 - Black & White" and the Halftone property is set to "0 - None."

Compatibility and Restraints
N/A

3.1.73 ThresholdCurve .... Density Curve in Automatic Binarization

Feature
Configures the density curve while in automatic binarization.

Coding Style
[form.] scancontrolname.**ThresholdCurve** [= Short]

Value

0 – Curve1	Very light (for OCR)
1 – Curve2	Light (for OCR)
2 – Curve3	Normal 1 (for OCR)
3 – Curve4	Normal 2 (for OCR)
4 – Curve5	Dark (for OCR)
5 – Curve6	Very dark (for OCR)
6 – Curve7	Normal (for images)
7 – Curve8	Darkest (for images)

Default

0 – Curve1	Very light (for OCR)

Explanation
Specify the density curve when scanning in automatic binarization mode.
This property is valid only when the PixelType property is set to "0 - Black & White" and the Threshold property is set to "0." Otherwise, it will be disregarded.
Because this property is not supported in devices without an image processing board (which is incorporated in the fi-4860C2), in such a case, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")
Note: Specification of this property is enabled or disabled (ignored) depending on the setting values of other properties. Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
PixelType
Threshold

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.

Compatibility and Restraints
N/A

3.1.74 TwainDS .... Data Source

Feature
Configures the TWAIN data source.

Coding Style
[form.] scancontrolname.**TwainDS** [= String]

Value
The product name of the TWAIN data source.
(The source name which is displayed on the TWAIN data source selection screen)
The default TWAIN data source is used at scanning if "" (empty character string) is specified.

Default
"" (empty character string)

Explanation
Specify the TWAIN data source for scanning.
This is useful for defining a data source.
The TWAIN data source specified in this property does not affect the TWAIN default data source.

Target method
StartScan

Related Properties
N/A

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
An error occurs if the specified data source does not exist.
When using the scanner connected via a USB port, if you change the current USB port to the other, the TWAIN data source name will be changed as in the example below.
Example:
Before changing the USB port: Fujitsu fi-5015C
After changing the USB port: Fujitsu fi-5015C #2
This means that an error still occurs when you specify a desired data source in this property and change the USB port.
To avoid such an error, change the description of the fiscn.ini file under the Windows directory (defaulted to "C:¥Windows") as follows:
(Default after the installation)
[Mode]
AnyPort=0
(Settings after the changes)
[Mode]
AnyPort=1
With the settings above, this function automatically searches for any numbered TWAIN data sources like #2, #3, etc., even if you have specified to search for unnumbered data sources.
Note the character string is case-sensitive.

Compatibility and Restraints
N/A

3.1.75 UndefinedScanning .... Scanning an Undefined Length (Paper End Detection)

Feature
Configures whether to scan an undefined length (paper end detection).

Coding Style
[form.] scancontrolname.**UndefinedScanning** [= Boolean]

Value

True	Scan an undefined length
False	Do not scan an undefined length

Default

False	Do not scan an undefined length

Explanation
Specify whether to scan an undefined length (paper end detection).
The scanner scans through the length of the document by detecting the paper end when scanning from an ADF.
Therefore, the output corresponding to each document can be produced when continuously scanning multiple documents with different lengths from an ADF.
This function is useful when scanning pages with various lengths.
However, scanning is not possible beyond the length specified in the PaperSize property.
Note) The value in this property can be enabled by the settings of other properties. Or it may not be enabled (disregarded). Refer to "5.3 Relationships Between Properties."

Target method
StartScan

Related Properties
AutoBorderDetection
BackgroundColor
OverScan
PaperSupply

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
If this property cannot be enabled depending on device type, a scan will be carried out without regard to this property when scanning. (* Refer to "5.1 Properties Enabled According to Devices.")

Compatibility and Restraints
N/A

3.1.76 Unit .... unit of size (inch/centimeter/pixel)

Feature
Sets the unit of size (inch/centimeter/pixel).

Coding Style
[form.] scancontrolname.**Unit** [= Short]

Value

0 – Inches	Inches (inch)
1 – Centimeters	Centimeters (cm)
2 – Pixels	Pixels (Pixel)

Default

0 – Inches	Inches (inch)

Explanation
Sets the unit of size (inch/centimeter/pixel).

Target method
StartScan

Related Properties
CustomPaperWidth
CustomPaperLength
EndorserOffset
RegionLeft
RegionLength
RegionTop
RegionWidth

Value Setting
When designed and when implemented.

Value Reference
When implemented.

Error Recovery
Value will not be updated if set beyond the setting range.
When this property is set to "1 - Centimeters", and the value set in any of the relating properties (CustomPaperLength, CustomPaperWidth, EndorserOffset, RegionLeft, RegionTop, RegionWidth, and RegionLength) contains a decimal part, it is rounded to the nearest whole number.

Compatibility and Restraints
N/A

3.2 Methods

3.2.1 List of Methods

The following describes methods supported by Fujitsu Scanner Control SDK.

Method Name	Description	Section
AboutBox	Displays a dialog box for this Control's version information.	3.2.3
CancelScan	Stops scanning an image.	3.2.4
ClearPage	Ejects the document loaded on the ADF.	3.2.5
CloseScanner	Performs the termination process after scanning.	3.2.6
FeederLoaded	Notifies whether or not the document is loaded on the ADF.	3.2.7
GetCapability	Acquires the capability of the TWAIN data source from an application.	3.2.8
GetSIpcTemplateCount	Acquires the total number of templates created by the "Image Processing Software Option."	3.2.9
GetSIpcTemplateName	Acquires the template name corresponding to the template number specified by the "Image Processing Software Option."	3.2.10
GetSIpcTemplateSelect	Acquires the template number currently selected by the "Image Processing Software Option."	3.2.11
GetTWAINTemplateCount	Acquires the total number of setting files created in the TWAIN driver.	3.2.12
GetTWAINTemplateName	Acquires the setting file name corresponding to the setting file number specified in the TWAIN driver.	3.2.13
GetTWAINTemplateSelect	Acquires the number of the setting file currently selected in the TWAIN driver.	3.2.14
OpenScanner	Performs the initialization process before scanning.	3.2.15
ScannerAvailable	Checks if the scanner is in the ready status.	3.2.16
SelectSource	Performs the selection process of the data source.	3.2.17
SetCapability	Configures the capability on the TWAIN data source from an application.	3.2.18
SetSIpcTemplateSelect	Configures the template number which is used by the "Image Processing Software Option" for selection.	3.2.19
SetTWAINTemplateSelect	Configures numbers for setting files stored in the TWAIN driver.	3.2.20
SetupDataSourceProperties	Displays the user interface with the configurable sources.	3.2.21
StartScan	Starts scanning an image according to the specified properties.	3.2.22

3.2.2 Examples and Notation Conventions in This Chapter

Feature
Describes the outline of the method.

Coding Style
Describes the usage and syntax of the method when coding a program.
Describes codes in accordance with the conventions of Visual Basic® .NET.
Example) [form.] scancontrolname.AboutBox
The part between square brackets ([ ]) can be omitted.

Parameters
Describes arguments to be passed to the method.

Explanation
Describes the use and function of the property. In addition, notes and restraints regarding correlated properties are also described if necessary.

Target method
Shows the list of methods that, when processed, change the state of the property.

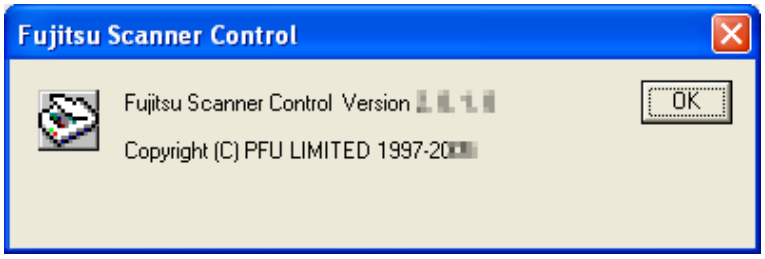
Related Properties
Gives all properties affecting each other.

Return Values
Describes return values from the method.

Sample
Describes simple program samples where necessary.

3.2.3 AboutBox .... Version Information Dialog Box Display

Feature
Displays a dialog box for this Control's version information.



Coding Style
[form.] scancontrolname.**AboutBox**

Parameters
N/A

Target method
N/A

Related Properties
N/A

Return Values
N/A

Sample
Displays a dialog box for this Control's version information.

```
[Visual Basic.NET]
    Private Sub Command5_Click()
        ' Display the version information dialog box
        AxFiScn1.AboutBox()
    End Sub

[Java]
   try {
            FiscnSampleApl obj = new FiscnSampleApl();
            // Internal Initialization
            initialize(obj);
            // Display the version information dialog box
            aboutBox();
   } catch (FiScnException e) {
            // Fix error
   } finally {
            // Internal End Process
            unInitialize();
   }
```

3.2.4 CancelScan .... Stopping an Image Scanning

Feature
Stops scanning an image.

Coding Style
[Integer =] [form.] scancontrolname. **CancelScan**()

Parameters
N/A

Return Values

0 :RC_SUCCESS	Normal end
-3:RC_SEQUENCE_ERROR	Sequence error

Explanation
Stops the scanning of an image.
This method must be called from either the ScanToDib, ScanToRaw, or ScanToFile event hander.

Target method
StartScan

Related Properties
N/A

Error Recovery
For how to handle errors, refer to "5.2 Error code and how to fix error."

Compatibility and Restraints
N/A

3.2.5 ClearPage .... Document Ejection

Feature
Ejects the document.

Coding Style
[Integer =] [form.] scancontrolname. **ClearPage**(hWnd As Integer)

Parameters
hWnd Handle of the window where this Control (Fujitsu Scanner Control) is located.

Return Values

0 :RC_SUCCESS	Normal end
-1:RC_FAILURE	Error
-3:RC_SEQUENCE_ERROR	Sequence error (during the method execution)

Explanation
Ejects one page of the document loaded on the ADF. If there is already a page fed in the image scanner device, the method ejects the page, and ejects another page from the document loaded on the ADF.
The device memorizes the status of the page already fed even if the page is removed manually. In such cases, the device will eject two pages from the ADF.

Target method
StartScan

Related Properties
ErrorCode

Error Recovery
The value can be acquired from the ErrorCode property in the event of an error ("-1: RC_FAILURE").
For how to handle errors, refer to "5.2 Error code and how to fix error."

Compatibility and Restraints
If RC_SEQUENCE_ERROR is returned, it indicates the method is being executed by another form. The method can be retried after the execution. However, it is not recommended to design an application which executes the CloseScanner method while another form is executing the StartScan method. We strongly recommend that you issue such methods from the same form.
The ClearPage method is invalid on devices which do not support the function. (Example fi-5015C)

Sample

Ejects the document loaded on the ADF.

```
[Visual Basic.NET]
  Private Sub Command6_Click()
        ' Document ejection process
        AxFiScn1.ClearPage(Me.Handle.ToInt32)
  End Sub

[Java]
  try {
        FiscnSampleApl obj = new FiscnSampleApl();
        // Internal Initialization
        initialize(obj);
        // Document ejection process
        clearPage();
  } catch (FiScnException e) {
        //TODO: Fix error
  } finally {
        // Fix error
        unInitialize();
  }
```

3.2.6 CloseScanner .... Closing the Scanner

Feature
Performs a termination process.

Coding Style
[Integer =] [form.] scancontrolname.**CloseScanner**(hWnd As Integer)

Parameters
hWnd Handle of the window where this Control (Fujitsu Scanner Control) is located.

Return Values

0 :RC_SUCCESS	Normal end
-1:RC_FAILURE	Error
-3:RC_SEQUENCE_ERROR	Sequence error (during the method execution)

Explanation
Performs the termination process after scanning.

Target method
OpenScanner
StartScan

Related Properties
ErrorCode

Error Recovery
The value can be acquired from the ErrorCode property in the event of an error ("-1: RC_FAILURE").
For how to handle errors, refer to "5.2 Error code and how to fix error."

Compatibility and Restraints
This method must be called at the end of the application if the OpenScanner method has been called. (The OpenScanner method and this method must be used as a pair.)
Also, if calling the StartScan method after calling this method, the OpenScanner method should be called again in advance.
If RC_SEQUENCE_ERROR is returned, it indicates the method is being executed by another form. The method can be retried after the execution. However, it is not recommended to design an application which executes the CloseScanner method while another form is executing the StartScan method. We strongly recommend that you issue such methods from the same form.

Sample
Refer to the sample for the StartScan method.

3.2.7 FeederLoaded .... Notifying Whether or Not a Document Is Loaded on the ADF

Feature
Notifies whether or not the document is loaded on the ADF.

Coding Style
[Boolean =] [form.] scancontrolname.**FeederLoaded**(hWnd As Integer)

Parameters
hWnd Handle of the window where this Control (Fujitsu Scanner Control) is located.

Return Values
True Papers are loaded
False Papers are not loaded

Target method
N/A

Related Properties
ErrorCode

Error Recovery
Even if papers are loaded on the ADF, it does not mean that scanning is immediately possible. Scanning may not be possible, for example, when the cover is open.
When "False" is returned, refer to the ErrorCode property since it may contain an error.

Compatibility and Restraints
Return value is False while other methods are being performed.

3.2.8 GetCapability .... Capability Acquisition

Feature
Acquires the capability

Coding Style
[Integer =] [form.] scancontrolname. **GetCapability**(nCap As Short, nMsg As Short, nItemType As Short, ByRef lpItemValue As Integer)

Parameters

nCap	Capability type	ex)ICAP_PIXELTYPE
nMsg	Message type	ex)MSG_GETCURRENT
nItemType	Capability data type	ex)TWTY_UINT16
lpItemValue	The address where the capability value is stored.	

Return Values

0 :RC_SUCCESS	Normal end
-1:RC_FAILURE	Error

Explanation
Knowledge of the TWAIN convention is required for calling this method. Refer to http://www.twain.org/ for the TWAIN protocol.
Acquires the capability directly of the TWAIN data source from an application.
Call this method when receiving the NegotiateCapabilities event.
The supported message type which can be specified by nMsg is limited to MSG_GET/MSG_GETCURRENT/MSG_GETDEFAULT. Also, lpItemValue must be specified.

Target method
StartScan

Related Properties
ErrorCode

Error Recovery
The value can be acquired from the ErrorCode property in the event of an error ("-1: RC_FAILURE").
For how to handle errors, refer to "5.2 Error code and how to fix error."

Compatibility and Restraints
Acquisition of TWAIN data is not available when using the Image Processing Software Option.

3.2.9 GetSlpcTemplateCount .... Total Number of Templates Acquisition

Feature
Acquires the total number of templates of the "Image Processing Software Option."

Coding Style
[Integer =] [form.] scancontrolname. **GetSlpcTemplateCount**()
Parameters
N/A

Return Values
0 - : The number of templates of the Image Processing Software Option
-1 : RC_FAILURE Acquisition failed
-2 : RC_SIPC_NOTINSTAL The Image Processing Software Option is not installed

Explanation
Acquires the total number of templates created (prepared in advance) by the "Image Processing Software Option."

Target method
GetSlpcTemplateName
GetSlpcTemplateSelect
SetSlpcTemplateSelect

Related Properties
N/A

Error Recovery
N/A (No value can be obtained from the ErrorCode property at the time of error occurrence.)

Compatibility and Restraints
N/A

Sample

Displays a dialog box with a list of templates of the Image Processing Software Option to allow a template selection.

```
  [Visual Basic.NET]
Private Sub FormSoftIPC_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
      Dim count As Short
      Dim Index As Short
      Dim strName As String
      ' Notify the number of templates of SoftIPC
      count = FormScan.CurrentInstance.AxFiScn1.GetSIpcTemplateCount
      ' Template list is not created when no template is present
      If count < 1 Then
            ButtonOK.Enabled = False
            lstTemplate.Enabled = False
            Exit Sub
      End If

      ' Create a template list for SoftIPC
      For Index = 0 To count - 1
            strName                                                    =
FormScan.CurrentInstance.AxFiScn1.GetSIpcTemplateName(Index)
            lstTemplate.Items.Add((strName))
      Next Index
      ' Notify the index value of the template currently selected
      Index = FormScan.CurrentInstance.AxFiScn1.GetSIpcTemplateSelect
      ' Make the currently selected template to the selected status
      lstTemplate.SelectedIndex = Index

End Sub

Private Sub cmdOK_Click()
      ' Configure the template currently selected
      FormScan.CurrentInstance.AxFiScn1.SetSIpcTemplateSelect(lstTemplate
.SelectedIndex)
      Me.Close()
End Sub

[Java]
   long lSIpcTemplateCount = 0;

   try {
            FiscnSampleApl obj = new FiscnSampleApl();
            //Internal Initialization
            initialize(obj);
            // Acquires the number of templates of SoftIPC
            lSIpcTemplateCount = getSIpcTemplateCount();
   } catch (FiScnException e) {
            //TODO: Fix error
   } finally {
            //Internal End Process
            unInitialize();
   }
```

3.2.10 GetSlpcTemplateName .... Template Name Acquisition

Feature
Acquires a template name of the specified template number by the "Image Processing Software Option."

Coding Style
[BSTR =] [form.] scancontrolname. **GetSlpcTemplateName**(nTemplateIndex As Short)

Parameters
nTemplateIndex Number of the template to be acquired (0 -)

Return Values
Character string: Template name, except ""
Character string: "" Acquisition failed

Explanation
Acquires the template name corresponding to the template number specified by the "Image Processing Software Option."

Target method
GetSlpcTemplateCount
GetSlpcTemplateSelect
SetSlpcTemplateSelect

Related Properties
N/A

Error Recovery
N/A (No value can be obtained from the ErrorCode property at the time of error occurrence.)

Compatibility and Restraints
N/A

Sample

```
[Visual Basic.NET]
  Refer to the sample for the GetSlpcTemplateCount method.

[Java]
   String  strSlpcTemplateName = “”;
  try {
          FiscnSampleApl obj = new FiscnSampleApl();
          // Internal Initialization
          initialize(obj);
          // Acquires the index value of the template name selected
          long lIndex = 0;
          strSlpcTemplateName = getSlpcTemplateName(iIndex);
  } catch (FiScnException e) {
          //TODO: Fix error
  } finally {
          // Internal End Process
          unInitialize();
  }
```

3.2.11 GetSIpcTemplateSelect .... Selected Template Number Acquisition

Feature
Acquires the template number (0 -) selected by the "Image Processing Software Option."

Coding Style
[Integer =] [form.] scancontrolname. **GetSIpcTemplateSelect**()

Parameters
N/A

Return Values
0 - : Number of the selected template (0 -)
-1 : RC_FAILURE Acquisition failed
-2 : RC_SIPC_NOTINSTALL The Image Processing Software Option is not installed

Explanation
Acquires the template number (0 -) currently selected by the "Image Processing Software Option."

Target method
GetSIpcTemplateCount
GetSIpcTemplateName
SetSIpcTemplateSelect

Related Properties
N/A

Error Recovery
N/A (No value can be obtained from the ErrorCode property at the time of error occurrence.)

Compatibility and Restraints
N/A

Sample

```
[Visual Basic.NET]
  Refer to the sample for the GetSIpcTemplateCount method.

[Java]
   long lSIpcTemplateSelect ;
  try {
          FiscnSampleApl obj = new FiscnSampleApl();
          // Internal Initialization
          initialize(obj);
          // Acquires the template number (0 - ) selected.
          lSIpcTemplateSelect = getSIpcTemplateSelect();
  } catch (FiScnException e) {
          //TODO: Fix error
  } finally {
          // Internal End Process
          unInitialize();
  }
```

3.2.12 GetTWAINTemplateCount .... Setting File Total Number Acquisition

Feature
Acquires the total number of setting files in the TWAIN driver.

Coding Style
[Integer =] [form.] scancontrolname. **GetTWAINTemplateCount**()
Parameters
N/A

Return Values
0 - : Number of setting files in the TWAIN driver
-1 : RC_FAILURE Acquisition failed
-2 : RC_TWAIN_NOTINSTAL The TWAIN driver is not installed

Explanation
Acquires the total number of setting files created (including those available by default) in the TWAIN driver.

Target method
GetTWAINTemplateName
GetTWAINTemplateSelect
SetTWAINTemplateSelect

Related Properties
N/A

Error Recovery
N/A (No value can be obtained from the ErrorCode property at the time of error occurrence.)

Compatibility and Restraints
N/A

Sample

Displays a dialog box containing a list of setting files stored in the TWAIN driver to allow a setting file selection.

```
[Visual Basic.NET]
Private Sub FormTWAIN_Load (ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
    Dim count As Short
    Dim Index As Short
    Dim strName As String
    'Notify the number of templates of TWAIN
    count = FormScan.CurrentInstance.AxFiScn1.GetTWAINTemplateCount
    'Template list is not created when no template is present
     If count < 1 Then
        ButtonOK.Enabled = False
        lstTemplate.Enabled = False
        Exit Sub
    End If

    'Create a template list for TWAIN
    For Index = 0 To count - 1
        strName=
FormScan.CurrentInstance.AxFiScn1.GetTWAINTemplateName(Index)
        lstTemplate.Items.Add((strName))
        Next Index
    'Notify the index value of the template currently selected
    Index = FormScan.CurrentInstance.AxFiScn1.GetTWAINTemplateSelect
    'Make the currently selected template to the selected status
    lstTemplate.SelectedIndex = Index

End Sub

Private Sub ButtonOK_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles ButtonOK.Click
    'Configure SourceCurrentScan currently selected
    FormScan.CurrentInstance.AxFiScn1.SourceCurrentScan=FormScan.Cur
rentInstance.MenuItemSourceCurrentScan.Checked
    'Configure the template currently selected
    FormScan.CurrentInstance.AxFiScn1.SetTWAINTemplateSelect(lstTempl
ate.SelectedIndex)
    Me.Close()
End Sub

[Java]
   long lTWAINTemplateCount = 0;

  try {
        FiscnSampleApl obj = new FiscnSampleApl();
        //Internal Initialization
        initialize(obj);
        // Acquires the number of templates of TWAIN
        lTWAINTemplateCount = getTWAINTemplateCount();
  } catch (FiScnException e) {
        //TODO: Fix error
  } finally {
        //Internal End Process
        unInitialize();
  }
```

3.2.13 GetTWAINTemplateName .... Setting File Name Acquisition

Feature
Acquires the setting file name corresponding to the setting file number specified in the TWAIN driver.

Coding Style
[BSTR =] [form.] scancontrolname. GetTWAIN**TemplateName**(nTemplateIndex As Short)

Parameters
nTemplateIndex Number of the template to be acquired (0 -)

Return Values
Character string: Template name, except ""
Character string: "" Acquisition failed

Explanation
Acquires the setting file name corresponding to the setting file number specified in the TWAIN driver.

Target method
GetTWAINTemplateCount
GetTWAINTemplateSelect
SetTWAINTemplateSelect

Related Properties
N/A

Error Recovery
N/A (No value can be obtained from the ErrorCode property at the time of error occurrence.)

Compatibility and Restraints
N/A

Sample

```
[Visual Basic.NET]
  Refer to the sample for the GetTWAINTemplateCount method.

[Java]
   String  strTWAINTemplateName = "";
   try {
          FiscnSampleApl obj = new FiscnSampleApl();
          // Internal Initialization
          initialize(obj);
          //Acquires the index value of the template name selected
          long lIndex = 0;
          strTWAINTemplateName = getTWAINTemplateName(lIndex);
   } catch (FiScnException e) {
          //TODO: Fix error
   } finally {
          // Internal End Process
          unInitialize();
   }
```

3.2.14 GetTWAINTemplateSelect .... Selected Setting File Number Acquisition

Feature
Acquires the number (0 -) of a selected setting file in the TWAIN driver."

Coding Style
[Integer =] [form.] scancontrolname. **GetTWAINTemplateSelect**()

Parameters
N/A

Return Values
0 - : Number of the selected template (0 -)
-1 : RC_FAILURE Acquisition failed
-2 : RC_TWAIN_NOTINSTALL The TWAIN driver is not installed

Explanation
Acquires the number (0 -) of a selected setting file in the TWAIN driver.

Target method
GetTWAINTemplateCount
GetTWAINTemplateName
SetTWAINTemplateSelect

Related Properties
N/A

Error Recovery
N/A (No value can be obtained from the ErrorCode property at the time of error occurrence.)

Compatibility and Restraints
N/A

Sample

```
[Visual Basic.NET]
  Refer to the sample for the GetTWAINTemplateCount method.

[Java]
   long lTWAINTemplateSelect ;
  try {
          FiscnSampleApl obj = new FiscnSampleApl();
          // Internal Initialization
          initialize(obj);
          // Acquires the template number (0 - ) selected.
          lTWAINTemplateSelect = getTWAINTemplateSelect();
  } catch (FiScnException e) {
          //TODO: Fix error
  } finally {
          // Internal End Process
          unInitialize();
  }
```

3.2.15 OpenScanner .... Opening the Scanner

Feature
Performs the initialization process before scanning.

Coding Style
[Integer =] [form.] scancontrolname.**OpenScanner**(hWnd As Integer)

Parameters
hWnd Handle of the window where this Control (Fujitsu Scanner Control) is located.

Return Values

0 : RC_SUCCESS	Normal end
2 : RC_NOT_DS_FJTWAIN	Not "FUJITSU TWAIN32"
-1 : RC_FAILURE	Error
-3 : RC_SEQUENCE_ERROR	Sequence error (during the method execution)

Explanation
Acquires scanner information and performs the associated initialization process.
Applications must call this method before calling the StartScan method.

Target method
CloseScanner
StartScan

Related Properties
ErrorCode
IsExistFB... Set by this method
ImageScanner... Set by this method

Error Recovery
The value can be acquired from the ErrorCode property in the event of an error ("-1: RC_FAILURE").
For how to handle errors, refer to "5.2 Error code and how to fix error."

Compatibility and Restraints
Applications must call this method (at startup of an application) before calling the StartScan method.
If the StartScan method is called without calling this method, properties may not be reflected to the source properly or a file may not be created properly.
After calling this method, always call the CloseScanner method at the end of the application. (This method and the CloseScanner method must be used as a pair.)
Also, if calling the StartScan method after calling the CloseScanner method, this method should be called again in advance.
If RC_SEQUENCE_ERROR is returned, it indicates the method is being executed by another form. The method can be retried after the execution. However, it is not recommended to design an application which executes the CloseScanner method while another form is executing the StartScan method. We strongly recommend that you issue such methods from the same form.

Sample
Refer to the sample for the StartScan method.

3.2.16 ScannerAvailable .... Image Scanner Availability

Feature
Checks if the device (scanner) is in the ready status.

Coding Style
[Boolean =] [form.] scancontrolname.**ScannerAvailable**(hWnd As Integer)

Parameters
hWnd Handle of the window where this Control (Fujitsu Scanner Control) is located.

Return Values

True	Available
False	Unavailable or error

Target method
N/A

Related Properties
ErrorCode

Error Recovery
Available status indicates that the device is online. However, this status does not always mean that scanning is immediately possible. Scanning may not be possible, for example, when the cover is open.
When "False" is returned, refer to the ErrorCode property since it may contain an error.

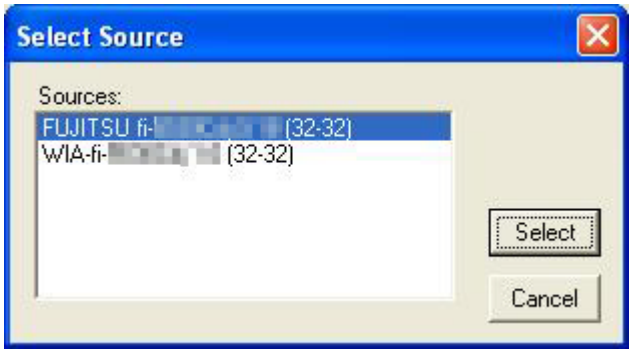
Compatibility and Restraints
"False" is returned when the method is being executed.

Sample
Displays whether the device (scanner) is in the ready status.

```
[Visual Basic.NET]
  Private Sub Command7_Click()
    Dim status As Boolean
    ' Whether the image scanner is available
      status = AxFiScn1.ScannerAvailable(Me.Handle.ToInt32)
    If status = FALSE Then
        MsgBox ("Device unavailable or error ")
    Else
        MsgBox ("Device ready ")
    End If
  End Sub
[Java]
  try {
        FiscnSampleApl obj = new FiscnSampleApl();
        //内Internal Initialization
        initialize(obj);
        // Whether the image scanner is available
        scannerAvailable ();
  } catch (FiScnException e) {
        //TODO: Fix error
  } finally {
        // Internal End Process
        unInitialize();
  }
```

3.2.17 SelectSource .... Source Selection

Feature
Performs the selection process of the data source.
Note: Specify the driver (data source) of the device.



Coding Style
[Integer =] [form.] scancontrolname.**SelectSource**(hWnd As Integer)

Parameters
hWnd Handle of the window where this Control (Fujitsu Scanner Control) is located.

Return Values

0 : RC_SUCCESS	Normal end
1 : RC_CANCEL	Canceled by the user
-1: RC_FAILURE	Error
-3: RC_SEQUENCE_ERROR	Sequence error (method in execution)

Target method
N/A

Related Properties
ErrorCode

Error Recovery
When no data source is present in the system, the Cancel button only is enabled in the selection dialog box.
The value can be acquired from the ErrorCode property in the event of an error ("-1: RC_FAILURE").
For how to handle errors, refer to "5.2 Error code and how to fix error."

Compatibility and Restraints
N/A

Sample

Displays the "Select Source" (scanner selection) screen.

```
[Visual Basic.NET]
    Private Sub Command3_Click()
        ' Performing the data source selection process.
        AxFiScn1.SelectSource(Me.Handle.ToInt32)
    End Sub

[Java]
   long lSelectSource = 0;
   try {
            FiscnSampleApl obj = new FiscnSampleApl();
            // Internal Initialization
            initialize(obj);
            // Performing the data source selection process.
            lSelectSource = selectSource();
   } catch (FiScnException e) {
            //TODO: Fix error
   } finally {
            // Internal End Process
            unInitialize();
   }
```

3.2.18 SetCapability .... Capability Configuration

Feature
Configures the capability.

Coding Style
[Integer =] [form.] scancontrolname. **SetCapability**(nCap As Short, nItemType As Short, lItemValue As Integer)

Parameters

nCap	Capability type	ex)ICAP_PIXELTYPE
nItemType	Capability data type	ex)TWTY_UINT16
lItemValue	Capability value	ex)TWPT_BW

Return Values

0 :RC_SUCCESS	Normal end
-1:RC_FAILURE	Error

Explanation
Knowledge of the TWAIN convention is required for calling this method. Refer to http://www.twain.org/ for the TWAIN protocol.
Configures the capability directly on the TWAIN data source from an application.
Call this method when receiving the NegotiateCapabilities event.

Target method
StartScan

Related Properties
ErrorCode

Error Recovery
The value can be acquired from the ErrorCode property in the event of an error ("-1: RC_FAILURE").
For how to handle errors, refer to "5.2 Error code and how to fix error."

Compatibility and Restraints
Configuration of TWAIN data is not available when using the Image Processing Software Option.

3.2.19 SetSIpcTemplateSelect .... Template Number Specification

Feature
Configures the template number to be selected (enabled) in the "Image Processing Software Option."

Coding Style
[Integer =] [form.] scancontrolname. **SetSIpcTemplateSelect**(nTemplateIndex As Short)

Parameters
nTemplateIndex Number of the template to be selected (0 -)

Return Values
0 - : Selected template number (0 -)
-1 : RC_FAILURE Acquisition failed
-2 : RC_SIPC_NOTINSTALL The Image Processing Software Option is not installed

Explanation
Configures the template number (0 -) which is used by the "Image Processing Software Option" for selection.

Target method
GetSIpcTemplateCount
GetSIpcTemplateName
GetSIpcTemplateSelect

Related Properties
N/A

Error Recovery
N/A (No value can be obtained from the ErrorCode property at the time of error occurrence.)

Compatibility and Restraints
N/A

Sample

```
[Visual Basic.NET]
  Refer to the sample for the GetSIpcTemplateCount method.

[Java]
  long lSelectSource = 0;
  try {
        FiscnSampleApl obj = new FiscnSampleApl();
        // Internal Initialization
        initialize(obj);
        // Configures the template number
        setSIpcTemplateSelect(lSelectSource);
  } catch (FiScnException e) {
        //TODO: Fix error
  } finally {
        // Internal End Process
        unInitialize();
  }
```

3.2.20 SetTWAINTemplateSelect .... Configuring Setting File Numbers

Feature
Configures numbers for setting files stored in the TWAIN driver."

Coding Style
[Integer =] [form.] scancontrolname. **SetTWAINTemplateSelect**(nTemplateIndex As Short)

Parameters

nTemplateIndex	Number of the template to be selected (0 -)

Return Values

0 - : Selected template number (0 -)	
-1 : RC_FAILURE	Acquisition failed
-2 : RC_TWAIN_NOTINSTALL	The TWAIN driver is not installed

Explanation
Configures numbers (0 -) for setting files stored in the TWAIN driver.

Target method
GetTWAINTemplateCount
GetTWAINTemplateName
GetTWAINTemplateSelect

Related Properties
SourceCurrentScan

Error Recovery
N/A (No value can be obtained from the ErrorCode property at the time of error occurrence.)

Compatibility and Restraints
To use this method, set the SourceCurrentScan property to "True." When the property is set to "False", setting file numbers are set to 0 by this method.

Sample

```
[Visual Basic.NET]
  Refer to the sample for the GetTWAINTemplateCount method.

[Java]
  long lTemplateSelect = 0;
  try {
        FiscnSampleApl obj = new FiscnSampleApl();
        // Internal Initialization
        initialize(obj);
        // Configures the template number
        setTWAINTemplateSelect(lTemplateSelect);
  } catch (FiScnException e) {
        //TODO: Fix error
  } finally {
        // Internal End Process
        unInitialize();
  }
```

3.2.21 SetupDataSourceProperties .... Settable UI Display

Feature
Displays source configuration dialog box.

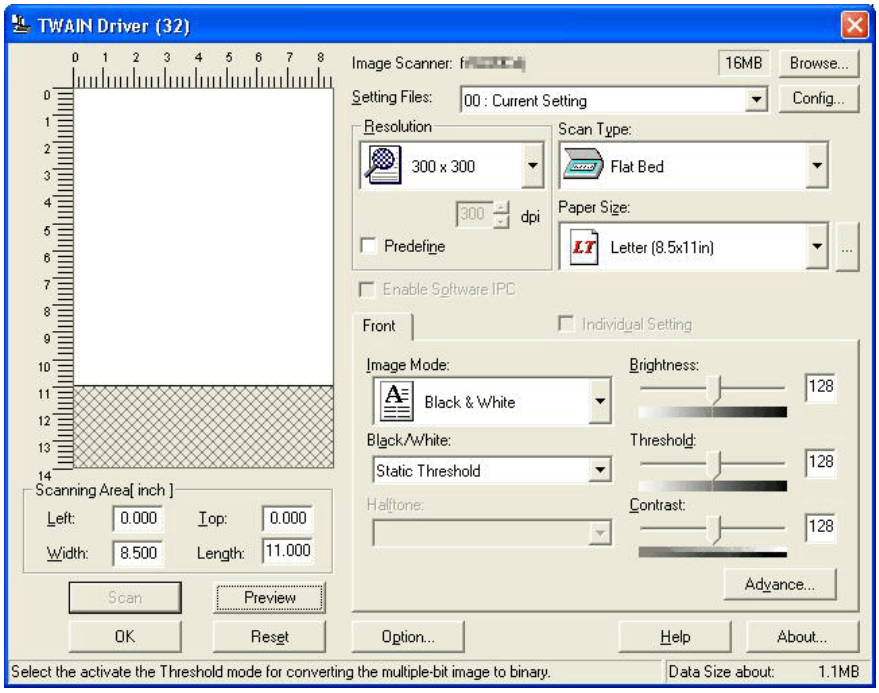
Coding Style
[Integer =] [form.] scancontrolname.**SetupDataSourceProperties**(hWnd As Integer)

Parameters
hWnd Handle of the window where this Control (Fujitsu Scanner Control) is located.

Return Values

0 :RC_SUCCESS	Normal end
-1:RC_FAILURE	Error
-3:RC_SEQUENCE_ERROR	Sequence error (during the method execution)

Explanation
Displays the user interface (the same as FUJITSU TWAIN32 driver) for the source which allows configuration of values only. (Read startup cannot be initiated from this user interface.)



Example of the user interface display

If the compression specification is invalid due to the ScanTo property and the FileType property, "0 - No Compress" is set to the CompressionType property.

Reference

This method enables the parameter configuration on the user interface when a user system does not provide its own parameter configuration screen.
If calling the StartScan method after calling this method, always set "True" to the SourceCurrentScan property prior to calling the StartScan method. Otherwise, functions configured by this method are replaced by values of properties configured on this Control before scanning.

Target method

StartScan

Related Properties

ScanTo (Reference only)
FileType (Reference only)
CommpressionType (Reference, update as necessary)
PixelType (Update as necessary)
Note (Configure before calling the StartScan method after calling this method)
SourceCurrentScan
ShowSourceUI

Error Recovery

The value can be acquired from the ErrorCode property in the event of an error ("-1: RC_FAILURE").
For how to handle errors, refer to "5.2 Error code and how to fix error."

Compatibility and Restraints

If RC_SEQUENCE_ERROR is returned, it indicates the method is being executed by another form. The method can be retried after the execution. However, it is not recommended to design an application which executes the CloseScanner method while another form is executing the StartScan method. We strongly recommend that you issue such methods from the same form.

Sample

Displays the user interface (the same as FUJITSU TWAIN32 driver) for the source which allows configuration only.

```
[Visual Basic.NET]
  Private Sub Command8_Click()
      ' Display a user interface which allows configuration only
      AxFiScn1.SetupDataSourceProperties (Me.Handle.ToInt32)
  End Sub

[Java]
  long lSelectSource = 0;
  try {
        FiscnSampleApl obj = new FiscnSampleApl();
        // Internal Initialization
        initialize(obj);
        // Display a user interface which allows configuration only
        setupDataSourceProperties ();
  } catch (FiScnException e) {
        //TODO: Fix error
  } finally {
        // Internal End Process
        unInitialize();
  }
```

3.2.22 StartScan .... Starting an Image Scanning

Feature
Starts scanning an image.

Coding Style
[Integer =] [form.] scancontrolname.**StartScan**(hWnd As Integer)

Parameters
hWnd Handle of the window where this Control (Fujitsu Scanner Control) is located.

Return Values

0 : RC_SUCCESS	Normal end
1 : RC_CANCEL	Canceled by the user, or an error which causes the device to be unable to continue scanning (insufficient disk space, image transfer error, etc.)
-1 : RC_FAILURE	Error
-3 : RC_SEQUENCE_ERROR	Sequence error (during the method execution)

Explanation
Starts scanning an image according to the specified properties.
Always call the OpenScanner method before calling this method.

Target method
CloseScanner
OpenScanner

Related Properties
All properties except IsExistFB and ImageScanner.

Error Recovery
The value can be acquired from the ErrorCode property in the event of an error ("-1: RC_FAILURE").
For how to handle errors, refer to "5.2 Error code and how to fix error."

This method reports the return value "0" (Normal end) if the Close button is clicked instead of the Scan button on the user interface (UI) of the source. Therefore, check the PageCount property together with this return value to determine if the actual scan has been performed.

When this method is invoked, the focus of the application window may move to another application window on completion of scanning.

Compatibility and Restraints
Always call this method between the OpenScanner method and the CloseScanner method.
If this method is called in any other manner, property values may not be reflected properly, or a file may not be created properly.
Example) Calling the StartScan method

```
OpenScanner      // (At the startup of an application, etc.)
↓
StartScan
↓
CloseScanner
↓
OpenScanner      // After CloseScanner is executed, be sure to call up OpenScanner for another scan.
↓
StartScan
↓
```

CloseScanner

OpenScanner // (At the startup of an application, etc.)
↓
StartScan
↓
StartScan // When scanning again.
↓
CloseScanner

X Incorrect calling method
OpenScanner // (When an application window is generated, etc.)
↓
StartScan
↓
CloseScanner
↓
StartScan
X The StartScan is called after the CloseScanner method without calling the OpenScanner method.

If RC_SEQUENCE_ERROR is returned, it indicates the method is being executed by another form. The method can be retried after the execution. However, it is not recommended to design an application which executes the CloseScanner method while another form is executing the StartScan method. We strongly recommend that you issue such methods from the same form.

Sample

The following code indicates from opening of the scanner, starting of scanning, to closing of the scanner.

```
[Visual Basic.NET]
Private Sub Command1_Click()
    Dim status As Integer

    ' Specify whether to display the source user interface (UI)
    AxFiScn1.ShowSourceUI = False        ' Not to display
    ' Specify the file format
    AxFiScn1.FileType = 0                'bitmap file
    ' Specify the file name to save the image
    AxFiScn1.filename = "c:¥img#####"
    ' Specify the start number of the sequence number attached to the file
    AxFiScn1.FileCounter = 1             ' Start number 1
    ' Specify whether to overwrite the file.
    AxFiScn1.Overwrite = 1               ' Overwrite
    ' Specify the paper feed method.
    AxFiScn1.PaperSupply = 1              'ADF
    ' Specify the document size.
    AxFiScn1.PaperSize = 1                ' A4 size
    ' Specify the pixel type.
    AxFiScn1.PixelType = 1               ' Grayscale
    ' Specify the resolution for scanning.
    AxFiScn1.Resolution = 0              '200dpi
    ' Open the scanner.
       status = AxFiScn1.OpenScanner(Me.Handle.ToInt32)
    ' Scanner open error
    If status = -1 Then
        Exit Sub
    End If

    ' Start scanning an image.
       status = AxFiScn1.StartScan(Me.Handle.ToInt32)
    ' Scan successful
    If status = 0 Then
        ' Display the scanned image on the image control.
        Image1.Picture = LoadPicture("c:¥img00001.bmp")
        Image1.Refresh
    End If

    ' Close the scanner.
    AxFiScn1.CloseScanner (Me.Handle.ToInt32)

End Sub
```

```
[Java]
   public void Scan() {
   long lStatus = 0;
   try {
         FiscnSampleApl obj = new FiscnSampleApl();
         //Internal Initialization
         initialize(obj);
         // Specify whether to display the source user interface (UI)
         setShowSourceUI(false);                    // Not to display
         //Specify the file format
         setFileType(0);                            //bitmap file
         //pecify the file name to save the image
         setFileName = "c:¥¥img#####"
         // Specify the start number of the sequence number attached to the file
         setFileCounter(1);                         // Start number 1
         // Specify whether to overwrite the file
         setOverwrite(1);                           // Overwrite
         // Specify the paper feed method.
         setPaperSupply(1);                        //ADF
         // Specify the document size.
         setPaperSize(1);                           //A4 size
         // Specify the pixel type.
         setPixelType(1);                           // Grayscale
         // Specify the resolution for scanning.
         setResolution(0);                          //200dpi
         // Open the scanner.
         openScanner();
         // Start scanning an image.
         lStatus = startScan();
         // Scan successful
         if (lStatus == 0){
            // TODO: Execute a normal end    process.
         }
         // Close the scanner.
         closeScanner();
   } catch (FiScnException e) {
            //TODO: Fix error
   } finally {
            //Internal End Process
            unInitialize();
   }
```

3.3 Events

3.3.1 List of Events

The following describes events supported by Fujitsu Scanner Control SDK.

Event Name	Description	Section
DetectJobSeparator	Issued when a special document (document of a particular form) is detected.	3.3.3
NegotiateCapabilities	Configures the TWAIN capability which cannot be configured by this Control.	3.3.4
ScanToDib	Issued by the scanning process (the StartScan method) for each scanned page when the ScanTo property is set to "1 - Dib Handle" This event is not supported by Java.	3.3.5
ScanToFile	Issued by the scanning process (the StartScan method) for each scanned page when the ScanTo property is set to "0 - File" This event is not supported by Java.	3.3.6
ScanToRaw	Issued by the scanning process (the StartScan method) for each scanned page when the ScanTo property is set to "2 - Raw Image Handle" This event is not supported by Java.	3.3.7

3.3.2 Examples and Notation Conventions in This Chapter

Feature
Describes the outline of the event.

Coding Style
Describes the syntax of the event when coding a program.
Describes codes in accordance with the conventions of Visual Basic®.NET .
Example) scancontrolname_ScanToDib(ByVal hDib As Stdole.OLE_HANDLE)

Parameters
Describes arguments for the event.

Explanation
Describes the use and function of the property. In addition, notes and restraints regarding correlated properties are also described if necessary.

Target method
Describes a list of methods whose property status is altered by processing this event.

Related Properties
Describes all properties which mutually influence each other.

Sample
Describes simple program samples where necessary.

3.3.3 DetectJobSeparator .... Special Document Detection Notification

Feature
Issued when a special document (document of a particular form) is detected.

Coding Style
scancontrolname_**DetectJobSeparator**( )

Parameters
N/A

Target method
StartScan

Related Properties
JobControl

Compatibility and Restraints
This event is issued when a special document is detected while the JobControl property is set to anything other than "0 - None," or job control is configured on the driver user interface.
The JobControl property is invalid on devices which do not support the property.
(* Refer to "5.1 Properties Enabled According to Devices.")
* For the details of special documents (documents in a particular shape), refer to the User's Guide for your device.

Sample

```
[Java]
   public void eventDetectJobSeparator() {
      System.out.println("The special paper was detected.");
   }
```

3.3.4 NegotiateCapabilities .... Capability Configuration Notification

Feature
Configures the TWAIN capability which cannot be configured by this Control.
Issued after the TWAIN capability configuration by this Control.

Coding Style
scancontrolname_ **NegotiateCapabilities** ( )

Parameters
N/A

Target method
StartScan
SetCapability
GetCapability

Related Properties
N/A

Compatibility and Restraints
Configure capabilities which can be configured by this Control with properties of this Control.

Sample

```
[Java]
    public void eventNegotiateCapabilities() {
      System.out.println("Configures the TWAIN capability .");
   }
```

3.3.5 ScanToDib .... DIB Handle Consignment

Feature
This event is issued for each page during the scanning process (the StartScan method) when the ScanTo property is set to "1 - Dib Handle."

Coding Style
scancontrolname_**ScanToDib**(ByVal hDib As Stdole.OLE_HANDLE)

Parameters
hDib DIB (Device Independent Bitmaps) handle

Target method
StartScan

Related Properties
ScanTo"Dib Handle"

Compatibility and Restraints
The application is responsible for releasing the DIB (Device Independent Bitmaps) handle (handle to the global memory) obtained from this event.
Release the DIB handle (global memory) when it is no longer necessary when scanning with the ScanTo property set to "1 - Dib Handle." Otherwise, the global memory area available to the system is reduced and may result in the system being unstable.
This Control is not liable for DIB handles (global memory) issued by this event after their issuance. The application is responsible for its use and release afterwards.
This event is not supported by Java.

3.3.6 ScanToFile .... File Output

Feature
This event is issued for each page during the scanning process (the StartScan method) when the ScanTo property is set to "0 - File".

Coding Style
scancontrolname_**ScanToFile**(ByVal ReadCount As Long, ByVal FileName As String)

Parameters

ReadCount	Scanning image count
FileName	Scanning file name

Target method
StartScan

Related Properties
ScanTo"File"

Compatibility and Restraints
If the file is not saved due to blank page skip, this event will not occur.
This event is not supported by Java.

3.3.7 ScanToRaw .... Memory Output

Feature

This event is issued for each page during the scanning process (the StartScan method) when the ScanTo property is set to "2 - Raw Image Handle."

Coding Style

```
scancontrolname_ScanToRaw(ByVal Resolution As Integer,
                          ByVal ImageWidth As Long,
                          ByVal ImageLength As Long,
                          ByVal BitPerPixel As Integer,
                          ByVal CompressionType As Integer,
                          ByVal Size As Long,
                          ByVal hRaw As Stdole.OLE_HANDLE )
```

Parameters

Resolution	Resolution (dpi)
ImageWidth	Image width (pixel)
ImageLength	Image length (pixel)
BitPerPixel	Number of bits per pixel
CompressionType	Compression type (refer to the CompressionType property)
Size	Data size
Hraw	Image data handle (pointer)

Target method

StartScan

Related Properties

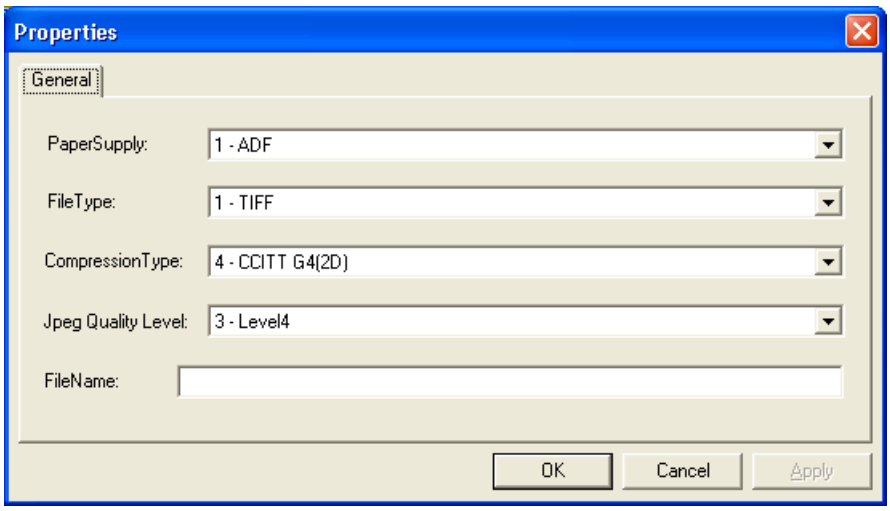
ScanTo"Raw Image Handle"
CompressionType

Compatibility and Restraints

The image data handle (global memory) issued by this event is released by this Control. Therefore, referring to the image data handle (global memory) acquired from this event is not available after this event is finished. The application should assign global memory in this event and use the copy if necessary. Access to the image data handle after this event is finished may result in an abnormal termination of the application, or anomalies of the system, or in the worst case, the system may go down.
Although the RGB color could not be specified for JPEG in V1.0, it has become possible since V2.0L10. Specify "2 - RGB" to the PixelType property, "5 - JPEG" to the CompressionType property, and "3 - JPEG" to the FileType property.
This event is not supported by Java.

3.4 Property Pages

Property Pages is a screen where properties (of frequent use) of Fujitsu Scanner Control are edited. (The following screen is displayed by selecting a Fujitsu Scanner Control property which is pasted on a form in Visual Basic® .NET 2003.)
The following items (properties) can be specified in the Property Pages.



Paper supply : PaperSupply property

0 – Flatbed Flatbed
1 – ADF ADF (scanning the front side)
2 – ADF(Duplex) ADF(Duplex scan)
3 – ADF(BackSide) ADF(Back scan)
4 – ADF(CarrierSheet Spread A3)
A3 double-page spread images scanned using the Carrier Sheet
5 – ADF(CarrierSheet Spread DL)
Double-letter double-page spread images scanned using the Carrier Sheet
6 – ADF(CarrierSheet Spread B4)
B4 double-page spread images scanned using the Carrier Sheet
7 – ADF(CarrierSheet Clipping)
Separate outputs of front and back side images scanned using the Carrier Sheet
10 - ADF(CarrierSheet Spread A3)
A3 double-page spread images scanned using the Carrier Sheet
11 - ADF(CarrierSheet Spread DL)
Double-letter double-page spread images scanned using the Carrier Sheet
12 - ADF(CarrierSheet Spread B4)
B4 double-page spread images scanned using the Carrier Sheet
13 - ADF(CarrierSheet Spread Auto)
Automatic detection double-page spread images scanned using the Carrier Sheet
14 - ADF(CarrierSheet Clipping All)
Carrier Sheet Size Clipping Front images scanned using the Carrier Sheet
15 - ADF(CarrierSheet Clipping A4)
A4 Clipping Front images scanned using the Carrier Sheet
16 - ADF(CarrierSheet Clipping A5)
A5 Clipping Front images scanned using the Carrier Sheet
17 - ADF(CarrierSheet Clipping A6)
A6 Clipping Front images scanned using the Carrier Sheet
18 - ADF(CarrierSheet Clipping POST)
POST Card Clipping Front images scanned using the Carrier Sheet

19 - ADF(CarrierSheet Clipping B5)
B5 Clipping Front images scanned using the Carrier Sheet
20 - ADF(CarrierSheet Clipping B6)
B6 Clipping Front images scanned using the Carrier Sheet
21 - ADF(CarrierSheet Clipping LT)
Letter Clipping Front images scanned using the Carrier Sheet
22 - ADF(CarrierSheet Clipping CARD_T)
Card Clipping Front images scanned using the Carrier Sheet
23 - ADF(CarrierSheet Clipping CARD_Y)
Card landscape Clipping Front images scanned using the Carrier Sheet
24 - ADF(CarrierSheet Clipping PHOTO_ET)
Photo E portrait Clipping Front images scanned using the Carrier Sheet
25 - ADF(CarrierSheet Clipping PHOTO_EY)
Photo E landscape Clipping Front images scanned using the Carrier Sheet
26 - ADF(CarrierSheet Clipping PHOTO_LT)
Photo L portrait Clipping Front images scanned using the Carrier Sheet
27 - ADF(CarrierSheet Clipping PHOTO_LY)
Photo L landscape Clipping Front images scanned using the Carrier Sheet
28 - ADF(CarrierSheet Clipping PHOTO_LLT)
Photo LL portrait Clipping Front images scanned using the Carrier Sheet
29 - ADF(CarrierSheet Clipping PHOTO_LLY)
Photo LL landscape Clipping Front images scanned using the Carrier Sheet
30 - ADF(CarrierSheet Clipping Auto)
Automatic detection Clipping Front images scanned using the Carrier Sheet
31 - ADF(CarrierSheet Clipping Custom)
Custom Clipping Front images scanned using the Carrier Sheet
32 – ADF(CarrierSheet Clipping Duplex All)
Carrier Sheet Size Clipping Duplex images scanned using the Carrier Sheet
33 – ADF(CarrierSheet Clipping Duplex A4)
A4 Clipping Duplex images scanned using the Carrier Sheet
34 – ADF(CarrierSheet Clipping Duplex A5)
A5 Clipping Duplex images scanned using the Carrier Sheet
35 – ADF(CarrierSheet Clipping Duplex A6)
A6 Clipping Duplex images scanned using the Carrier Sheet
36 – ADF(CarrierSheet Clipping Duplex POST)
POST Card Clipping Duplex images scanned using the Carrier Sheet
37 – ADF(CarrierSheet Clipping Duplex B5)
B5 Clipping Duplex images scanned using the Carrier Sheet
38 – ADF(CarrierSheet Clipping Duplex B6)
B6 Clipping Duplex Images scanned using the Carrier Sheet
39 – ADF(CarrierSheet Clipping Duplex LT)
Letter Clipping Duplex images scanned using the Carrier Sheet
40 – ADF(CarrierSheet Clipping Duplex CARD_T)
Card Clipping Duplex images scanned using the Carrier Sheet
41 – ADF(CarrierSheet Clipping Duplex CARD_Y)
Card landscape Clipping Duplex images scanned using the Carrier Sheet
42 – ADF(CarrierSheet Clipping Duplex PHOTO_ET)
Photo E portrait Clipping Duplex images scanned using the Carrier Sheet
43 – ADF(CarrierSheet Clipping Duplex PHOTO_EY)
Photo E landscape Clipping Duplex images scanned using the Carrier Sheet
44 – ADF(CarrierSheet Clipping Duplex PHOTO_LT)
Photo L portrait Clipping Duplex images scanned using the Carrier Sheet
45 – ADF(CarrierSheet Clipping Duplex PHOTO_LY)
Photo L landscape Clipping Duplex images scanned using the Carrier Sheet
46 – ADF(CarrierSheet Clipping Duplex PHOTO_LLT)
Photo LL portrait Clipping Duplex images scanned using the Carrier Sheet
47 – ADF(CarrierSheet Clipping Duplex PHOTO_LLY)
Photo LL landscape Clipping Duplex images scanned using the Carrier Sheet

48 – ADF(CarrierSheet Clipping Duplex Auto)
Automatic detection Clipping Duplex images scanned using the Carrier Sheet
49 – ADF(CarrierSheet Clipping Duplex Custom)
Custom Clipping Duplex images scanned using the Carrier Sheet

File type : FileType property

0 – BMP	Windows Bitmap file
1 – TIFF	TIFF file
2 – Multipage TIFF	Multipage TIFF files
3 – JPEG	JPEG file
4 – PDF	PDF file
5 – Multipage PDF	Multipage PDF files
6 – Multi Image Output	Multi-Image output
7 – Auto Coloer Detection	Auto color detection

Compression type : CompressionType property

0 – No Compress	No (not compressing)
1 – CCITT G3(1D)	MH compression
2 – CCITT G3(2D) Kfactor = 2	MR compression K Factor 2
3 – CCITT G3(2D) Kfactor = 4	MR compression K Factor 4
4 – CCITT G4	MMR compression
5 – JPEG	JPEG compression
6 – Old JPEG	Old JPEG compression

JPEG quality level : JpegQuality property

0 – Level1	Compression level 1 (Size given top priority)
1 – Level2	Compression level 2
2 – Level3	Compression level 3
3 – Level4	Compression level 4
4 – Level5	Compression level 5
5 – Level6	Compression level 6
6 – Level7	Compression level 7 (Image quality given top priority)

File name : FileName property
File name for saving the image

4. Samples

Sample source codes and executable forms of Visual Basic®.NET 2003, Visual C++®.NET 2003, Visual C#®.NET 2003, Visual Basic® 2010, Visual C++® 2010, Visual C#® 2010 and Java™ are included in this product.
This version includes samples for using Windows® control (ActiveX Control) to scan an image data and samples for using shared scanner device fi-5000N. This document explains fiScanTest only, a sample of the former. See contents of the sample folder under the SDK installation folder (C: \ Program Files \ FiScnSDK21 as the default) for other samples. All samples are stored in the following location.

<Installation folder>\ Sample \

These samples are supplemental references for this document. Use these samples or partly modified samples to confirm operations. However, Fujitsu is not liable for any operational results of the samples.

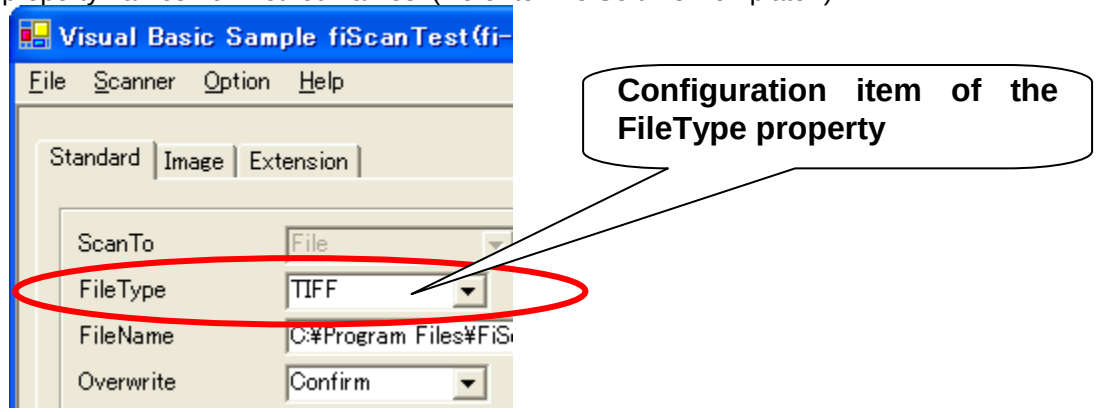
To use the development environment for Visual Studio® .NET 2003, Visual Studio® 2005, or Visual Studio® 2008, use the samples for Visual Basic® .NET 2003, Visual C++® .NET 2003, or Visual C#® .NET 2003.
To use the development environment for Visual Studio® 2010, use the samples for Visual Basic® 2010, Visual C++® 2010, or Visual C#® 2010.
Microsoft® .NET Framework 2.0 is required to run the samples for Visual Basic® .NET 2003, Visual C++® .NET 2003, and Visual C#® .NET 2003. Install Microsoft® .NET Framework version 2.0, 3.0, or 3.5 in advance.
Microsoft® .Net Framework 4.0 is required to run the samples for Visual Basic® 2010, Visual C++® 2010, and Visual C#® 2010. Install Microsoft® .NET Framework 4.0 in advance.

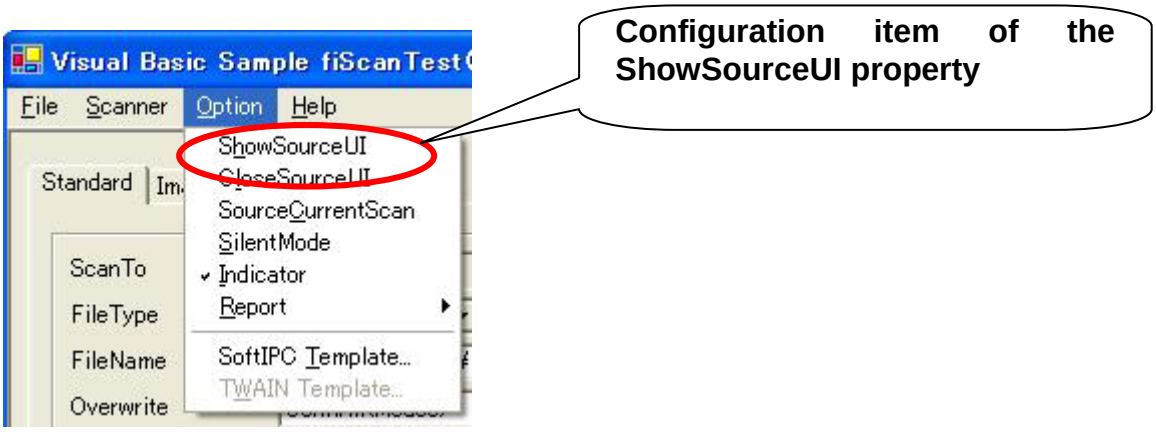
4.1 Basic Operations

(1) As the sample starts, it opens the scanner with the OpenScanner method.
(2) When [StartScan] is selected from the sample's [Scanner] menu, or the [Scan] button is clicked, it starts scanning with the StartScan method.
(3) When [Exit] is selected from the sample's [File] menu, or the [Exit] button is clicked, it closes scanner with the CloseScanner method.
(4) When the [Reset] button in the sample is clicked, it returns to the initial configuration status.

4.2 Item Names

Item names within the sample, under the [Scanner] and [Option] menus are corresponding to the property names and method names of Fujitsu Scanner Control.
However, the [SoftIPC Template] items under the [Option] menu are corresponding to neither property names nor method names. (Refer to "4.3 SoftIPC Template.")



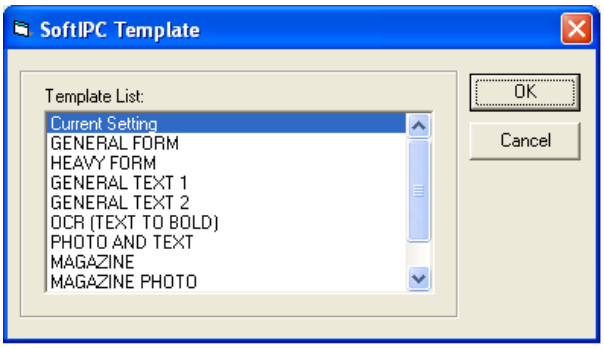

Visual Basic Sample fiScanTest
File
Scanner
Option
Help
ShowSourceUI
CloseSourceUI
SourceCurrentScan
SilentMode
Indicator
Report
SoftIPC Template...
TWAIN Template...
Standard
ScanTo
FileType
FileName
Overwrite
Configuration item of the ShowSourceUI property

4.3 SoftIPC Template

A dialog box with a list of templates for the "Image Processing Software Option" is displayed to allow the user to select a template when [SoftIPC Template] under the [Option] menu is clicked.
This dialog box is displayed using the following methods.
A separate product "Image Processing Software Option" must be installed to use this function.

Used Methods

GetSIpcTemplateCount
GetSIpcTemplateName
GetSIpcTemplateSelect
SetSIpcTemplateSelect

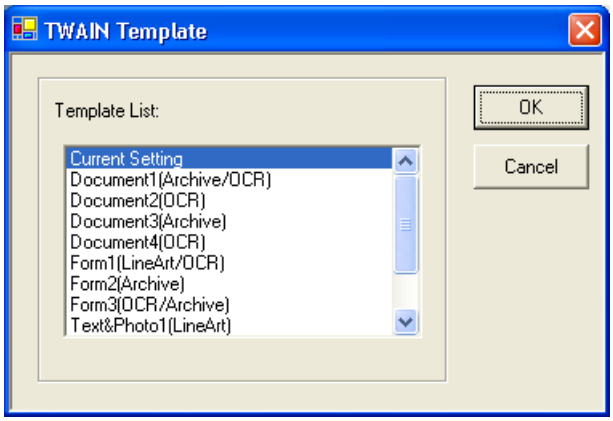


4.4 TWAIN Template

A dialog box with a list of templates for the "TWAIN" is displayed to allow the user to select a template when [TWAIN Template] under the [Option] menu is clicked.
This dialog box is displayed using the following methods.

Used Methods

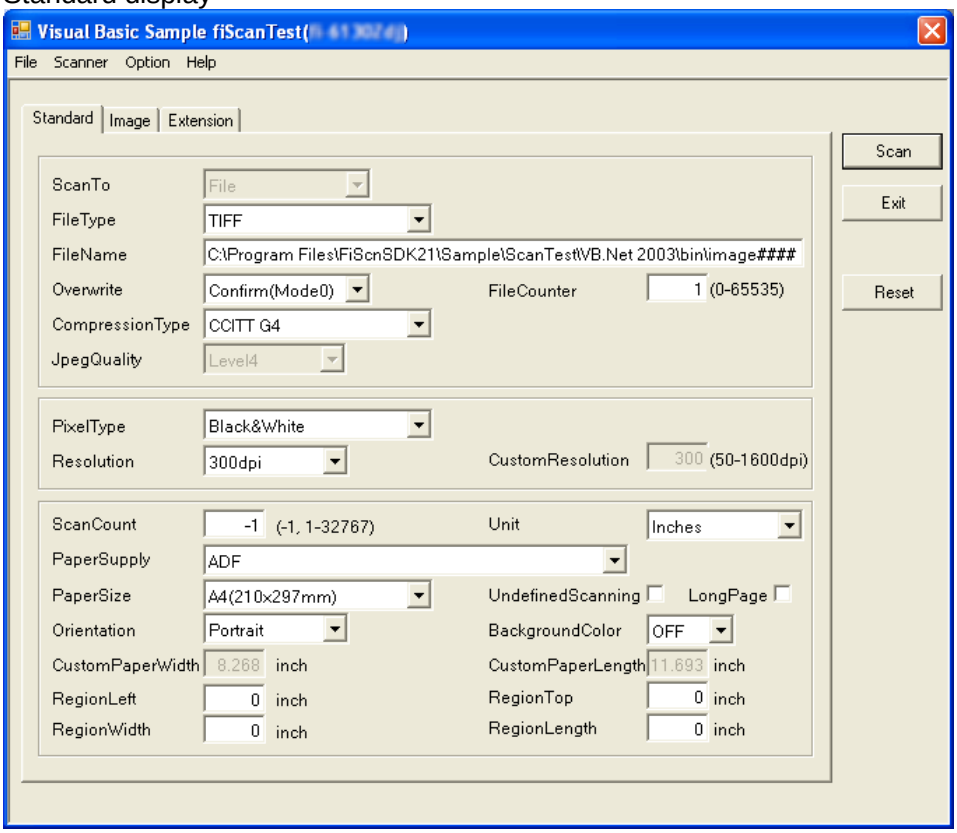
GetTWAINTemplateCount
GetTWAINTemplateName
GetTWAINTemplateSelect
SetTWAINTemplateSelect



4.5 Visual Basic®.NET / Visual C#®.NET Sample Screen

Visual Basic®.NET samples / Visual C#®.NET samples consist of Standard, Image and Extension screens.
Configure items by switching between screens.

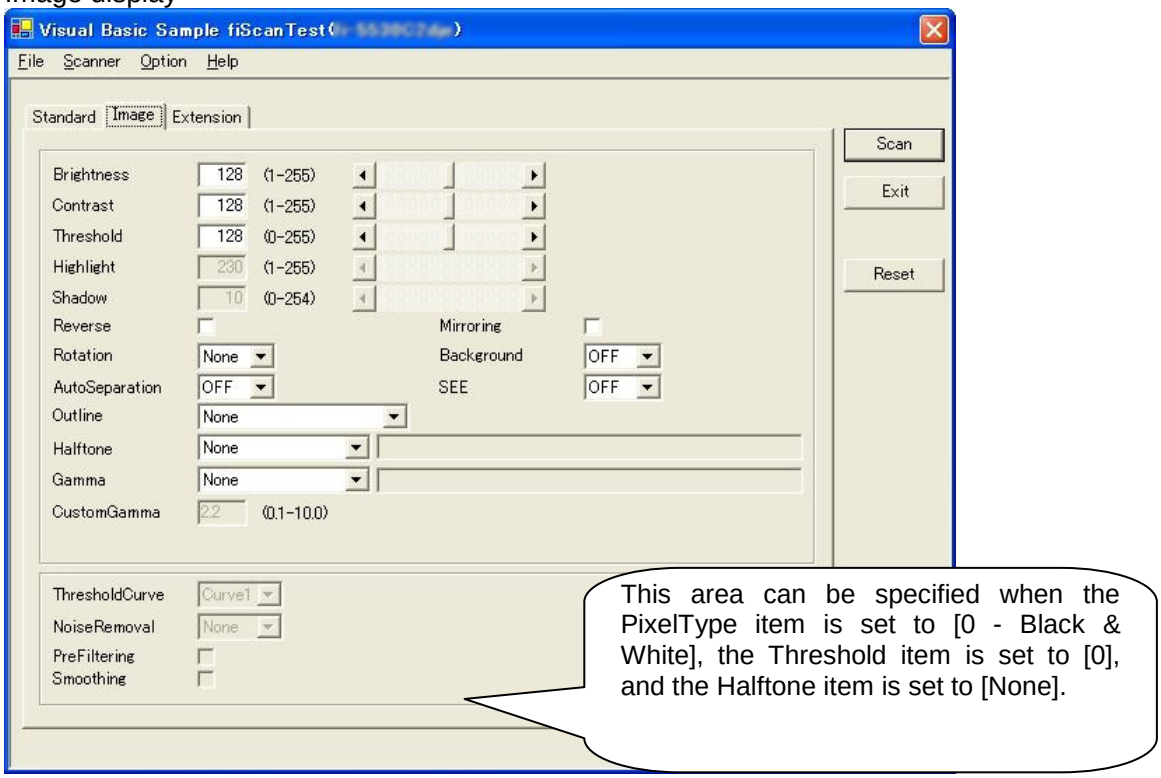
Standard display



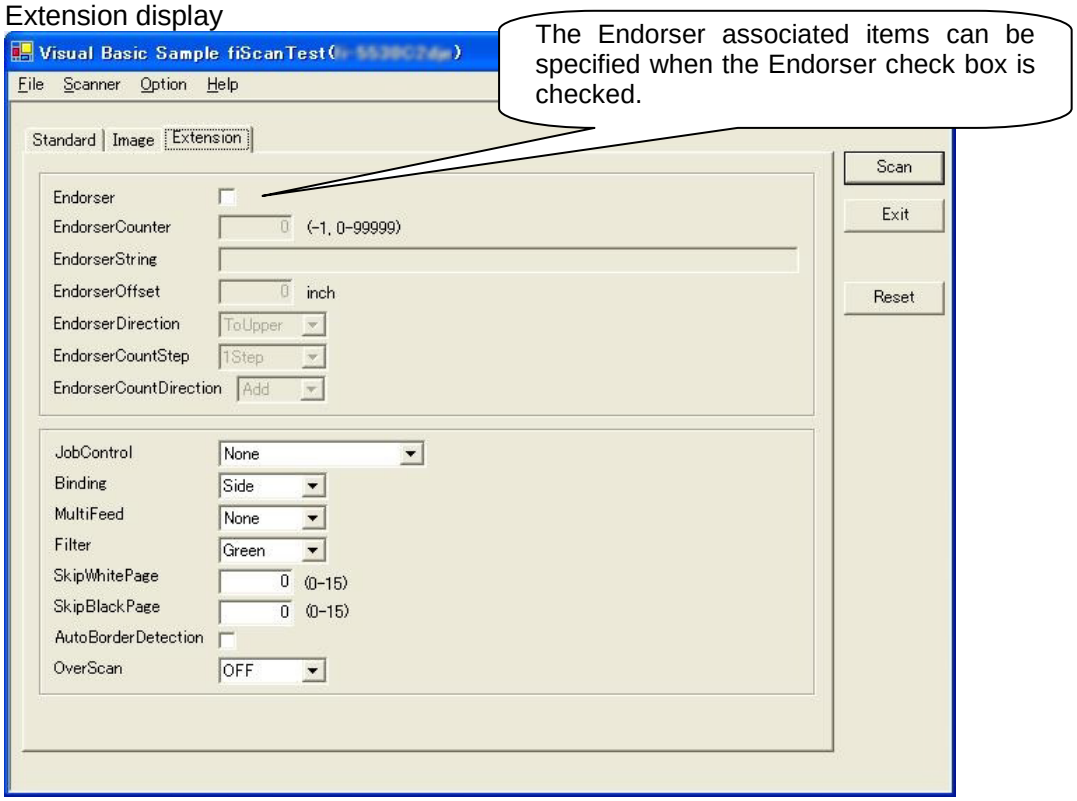
Cautions

1) The [File] item only is supported among the ScanTo items.
2) When [File] or [Display&File] is specified in the [Report] sub-menu under the [Option] menu, the ReportFile is stored where samples are stored, with a file name "Report.txt."

Image display

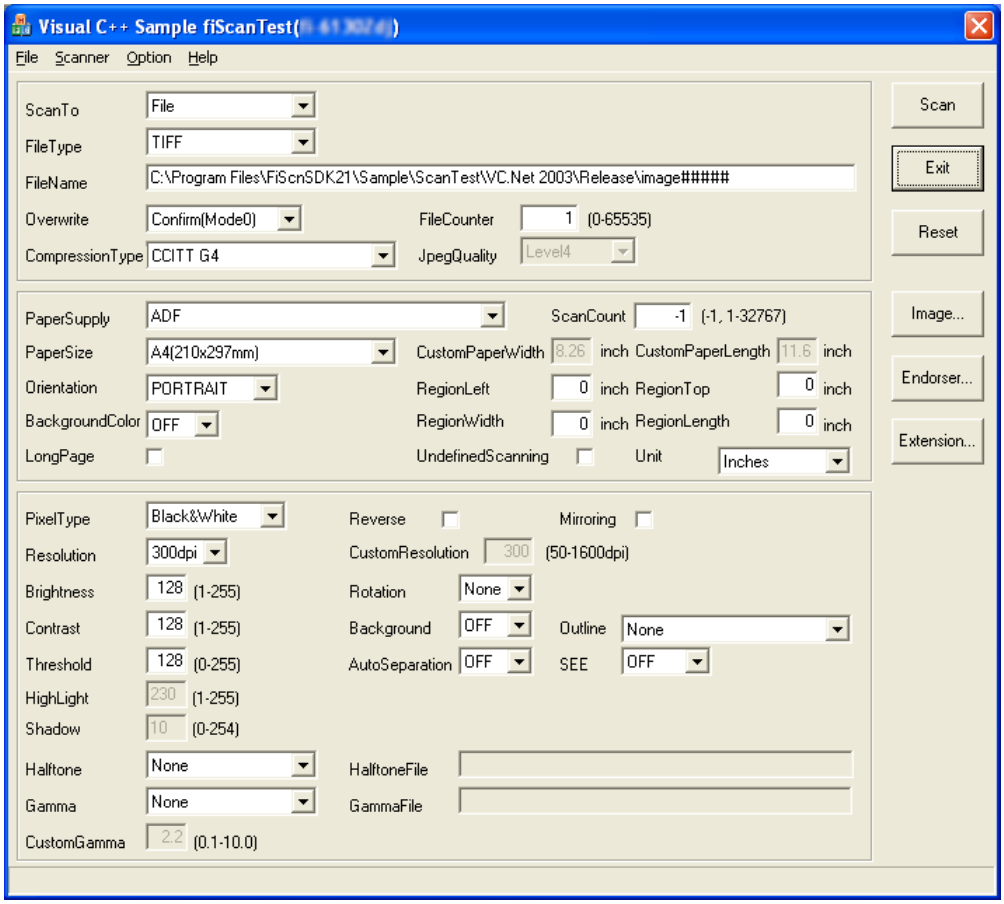


Extension display



4.6 Visual C++® .NET Sample Screen

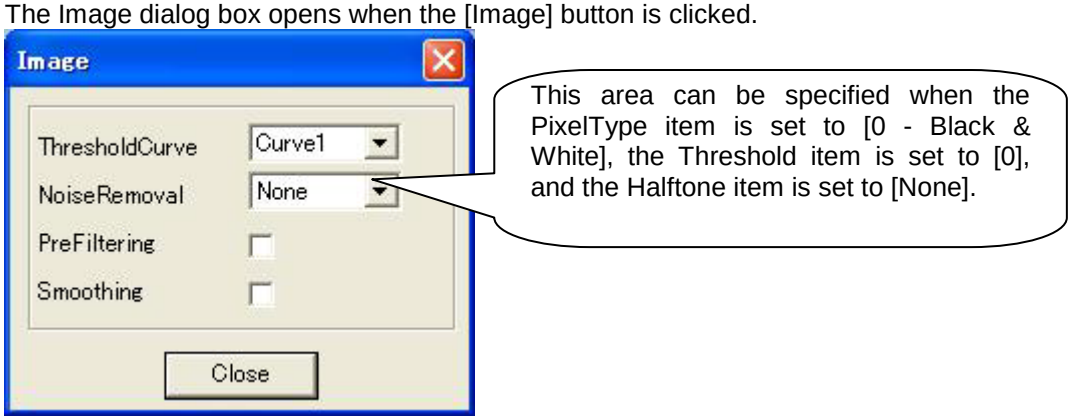
Configuration of the Image, Endorser, and Extension items for Visual C++®.NET samples is performed by opening an appropriate dialog box.



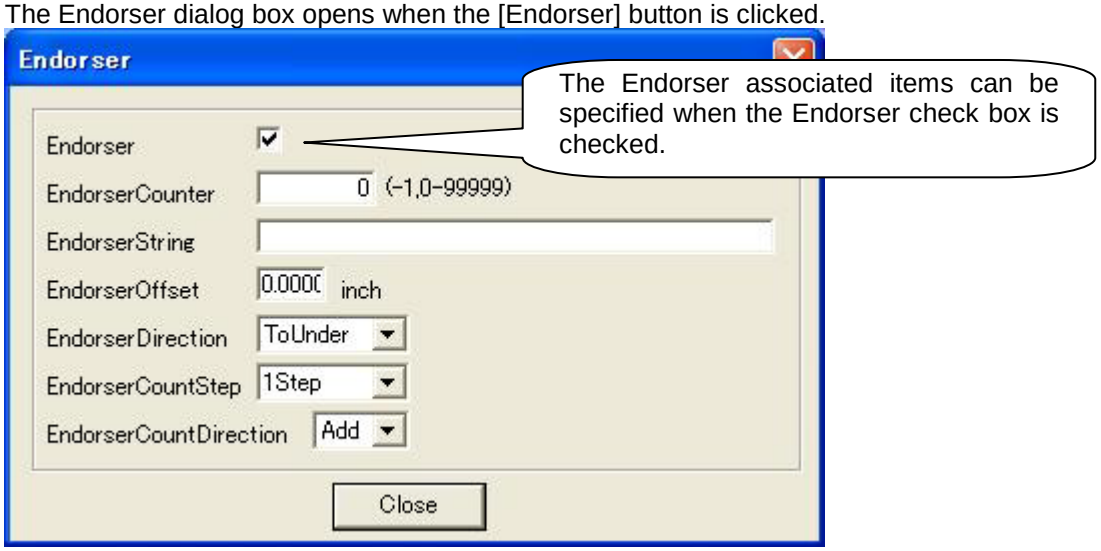
Cautions

1) If a scan is performed when [Dib Handle] or [Raw Image Handle] is specified for the ScanTo item, this sample stores the data in the same location as the [File] specification for the ScanTo item, with the same file name, in a Windows bitmap format.
2) When [File] or [Display&File] is specified in the [Report] sub-menu under the [Option] menu, the ReportFile is stored where samples are stored, with a file name "Report.txt."

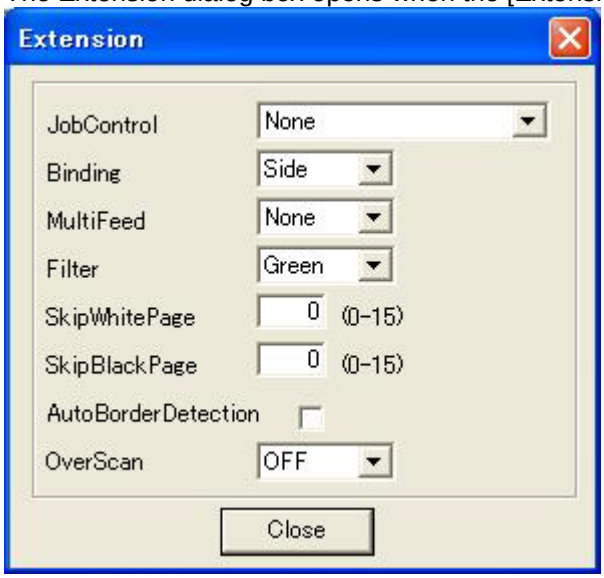
The Image dialog box opens when the [Image] button is clicked.



The Endorser dialog box opens when the [Endorser] button is clicked.



The Extension dialog box opens when the [Extension] button is clicked.



4.7 Java™ SampleProgram

There is no setup screen for a Java™ sample.
To set properties, use the following xml file.
<Installation folder>\ ScanTest \ Java \ FiscnProperties.xml

To run a Java sample,
(1) Start a command prompt, and run the following command.
cd /d "<Installation folder>"
(2) In the command prompt, run the following command.
java -classpath "<Installation folder>\ Sample \ ScanTest \ Java";"<Installation folder>\ Fiscn.jar" com.fujitsu.pfu.fiscn.sdksample.FiscnSampleApp "<Installation folder>\ Sample \ ScanTest \ Java \ FiscnProperties.xml"

-classpath : Specify jar files or class directories necessary to run the Java sample.
Use a semi colon (;) to separate multiple paths.
Second parameter : Specify an execution class.
Third parameter : Specify an execution parameter.

5. Appendix

5.1 Properties Enabled According to Devices

●: Properties which are independent from models and are valid for all models
◎: Properties which are independent from models, however, with restrictions on usable values (independent from whether the option is present)[4]
N/A: Properties or values which are not valid (the specified value will be ignored and the default value is applied)
○: Valid values
-: Properties which are independent from whether the option is installed or not.
□: Properties or values which are valid only when the option is installed.

*1 E: When Endorser or Imprinter option is installed
*2 I: When the image processing board is installed (excluding fi-4860C2 which has the device built-in)
*3 S: When the Image Processing Software Option is installed

[A3 Model]

Property			fi-6800			fi-6770/fi-6770A		fi-6750S		fi-6670/fi-6670A			fi-5950/fi-5900C			fi-5750C			fi-5650C				fi-5530C/C2			fi-4860C2	
				E *1	S *3		S *3		S *3		E *1	S *3		E *1	S *3		I *2	S *3		E *1	I *2	S *3		E *1	S *3		E *1
AutoBorderDetection		True/False	○	-	N/A	○	N/A	○	N/A	○	-	N/A	○	-	N/A	○	-	N/A	○	-	-	N/A	○	-	N/A	○	-
AutoSeparation	0	OFF	N/A	-	N/A	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	-	N/A	N/A	-	N/A	N/A	-	-	N/A	N/A	-	N/A	○	-
	1	ON	N/A	-	N/A	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	-	N/A	N/A	□	N/A	N/A	-	□	N/A	N/A	-	N/A	○	-
Background	0	OFF	○	-	N/A	○	N/A	○	N/A	○	-	N/A	○	-	N/A	○	-	N/A	○	-	-	N/A	N/A	-	N/A	○	-
	1	ON	○	-	N/A	○	N/A	○	N/A	○	-	N/A	○	-	N/A	○	-	N/A	○	-	-	N/A	N/A	-	N/A	○	-
	2	AUTO	○	-	N/A	○	N/A	○	N/A	○	-	N/A	○	-	N/A	○	-	N/A	○	-	-	N/A	N/A	-	N/A	○	-
BackgroundColor	0	OFF	○	-	N/A	○	N/A	○	N/A	○	-	N/A	○	-	N/A	○	-	N/A	○	-	-	N/A	○	-	N/A	○	-
	1	ON	○	-	N/A	○	N/A	○	N/A	○	-	N/A	○	-	N/A	○	-	N/A	○	-	-	N/A	○	-	N/A	○	-
Binding	0	Side	○	-	N/A	○	N/A	○	N/A	○	-	N/A	○	-	N/A	○	-	N/A	○	-	-	N/A	○	-	N/A	○	-
	1	Height	○	-	N/A	○	N/A	N/A	N/A	○	-	N/A	○	-	N/A	○	-	N/A	○	-	-	N/A	○	-	N/A	○	-
Brightness	1 - 255	Binary (Black and White)	N/A	-	N/A	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	-	N/A	N/A	-	N/A	N/A	-	-	N/A	○	-	N/A	N/A	-
		Halftone (Halftone = 1 - 6)	○	-	N/A	○	N/A	○	N/A	○	-	N/A	○	-	N/A	○	-	N/A	○	-	-	N/A	○	-	N/A	○	-
		Automatic separation (AutoSeparation = 1)	N/A	-	N/A	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	-	N/A	N/A	□	N/A	N/A	-	□	N/A	N/A	-	N/A	○	-
		Selectable edge enhancement (SEE = 1)	○	-	N/A	○	N/A	○	N/A	○	-	N/A	○	-	N/A	○	-	N/A	○	-	-	N/A	N/A	-	N/A	N/A	-
		Grayscale	○	-	N/A	○	N/A	○	N/A	○	-	N/A	○	-	N/A	○	-	N/A	○	-	-	N/A	○	-	N/A	○	-
		Color	○	-	N/A	○	N/A	○	N/A	○	-	N/A	○	-	N/A	○	-	N/A	○	-	-	N/A	○	-	N/A	○	-
CloseSourceUI		True/False	●	-	○	●	○	●	○	●	-	○	●	-	○	●	-	○	●	-	-	○	●	-	○	●	-
CompressionType	0	No Compress	●	-	○	●	○	●	○	●	-	○	●	-	○	●	-	○	●	-	-	○	●	-	○	●	-
	1	CCITT G3(1D)	●	-	○	●	○	●	○	●	-	○	●	-	○	●	-	○	●	-	-	○	●	-	○	●	-
	2	CCITT G3(2D) Kfactor=2	●	-	○	●	○	●	○	●	-	○	●	-	○	●	-	○	●	-	-	○	●	-	○	●	-
	3	CCITT G3(2D) Kfactor=4	●	-	○	●	○	●	○	●	-	○	●	-	○	●	-	○	●	-	-	○	●	-	○	●	-
	4	CCITT G4	●	-	○	●	○	●	○	●	-	○	●	-	○	●	-	○	●	-	-	○	●	-	○	●	-
	5	JPEG	●	-	○	●	○	●	○	●	-	○	●	-	○	●	-	○	●	-	-	○	●	-	○	●	-
	6	Old JPEG	●	-	○	●	○	●	○	●	-	○	●	-	○	●	-	○	●	-	-	○	●	-	○	●	-
Contrast	1 - 255		○	-	N/A	○	N/A	○	N/A	○	-	N/A	○	-	N/A	○	-	N/A	○	-	-	N/A	○	-	N/A	○	-

[4] However, the property may not be specified depending on the combination of other properties. Refer to the property descriptions for details.

Property			fi-6800			fi-6770/fi-6770A		fi-6750S		fi-6670/fi-6670A			fi-5950/fi-5900C			fi-5750C			fi-5650C				fi-5530C/C2			fi-4860C2	
				E *1	S *3		S *3		S *3		E *1	S *3		E *1	S *3		I *2	S *3		E *1	I *2	S *3		E *1	S *3		E *1
CustomGamma	0.1 – 10.0		○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○ ＊Color only	–
CustomPaperLength			◎	–	N/A	◎	N/A	◎	N/A	◎	–	N/A	◎	–	N/A	◎	–	N/A	◎	–	–	N/A	◎	–	N/A	◎	–
CustomPaperWidth			◎	–	N/A	◎	N/A	◎	N/A	◎	–	N/A	◎	–	N/A	◎	–	N/A	◎	–	–	N/A	◎	–	N/A	◎	–
CustomResolution		Maximum black and white	○600	–	N/A	○600	N/A	○600	N/A	○600	–	N/A	○600	–	N/A	○600	–	N/A	○600	–	–	N/A	○600/ ○1200	–	N/A	○400	–
		Maximum grayscale	○600	–	N/A	○600	N/A	○600	N/A	○600	–	N/A	○600	–	N/A	○600	–	N/A	○600	–	–	N/A	○600/ ○1200	–	N/A	○400	–
		Maximum color	○600	–	N/A	○600	N/A	○600	N/A	○600	–	N/A	○600	–	N/A	○600	–	N/A	○600	–	–	N/A	○600/ ○1200	–	N/A	○400	–
		Minimum	○50	–	N/A	○50	N/A	○50	N/A	○50	–	N/A	○50	–	N/A	○50	–	N/A	○50	–	–	N/A	○50	–	N/A	○100	–
		Units	○1	–	N/A	○1	N/A	○1	N/A	○1	–	N/A	○1	–	N/A	○1	–	N/A	○1	–	–	N/A	○1	–	N/A	–	–
DoubleFeed (Refer to MultiFeed)					N/A		N/A		N/A			N/A			N/A			N/A				N/A			N/A		
Endorser		True/False	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	–	N/A	N/A	□	–	N/A	N/A	□	N/A	N/A	○
EndorserCountDirection	0	Add	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	–	N/A	N/A	□	–	N/A	N/A	□	N/A	N/A	○
	1	Del	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	–	N/A	N/A	□	–	N/A	N/A	□	N/A	N/A	○
EndorserCounter	−1 –		N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	–	N/A	N/A	□	–	N/A	N/A	□	N/A	N/A	○
EndorserCountStep	0	None	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	–	N/A	N/A	□	–	N/A	N/A	□	N/A	N/A	○
	1	1 Step	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	–	N/A	N/A	□	–	N/A	N/A	□	N/A	N/A	○
	2	2 Step	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	–	N/A	N/A	□	–	N/A	N/A	□	N/A	N/A	○
EndorserDirection	1	ToUnder	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	–	N/A	N/A	□	–	N/A	N/A	□	N/A	N/A	○
	3	ToUpper	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	–	N/A	N/A	□	–	N/A	N/A	□	N/A	N/A	○
EndorserOffset	0 –		N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	–	N/A	N/A	□	–	N/A	N/A	□	N/A	N/A	○
EndorserString			N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	–	N/A	N/A	□	–	N/A	N/A	□	N/A	N/A	○
		Maximum number of single byte characters	N/A	43	N/A	N/A	N/A	N/A	N/A	N/A	43	N/A	N/A	43/ 40	N/A	N/A	–	N/A	N/A	40	–	N/A	N/A	40/ 43	N/A	N/A	40
ErrorCode			●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
FileCounter			●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
FileName			●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
FileType	0	BMP	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	1	TIFF	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	2	MultipageTIFF	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	3	JFIF(JPEG)	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	4	PDF	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	5	MultipagePDF	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	6	Multi Image Output	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	7	Auto Color Detection	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
Filter	0	Green	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	1	Red	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	2	Blue	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	3	None	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	N/A	–	N/A	○	–
	4	White	N/A	–	N/A	○	N/A	○	N/A	○	–	N/A	N/A	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	N/A	–
	99	Custom1	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	100	Custom2	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	101	Custom3	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–

Property			fi-6800			fi-6770/fi-6770A		fi-6750S		fi-6670/fi-6670A			fi-5950/fi-5900C			fi-5750C			fi-5650C				fi-5530C/C2			fi-4860C2	
				E *1	S *3		S *3		S *3		E *1	S *3		E *1	S *3		I *2	S *3		E *1	I *2	S *3		E *1	S *3		E *1
Gamma	0	None	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–
	1	Soft	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscal	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	–	N/A	N/A	–	N/A	○ * Black & white /grayscale	–
	2	Sharp	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscal	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	–	N/A	N/A	–	N/A	○ * Black & white /grayscale	–
	3	Gamma Pattern File	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscal	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	–	N/A	N/A	–	N/A	N/A	–
	4	Custom	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○ * Color only	–
GammaFile			○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscal	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	–	N/A	N/A	–	N/A	N/A	–
Halftone	0	None	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	1	Dither Pattern0	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	2	Dither Pattern1	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	3	Dither Pattern2	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	4	Dither Pattern3	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	5	Dither pattern File	○	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	N/A	–
	6	Error Diffusion	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
HalftoneFile			○	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	N/A	–
Highlight	1 – 255		○ *Grayscale / color	–	N/A	○ *Grayscale / color	N/A	○ *Grayscale / color	N/A	○ *Grayscale / color	–	N/A	○ *Grayscale / color	–	N/A	○ *Grayscale / color	–	N/A	○ *Grayscale / color	–	–	N/A	○ *Grayscale / color	–	N/A	○ *Grayscale / color	–
ImageScanner			●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
Indicator		True/False	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
IsExistsFB	True		N/A	–	N/A	○	○	○	○	N/A	–	N/A	N/A	–	N/A	○	–	○	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	False		○	–	○	N/A	N/A	N/A	N/A	○	–	○	○	–	○	N/A	–	N/A	○	–	–	○	○	–	○	○	–
JobControl	0	None	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	N/A	–	N/A	○	–
	1	Include and Continue	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	N/A	–	N/A	○	–
	2	Include and Stop	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	N/A	–	N/A	○	–
	3	Exclude and Continue	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	N/A	–	N/A	○	–
	4	Exclude and Stop	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	N/A	–	N/A	○	–
JpegQuality	0	Level1(High compression ratio)	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	1	Level2	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	2	Level3	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	3	Level4	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	4	Level5	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	5	Level6	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	6	Level7(High image quality)	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–

Property			fi-6800			fi-6770/fi-6770A		fi-6750S		fi-6670/fi-6670A			fi-5950/fi-5900C			fi-5750C			fi-5650C				fi-5530C/C2			fi-4860C2	
				E *1	S *3		S *3		S *3		E *1	S *3		E *1	S *3		I *2	S *3		E *1	I *2	S *3		E *1	S *3		E *1
LongPage		True/False	○Black & white, grayscale, color 125inch (3175mm)	–	N/A	○Black & white, grayscale, color 125inch (3175mm)	N/A	○Black & white, grayscale, color 125inch (3175mm)	N/A	○Black & white, grayscale, color 125inch (3175mm)	–	N/A	○Black & white, grayscale, color 125inch (3175mm)	–	N/A	○Black & white, grayscale, color 34.0inch (863.6mm)	–	N/A	○Black & white, grayscale, color 34.0inch (863.6mm)	–	–	N/A	○Black & white, grayscale, color 34.0inch (863.6mm)	–	N/A	○Black & white 34.560inch (878mm)	–
Mirroring		True/False	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	○ ＊Black & white	–
MultiFeed	0	None	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	1	Mode0	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	N/A	–	N/A	○	–
	2	Mode1	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	3	Mode2	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	4	Mode3	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
NoiseRemoval	0	None	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	□	N/A	N/A	–	□	N/A	N/A	–	N/A	N/A	–
	1	Matrix2	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	□	N/A	N/A	–	□	N/A	N/A	–	N/A	N/A	–
	2	Matrix3	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	□	N/A	N/A	–	□	N/A	N/A	–	N/A	N/A	–
	3	Matrix4	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	□	N/A	N/A	–	□	N/A	N/A	–	N/A	N/A	–
	4	Matrix5	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	□	N/A	N/A	–	□	N/A	N/A	–	N/A	N/A	–
Orientation	0	Portrait	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	–	N/A	●	–	–	N/A	●	–	N/A	●	–
	1	Landscape	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	–	N/A	●	–	–	N/A	●	–	N/A	●	–
Outline Black & white, or color only			Black & white / color	–	N/A	Black & white / color	N/A	Black & white / color	N/A	Black & white / color	–	N/A	Black & white / color	–	N/A	Black & white / color	–	N/A	Black & white / color	–	–	N/A	Black & white / color	–	N/A	Black & White / color	–
	0	None	○/○		N/A	○/○	N/A	○/○	N/A	○/○		N/A	○/○		N/A	○/○		N/A	○/○			N/A	○/○		N/A	○/○	
	1	Outline Emphasis Low	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	○/○	–	N/A	○/ N/A	–
	2	Outline Emphasis Medium	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	○/○	–	N/A	○/ N/A	–
	3	Outline Emphasis High	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	○/○	–	N/A	○/ N/A	–
	4	Outline Smooth	○/ N/A	–	N/A	○/ N/A	N/A	○/ N/A	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/ N/A	–	–	N/A	○/ N/A	–	N/A	○/ N/A	–
	5	Edge Extract (black & white) / De-Screen Level-1 (color)	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	N/A /○	–	N/A	○/ N/A	–
	6	De-Screen Level-2	N/A /○	–	N/A	N/A /○	N/A	N/A /○	N/A	N/A /○	–	N/A	N/A /○	–	N/A	N/A /○	–	N/A	N/A /○	–	–	N/A	N/A /○	–	N/A	N/A / N/A	–
	7	De-Screen Level-3	N/A /○	–	N/A	N/A /○	N/A	N/A /○	N/A	N/A /○	–	N/A	N/A /○	–	N/A	N/A /○	–	N/A	N/A /○	–	–	N/A	N/A /○	–	N/A	N/A / N/A	–
	8	De-Screen Level-4	N/A /○	–	N/A	N/A /○	N/A	N/A /○	N/A	N/A /○	–	N/A	N/A /○	–	N/A	N/A /○	–	N/A	N/A /○	–	–	N/A	N/A /○	–	N/A	N/A / N/A	–
OverScan		True/False	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
Overwrite	0	OFF(Mode0)	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	1	ON	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	2	Confirm(Mode0)	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	3	OFF(Mode1)	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	4	Confirm(Mode1)	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
PageCount			●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–

Property			fi-6800			fi-6770/fi-6770A		fi-6750S		fi-6670/fi-6670A			fi-5950/fi-5900C			fi-5750C			fi-5650C				fi-5530C/C2			fi-4860C2	
				E *1	S *3		S *3		S *3		E *1	S *3		E *1	S *3		I *2	S *3		E *1	I *2	S *3		E *1	S *3		E *1
PaperSize			Length / width			Length / width		Length / width		Length / width			Length / width			Length / width			Length / width				Length / width			Length / width	
	0	A3	○/N/A	–	N/A	○/N/A	N/A	○/N/A	N/A	○/N/A	–	N/A	○/N/A	–	N/A	○/N/A	–	N/A	○/N/A	–	–	N/A	○/N/A	–	N/A	○/N/A ＊Color 300 dpi or more X	–
	1	A4	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	○/○	–	N/A	○/○	–
	2	A5	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	○/○	–	N/A	○/○	–
	3	A6	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	○/○	–	N/A	○/○	–
	4	B4	○/ N/A	–	N/A	○/ N/A	N/A	○/ N/A	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/ N/A	–	–	N/A	○/ N/A	–	N/A	○/ N/A	–
	5	B5	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	○/○	–	N/A	○/○	–
	6	B6	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	○/○	–	N/A	○/○	–
	7	Letter	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	○/○	–	N/A	○/○	–
	8	Legal	○/ N/A	–	N/A	○/ N/A	N/A	○/ N/A	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/ N/A	–	–	N/A	○/ N/A	–	N/A	○/ N/A	–
	9	Executive	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	○/○	–	N/A	○/○	–
	10	Double Letter	○/ N/A	–	N/A	○/ N/A	N/A	○/ N/A	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/ N/A	–	–	N/A	○/ N/A	–	N/A	○/ N/A	–
	11	PostCard	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	○/○	–	N/A	○/○	–
	12	Photo	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	○/○	–	N/A	○/○	–
	13	Card	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	N/A	○/○	–	–	N/A	○/○	–	N/A	N/A / N/A	–
	99	Custom	○/ N/A	–	N/A	○/ N/A	N/A	○/ N/A	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/ N/A	–	–	N/A	○/ N/A	–	N/A	○/ N/A	–
PaperSupply	0	Flatbed	N/A	–	N/A	○	N/A	○	N/A	N/A	–	N/A	N/A	–	N/A	○	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	1	ADF	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	2	ADF(Duplex)	○	–	N/A	○	N/A	N/A	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	3	ADF(BackSide)	○	–	N/A	○	N/A	N/A	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	4	ADF(CarrierSheet Spread A3)	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	5	ADF(CarrierSheet Spread DL)	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	6	ADF(CarrierSheet Spread B4)	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	7	ADF(CarrierSheet Clipping)	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	10	ADF(CarrierSheet Spread A3)	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	11	ADF(CarrierSheet Spread DL)	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	12	ADF(CarrierSheet Spread B4)	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	13	ADF(CarrierSheet Spread Auto)	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	14 – 49	ADF(CarrierSheet Clipping All) – ADF(CarrierSheet Clipping Duplex Custom)	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
PixelType	0	Black & white	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	1	Grayscale	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	2	RGB color	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
PreFiltering		True/False	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	□	N/A	N/A	–	□	N/A	N/A	–	N/A	N/A	–
RegionLength			◎	–	N/A	◎	N/A	◎	N/A	◎	–	N/A	◎	–	N/A	◎	–	N/A	◎	–	–	N/A	◎	–	N/A	◎	–
RegionLeft			◎	–	N/A	◎	N/A	◎	N/A	◎	–	N/A	◎	–	N/A	◎	–	N/A	◎	–	–	N/A	◎	–	N/A	◎	–
RegionTop			◎	–	N/A	◎	N/A	◎	N/A	◎	–	N/A	◎	–	N/A	◎	–	N/A	◎	–	–	N/A	◎	–	N/A	◎	–
RegionWidth			◎	–	N/A	◎	N/A	◎	N/A	◎	–	N/A	◎	–	N/A	◎	–	N/A	◎	–	–	N/A	◎	–	N/A	◎	–

Property			fi-6800			fi-6770/fi-6770A		fi-6750S		fi-6670/fi-6670A			fi-5950/fi-5900C			fi-5750C			fi-5650C				fi-5530C/C2			fi-4860C2	
				E *1	S *3		S *3		S *3		E *1	S *3		E *1	S *3		I *2	S *3		E *1	I *2	S *3		E *1	S *3		E *1
Report	0	OFF	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	1	Display	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	2	File	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	3	Display+File	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
ReportFile			●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
Resolution	0	200 x 200	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	1	240 x 240	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○ * Black & white, Grayscale	–
	2	300 x 300	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
	3	400 x 400	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○ *Other than A3/Double Letter color	–
	4	500 x 500	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	N/A	–
	5	600 x 600	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	N/A	–
	6	700 x 700	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	7	800 x 800	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	99	Custom	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○ * 100/150/200/240/300/400 only	–
Reverse		True/False	○ Black & white, grayscale	–	N/A	○ Black & white, grayscale	N/A	○ Black & white, grayscale	N/A	○ Black & white, grayscale	–	N/A	○ Black & white, grayscale	–	N/A	○ Black & white, grayscale	–	N/A	○ Black & white, grayscale	–	–	N/A	○	–	N/A	○	–
Rotation	0	None	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	–	N/A	●	–	–	N/A	●	–	N/A	●	–
	1	R90	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	–	N/A	●	–	–	N/A	●	–	N/A	●	–
	2	R180	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	–	N/A	●	–	–	N/A	●	–	N/A	●	–
	3	R270	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	–	N/A	●	–	–	N/A	●	–	N/A	●	–
ScanCount			○	–	○	○	○	○	○	○	–	○	○	–	○	○	–	○	○	–	–	○	○	–	○	○	–
ScanTo	0	File	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	1	Dib Handle	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
	2	Raw Image Handle	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
SEE	0	OFF	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	N/A	–	N/A	N/A	–
	1	ON	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	N/A	–	N/A	N/A	–
Shadow	0 – 254		○ *Grayscale / color	–	N/A	○ *Grayscale / color	N/A	○ *Grayscale / color	N/A	○ *Grayscale / color	–	N/A	○ *Grayscale / color	–	N/A	○ *Grayscale / color	–	N/A	○ *Grayscale / color	–	–	N/A	○ *Grayscale / color	–	N/A	○ *Grayscale / color	–
ShowSourceUI		True/False	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
SilentMode		True/False	●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
SkipBlackPage	0 – 15		○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
SkipWhitePage	0 – 15		○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
Smoothing		True/False	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	□	N/A	N/A	–	□	N/A	N/A	–	N/A	N/A	–
SourceCurrentScan		True/False	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	–	N/A	●	–	–	N/A	●	–	N/A	●	–

Property			fi-6800			fi-6770/fi-6770A		fi-6750S		fi-6670/fi-6670A			fi-5950/fi-5900C			fi-5750C			fi-5650C				fi-5530C/C2			fi-4860C2	
				E *1	S *3		S *3		S *3		E *1	S *3		E *1	S *3		I *2	S *3		E *1	I *2	S *3		E *1	S *3		E *1
Threshold	1 – 255	Binary (Black & White)	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
		Halftone (Halftone = 1 – 6)	○	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	○	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
		Automatic separation (AutoSeparation = 1)	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	□	N/A	N/A	–	□	N/A	N/A	–	N/A	○	–
		Selectable edge enhancement (SEE = 1)	○	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	○	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
		Grayscale	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
		Color	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	N/A	–
	0	Automatic binarization (simple or complete)	○ Simple	–	N/A	○ Simple	N/A	○ Simple	N/A	○ Simple	–	N/A	○ Simple	–	N/A	○ Simple	□ Complete	N/A	○ Simple	–	□ Complete	N/A	○ Simple	–	N/A	○ Complete	–
ThresholdCurve	0	Curve1	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	□	N/A	N/A	–	□	N/A	N/A	–	N/A	○	–
	1	Curve2	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	□	N/A	N/A	–	□	N/A	N/A	–	N/A	○	–
	2	Curve3	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	□	N/A	N/A	–	□	N/A	N/A	–	N/A	○	–
	3	Curve4	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	○	–
	4	Curve5	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	○	–
	5	Curve6	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	○	–
	6	Curve7	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	○	–
	7	Curve8	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	N/A	N/A	–	–	N/A	N/A	–	N/A	○	–
TwainDS			●	–	○	●	○	●	○	●	–	○	●	–	○	●	–	○	●	–	–	○	●	–	○	●	–
UndefinedScanning		True/False	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	–	N/A	○	–	–	N/A	○	–	N/A	○	–
Unit	0	Inches	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	–	N/A	●	–	–	N/A	●	–	N/A	●	–
	1	Centimeters	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	–	N/A	●	–	–	N/A	●	–	N/A	●	–
	2	Pixels	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	–	N/A	●	–	–	N/A	●	–	N/A	●	–

[A4 Model / A6 Model]

Property			fi-6240Z/fi-6230Z		fi-6240/fi-6230		fi-6140Z/fi-6130Z			fi-6140/fi-6130			fi-6110		fi-5220C		fi-5120C			fi-5110C		fi-5015C	
				S *3		S *3		E *1	S *3		E *1	S *3		S *3		S *3		E *1	S *3		S *3		S *3
AutoBorderDetection		True/False	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	N/A	N/A	N/A	N/A
AutoSeparation	0	OFF	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	1	ON	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
Background	0	OFF	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	1	ON	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	2	AUTO	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
BackgroundColor	0	OFF	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	1	ON	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
Binding	0	Side	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
	1	Height	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
Brightness	1 – 255	Binary (Black and White)	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
		Halftone (Halftone = 1 – 6)	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
		Automatic separation (AutoSeparation = 1)	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
		Selectable edge enhancement (SEE = 1)	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
		Grayscale	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
		Color	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○		N/A	○	N/A	○	N/A
CloseSourceUI		True/False	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
CompressionType	0	No Compress	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	1	CCITT G3(1D)	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	2	CCITT G3(2D) Kfactor=2	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	3	CCITT G3(2D) Kfactor=4	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	4	CCITT G4	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	5	JPEG	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	6	Old JPEG	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
Contrast	1 – 255		○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
CustomGamma	0.1 – 10.0		○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
CustomPaperLength			◎	N/A	◎	N/A	◎	–	N/A	◎	–	N/A	◎	N/A	◎	N/A	◎	–	N/A	◎	N/A	◎	N/A
CustomPaperWidth			◎	N/A	◎	N/A	◎	–	N/A	◎	–	N/A	◎	N/A	◎	N/A	◎	–	N/A	◎	N/A	◎	N/A
CustomResolution		Maximum black and white	○1200	N/A	○1200	N/A	○1200	–	N/A	○1200	–	N/A	○1200	N/A	○600	N/A	○600	–	N/A	○600	N/A	○600	N/A
		Maximum grayscale	○1200	N/A	○1200	N/A	○1200	–	N/A	○1200	–	N/A	○1200	N/A	○600	N/A	○600	–	N/A	○600	N/A	○600	N/A
		Maximum color	○1200	N/A	○1200	N/A	○1200	–	N/A	○1200	–	N/A	○1200	N/A	○600	N/A	○600	–	N/A	○600	N/A	○600	N/A
		Minimum	○50	N/A	○50	N/A	○50	–	N/A	○50	–	N/A	○50	N/A	○50	N/A	○50	–	N/A	○50	N/A	○50	N/A
		Units	○1	N/A	○1	N/A	○1	–	N/A	○1	–	N/A	○1	N/A	○1	N/A	○1	–	N/A	○1	N/A	○1	N/A
DoubleFeed (Refer to MultiFeed)																							
Endorser		True/False	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A
EndorserCountDirection	0	Add	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A
	1	Del	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A
EndorserCounter	-1 –		N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A
EndorserCountStep	0	None	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A
	1	1 Step	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A
	2	2 Step	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A

Property			fi-6240Z/fi-6230Z		fi-6240/fi-6230		fi-6140Z/fi-6130Z			fi-6140/fi-6130			fi-6110		fi-5220C		fi-5120C			fi-5110C		fi-5015C	
				S *3		S *3		E *1	S *3		E *1	S *3		S *3		S *3		E *1	S *3		S *3		S *3
EndorserDirection	1	ToUnder	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A
	3	ToUpper	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A
EndorserOffset	0 –		N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A
EndorserString			N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A	N/A	□	N/A	N/A	N/A	N/A	N/A
		Maximum number of single byte characters	N/A	N/A	N/A	N/A	N/A	43	N/A	N/A	43	N/A	N/A	N/A	N/A	N/A	N/A	40	N/A	N/A	N/A	N/A	N/A
ErrorCode			●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
FileCounter			●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
FileName			●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
FileType	0	BMP	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	1	TIFF	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	2	MultipageTIFF	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	3	JFIF(JPEG)	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	4	PDF	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	5	MultipagePDF	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	6	Multi Image Output	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	7	Auto Color Detection	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
Filter	0	Green	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	1	Red	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	2	Blue	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	3	None	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	○	N/A
	4	White	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	99	Custom1	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	100	Custom2	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	101	Custom3	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
Gamma	0	None	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	N/A	○ * Black & white	N/A	○ * Black & white	–	N/A	○ * Black & white	N/A	○ * Black & white	N/A
	1	Soft	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	2	Sharp	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	3	Gamma Pattern File	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	–	N/A	○ * Black & white /grayscale	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	4	Custom	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
GammaFile			○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
Halftone	0	None	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	1	Dither Pattern0	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	2	Dither Pattern1	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
	3	Dither Pattern2	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
	4	Dither Pattern3	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
	5	Dither pattern File	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
	6	Error Diffusion	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A

Property			fi-6240Z/fi-6230Z		fi-6240/fi-6230		fi-6140Z/fi-6130Z			fi-6140/fi-6130			fi-6110		fi-5220C		fi-5120C			fi-5110C		fi-5015C	
				S *3		S *3		E *1	S *3		E *1	S *3		S *3		S *3		E *1	S *3		S *3		S *3
HalftoneFile			○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
Highlight	1 – 255		○ *Grayscale / color	N/A	○ *Grayscale / color	N/A	○ *Grayscale / color		N/A	○ *Grayscale / color		N/A	○ *Grayscale / color	N/A	○ *Grayscale / color	N/A	○ *Grayscale / color		N/A	○ *Grayscale / color	N/A	○ *Grayscale / color	N/A
ImageScanner			●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
Indicator		True/False	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
IsExistsFB	True		○	○	○	○	N/A	–	N/A	N/A	–	N/A	N/A	N/A	○	○	N/A	–	N/A	N/A	N/A	○	○
	False		N/A	N/A	N/A	N/A	○	–	○	○	–	○	○	○	N/A	N/A	○	–	○	○	○	N/A	N/A
JobControl	0	None	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	1	Include and Continue	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	2	Include and Stop	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	3	Exclude and Continue	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	4	Exclude and Stop	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
JpegQuality	0	Level1 (High compression ratio)	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	1	Level2	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	2	Level3	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	3	Level4	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	4	Level5	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	5	Level6	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	6	Level7 (High image quality)	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
LongPage		True/False	○ Black & white Grayscale, color 125 inch (3175 mm)	N/A	○ Black & white Grayscale, color 125 inch (3175 mm)	N/A	○ Black & white Grayscale, color 125 inch (3175 mm)	–	N/A	○ Black & white Grayscale, color 125 inch (3175 mm)	–	N/A	○ Black & white Grayscale, color 125 inch (3175 mm)	N/A	○ Black & white, Grayscale, color 34 inch (863.6 mm)	N/A	○ Black & white, Grayscale, color 34 inch (863.6 mm)	–	N/A	○ Black & white Grayscale, color 34 inch (863.6 mm)	N/A	N/A	N/A
Mirroring		True/False	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
MultiFeed	0	None	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
	1	Mode0	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	2	Mode1	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
	3	Mode2	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
	4	Mode3	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
NoiseRemoval	0	None	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	1	Matrix2	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	2	Matrix3	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	3	Matrix4	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	4	Matrix5	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
Orientation	0	Portrait	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	N/A	●	N/A
	1	Landscape	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	N/A	●	N/A

Property			fi-6240Z/fi-6230Z		fi-6240/fi-6230		fi-6140Z/fi-6130Z			fi-6140/fi-6130			fi-6110		fi-5220C		fi-5120C			fi-5110C		fi-5015C	
				S *3		S *3		E *1	S *3		E *1	S *3		S *3		S *3		E *1	S *3		S *3		S *3
Outline			Black & white / color	N/A	Black & white / color	N/A	Black & white / color	–	N/A	Black & white / color	–	N/A	Black & white / color	N/A	Black & white / color	N/A	Black & white / color	–	N/A	Black & white / color	N/A	Black & white / color	N/A
Black & white, or color only	0	None	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	N/A	○/○	N/A
	1	Outline Emphasis Low	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	N/A	N/A /N/A	N/A
	2	Outline Emphasis Medium	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	N/A	N/A /N/A	N/A
	3	Outline Emphasis High	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	N/A	N/A /N/A	N/A
	4	Outline Smooth	○/ N/A	N/A	○/ N/A	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/N/A	N/A	○/N/A	N/A	○/N/A	–	N/A	○/N/A	N/A	N/A /N/A	N/A
	5	Edge Extract (black & white) / De-Screen Level-1 (color)	N/A /○	N/A	N/A /○	N/A	N/A /○	–	N/A	N/A /○	–	N/A	N/A /○	N/A	N/A /○	N/A	N/A /○	–	N/A	N/A /○	N/A	N/A/○	N/A
	6	De-Screen Level-2	N/A /○	N/A	N/A /○	N/A	N/A /○	–	N/A	N/A /○	–	N/A	N/A /○	N/A	N/A /○	N/A	N/A /○	–	N/A	N/A /○	N/A	N/A/○	N/A
	7	De-Screen Level-3	N/A /○	N/A	N/A /○	N/A	N/A /○	–	N/A	N/A /○	–	N/A	N/A /○	N/A	N/A /○	N/A	N/A /○	–	N/A	N/A /○	N/A	N/A/○	N/A
	8	De-Screen Level-4	N/A /○	N/A	N/A /○	N/A	N/A /○	–	N/A	N/A /○	–	N/A	N/A /○	N/A	N/A /○	N/A	N/A /○	–	N/A	N/A /○	N/A	N/A/○	N/A
OverScan		True/False	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○		○	–	N/A	○	N/A	○ *ADF	N/A
Overwrite	0	OFF(Mode0)	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	1	ON	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	2	Confirm(Mode0)	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	3	OFF(Mode1)	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	4	Confirm(Mode1)	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
PageCount			●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
PaperSize			Length / width		Length / width		Length / width			Length / width			Length / width		Length / width		Length / width			Length / width		Length / width	
	0	A3	N/A /N/A	N/A	N/A /N/A	N/A	N/A /N/A	–	N/A	N/A /N/A	–	N/A	N/A /N/A	N/A	N/A /N/A	N/A	N/A /N/A	–	N/A	N/A /N/A	N/A	N/A /N/A	N/A
	1	A4	○/ N/A	N/A	○/ N/A	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/N/A	N/A	○/N/A	N/A	○/N/A	–	N/A	○/N/A	N/A	○/N/A	N/A
	2	A5	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	N/A	○/○	N/A
	3	A6	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	N/A	N/A /N/A	N/A
	4	B4	N/A /N/A	N/A	N/A /N/A	N/A	N/A /N/A	–	N/A	N/A /N/A	–	N/A	N/A /N/A	N/A	N/A /N/A	N/A	N/A /N/A	–	N/A	N/A /N/A	N/A	N/A /N/A	N/A
	5	B5	○/ N/A	N/A	○/ N/A	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/N/A	N/A	○/N/A	N/A	○/N/A	–	N/A	○/N/A	N/A	○/N/A	N/A
	6	B6	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	N/A	○/N/A	N/A
	7	Letter	○/ N/A	N/A	○/ N/A	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/N/A	N/A	○/N/A	N/A	○/N/A	–	N/A	○/N/A	N/A	○/N/A	N/A
	8	Legal	○/ N/A	N/A	○/ N/A	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/N/A	N/A	○/N/A	N/A	○/N/A	–	N/A	○/N/A	N/A	○/N/A	N/A
	9	Executive	○/ N/A	N/A	○/ N/A	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/N/A	N/A	○/N/A	N/A	○/N/A	–	N/A	○/N/A	N/A	○/N/A	N/A
	10	Double Letter	N/A /N/A	N/A	N/A /N/A	N/A	N/A /N/A	–	N/A	N/A /N/A	–	N/A	N/A /N/A	N/A	N/A /N/A	N/A	N/A /N/A	–	N/A	N/A /N/A	N/A	N/A /N/A	N/A
	11	PostCard	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	N/A	N/A /N/A	N/A
	12	Photo	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	N/A	N/A /N/A	N/A
	13	Card	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	–	N/A	○/○	N/A	○/○	N/A	○/○	–	N/A	○/○	N/A	N/A /N/A	N/A
	99	Custom	○/ N/A	N/A	○/ N/A	N/A	○/ N/A	–	N/A	○/ N/A	–	N/A	○/N/A	N/A	○/N/A	N/A	○/N/A	–	N/A	○/N/A	N/A	○/N/A	N/A

Property			fi-6240Z/fi-6230Z		fi-6240/fi-6230		fi-6140Z/fi-6130Z			fi-6140/fi-6130			fi-6110		fi-5220C		fi-5120C			fi-5110C		fi-5015C	
				S *3		S *3		E *1	S *3		E *1	S *3		S *3		S *3		E *1	S *3		S *3		S *3
PaperSupply	0	Flatbed	○	N/A	○	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	○	N/A	N/A	–	N/A	N/A	N/A	○	N/A
	1	ADF	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	2	ADF(Duplex)	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
	3	ADF(BackSide)	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
	4	ADF(CarrierSheet Spread A3)	○	N/A	○	N/A	○	–	N/A	○	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	5	ADF(CarrierSheet Spread DL)	○	N/A	○	N/A	○	–	N/A	○	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	6	ADF(CarrierSheet Spread B4)	○	N/A	○	N/A	○	–	N/A	○	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	7	ADF(CarrierSheet Clipping)	○	N/A	○	N/A	○	–	N/A	○	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	10	ADF(CarrierSheet Spread A3)	○	N/A	N/A	N/A	○	–	N/A	N/A	–	N/A	○	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	11	ADF(CarrierSheet Spread DL)	○	N/A	N/A	N/A	○	–	N/A	N/A	–	N/A	○	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	12	ADF(CarrierSheet Spread B4)	○	N/A	N/A	N/A	○	–	N/A	N/A	–	N/A	○	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	13	ADF(CarrierSheet Clipping)	○	N/A	N/A	N/A	○	–	N/A	N/A	–	N/A	○	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	14 – 49	ADF(CarrierSheet Clipping All) – ADF(CarrierSheet Clipping Duplex Custiom)	○	N/A	N/A	N/A	○	–	N/A	N/A	–	N/A	○	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
PixelType	0	Black & white	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	1	Grayscale	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	2	RGB color	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
PreFiltering		True/False	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
RegionLength			◎	N/A	◎	N/A	◎	–	N/A	◎	–	N/A	◎	N/A	◎	N/A	◎	–	N/A	◎	N/A	◎	N/A
RegionLeft			◎	N/A	◎	N/A	◎	–	N/A	◎	–	N/A	◎	N/A	◎	N/A	◎	–	N/A	◎	N/A	◎	N/A
RegionTop			◎	N/A	◎	N/A	◎	–	N/A	◎	–	N/A	◎	N/A	◎	N/A	◎	–	N/A	◎	N/A	◎	N/A
RegionWidth			◎	N/A	◎	N/A	◎	–	N/A	◎	–	N/A	◎	N/A	◎	N/A	◎	–	N/A	◎	N/A	◎	N/A
Report	0	OFF	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	1	Display	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	2	File	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	3	Display+File	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
ReportFile			●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
Resolution	0	200 x 200	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	1	240 x 240	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	2	300 x 300	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	3	400 x 400	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	4	500 x 500	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	5	600 x 600	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
	6	700 x 700	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	7	800 x 800	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	99	Custom	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
Reverse		True/False	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
Rotation	0	None	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	N/A	●	N/A
	1	R90	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	N/A	●	N/A
	2	R180	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	N/A	●	N/A
	3	R270	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	N/A	●	N/A
ScanCount			○	○	○	○	○	–	○	○	–	○	○	○	○	○	○	–	○	○	○	N/A	N/A

Property			fi-6240Z/fi-6230Z		fi-6240/fi-6230		fi-6140Z/fi-6130Z			fi-6140/fi-6130			fi-6110		fi-5220C		fi-5120C			fi-5110C		fi-5015C	
				S *3		S *3		E *1	S *3		E *1	S *3		S *3		S *3		E *1	S *3		S *3		S *3
ScanTo	0	File	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	1	Dib Handle	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
	2	Raw Image Handle	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
SEE	0	OFF	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	1	ON	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
Shadow	0 – 254		○ *Grayscale / color	N/A	○ *Grayscale / color	N/A	○ *Grayscale / color	–	N/A	○ *Grayscale / color	–	N/A	○ *Grayscale / color	N/A	○ *Grayscale / color	N/A	○ *Grayscale / color	–	N/A	○ *Grayscale / color	N/A	○ *Grayscale / color	N/A
ShowSourceUI		True/False	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
SilentMode		True/False	●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
SkipBlackPage	0 – 15		○	N/A	○	N/A	○	–	N/A	○	–	N/A	N/A	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
SkipWhitePage	0 – 15		○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
Smoothing		True/False	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
SourceCurrentScan		True/False	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	N/A	●	N/A
Threshold	1 – 255	Binary (Black and White)	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	○	N/A
		Halftone (Halftone = 1 – 6)	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
		Automatic separation (AutoSeparation = 1)	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
		Selectable edge enhancement (SEE = 1)	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
		Grayscale	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
		Color	N/A	N/A	N/A	N/A	N/A		N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	0	Automatic binarization (simple or complete)	○Simple	N/A	○Simple	N/A	○Simple	–	N/A	○Simple	–	N/A	○Simple	N/A	○Simple	N/A	○Simple	–	N/A	○Simple	N/A	N/A	N/A
ThresholdCurve	0	Curve1	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	1	Curve2	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	2	Curve3	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	3	Curve4	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	4	Curve5	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	5	Curve6	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	6	Curve7	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
	7	Curve8	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A	N/A	–	N/A	N/A	N/A	N/A	N/A
TwainDS			●	○	●	○	●	–	○	●	–	○	●	○	●	○	●	–	○	●	○	●	○
UndefinedScanning		True/False	○	N/A	○	N/A	○	–	N/A	○	–	N/A	○	N/A	○	N/A	○	–	N/A	○	N/A	N/A	N/A
Unit	0	Inches	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	N/A	●	N/A
	1	Centimeters	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	N/A	●	N/A
	2	Pixels	●	N/A	●	N/A	●	–	N/A	●	–	N/A	●	N/A	●	N/A	●	–	N/A	●	N/A	●	N/A

[A4 Model / A6 Model]

Property			fi-4340C				fi-60F	
				E *1	I *2	S *3		S *3
AutoBorderDetection		True/False	○	–	–	N/A	○	N/A
AutoSeparation	0	OFF	N/A	–	–	N/A	N/A	N/A
	1	ON	N/A	–	□	N/A	N/A	N/A
Background	0	OFF	○	–	–	N/A	N/A	N/A
	1	ON	○	–	–	N/A	N/A	N/A
	2	AUTO	○	–	–	N/A	N/A	N/A
BackgroundColor	0	OFF	○	–	–	N/A	N/A	N/A
	1	ON	○	–	–	N/A	N/A	N/A
Binding	0	Side	○	–	–	N/A	N/A	N/A
	1	Height	○	–	–	N/A	N/A	N/A
Brightness	1 – 255	Binary (Black and White)	N/A	–	–	N/A	○	N/A
		Halftone (Halftone = 1 – 6)	○	–	–	N/A	○	N/A
		Automatic separation (AutoSeparation = 1)	N/A	–	□	N/A	N/A	N/A
		Selectable edge enhancement (SEE = 1)	○	–	–	N/A	N/A	N/A
		Grayscale	N/A	–	–	N/A	○	N/A
		Color	○	–	–	N/A	○	N/A
CloseSourceUI		True/False	●	–	–	○	●	○
CompressionType	0	No Compress	●	–	–	○	●	○
	1	CCITT G3(1D)	●	–	–	○	●	○
	2	CCITT G3(2D) Kfactor=2	●	–	–	○	●	○
	3	CCITT G3(2D) Kfactor=4	●	–	–	○	●	○
	4	CCITT G4	●	–	–	○	●	○
	5	JPEG	●	–	–	○	●	○
	6	Old JPEG	●	–	–	○	●	○
Contrast	1 – 255		○	–	–	N/A	○	N/A
CustomGamma	0.1 – 10.0		○	–	–	N/A	○	N/A
CustomPaperLength			◎	–	–	N/A	◎	N/A
CustomPaperWidth			◎	–	–	N/A	◎	N/A
CustomResolution		Maximum black and white	○800	–	–	N/A	○600	N/A
		Maximum grayscale	○600	–	–	N/A	○600	N/A
		Maximum color	○600	–	–	N/A	○600	N/A
		Minimum	○50	–	–	N/A	○50	N/A
		Units	○1	–	–	N/A	○1	N/A
DoubleFeed (Refer to MultiFeed)								
Endorser		True/False	N/A	□	–	N/A	N/A	N/A
EndorserCountDirection	0	Add	N/A	□	–	N/A	N/A	N/A
	1	Del	N/A	□	–	N/A	N/A	N/A
EndorserCounter	-1 –		N/A	□	–	N/A	N/A	N/A
EndorserCountStep	0	None	N/A	□	–	N/A	N/A	N/A
	1	1 Step	N/A	□	–	N/A	N/A	N/A
	2	2 Step	N/A	□	–	N/A	N/A	N/A

Property			fi-4340C				fi-60F	
				E *1	I *2	S *3		S *3
EndorserDirection	1	ToUnder	N/A	□	–	N/A	N/A	N/A
	3	ToUpper	N/A	□	–	N/A	N/A	N/A
EndorserOffset	0 –		N/A	□	–	N/A	N/A	N/A
EndorserString			N/A	□	–	N/A	N/A	N/A
		Maximum number of single byte characters	N/A	40	–	N/A	N/A	N/A
ErrorCode			●	–	–	○	●	○
FileCounter			●	–	–	○	●	○
FileName			●	–	–	○	●	○
FileType	0	BMP	●	–	–	○	●	○
	1	TIFF	●	–	–	○	●	○
	2	MultipageTIFF	●	–	–	○	●	○
	3	JFIF(JPEG)	●	–	–	○	●	○
	4	PDF	●	–	–	○	●	○
	5	MultipagePDF	●	–	–	○	●	○
	6	Multi Image Output	●	–	–	○	●	○
	7	Auto Color Detection	●	–	–	○	●	○
Filter	0	Green	○	–	–	N/A	○	N/A
	1	Red	○	–	–	N/A	○	N/A
	2	Blue	○	–	–	N/A	○	N/A
	3	None	○	–	–	N/A	N/A	N/A
	4	White	N/A	–	–	N/A	N/A	N/A
	99	Custom1	N/A	–	–	N/A	N/A	N/A
	100	Custom2	N/A	–	–	N/A	N/A	N/A
	101	Custom3	N/A	–	–	N/A	N/A	N/A
Gamma	0	None	○ * Black & white /grayscale	–	–	N/A	○ * Black & white	N/A
	1	Soft	○ * Black & white /grayscale	–	–	N/A	N/A	N/A
	2	Sharp	○ * Black & white /grayscale	–	–	N/A	N/A	N/A
	3	Gamma Pattern File	○ * Black & white /grayscale	–	–	N/A	N/A	N/A
	4	Custom	○	–	–	N/A	○	N/A
GammaFile			○	–	–	N/A	N/A	N/A
Halftone	0	None	○	–	–	N/A	○	N/A
	1	Dither Pattern0	○	–	–	N/A	○	N/A
	2	Dither Pattern1	○	–	–	N/A	○	N/A
	3	Dither Pattern2	○	–	–	N/A	○	N/A
	4	Dither Pattern3	○	–	–	N/A	○	N/A
	5	Dither pattern File	○	–	–	N/A	○	N/A
	6	Error Diffusion	○	–	–	N/A	○	N/A

Property			fi-4340C				fi-60F	
				E *1	I *2	S *3		S *3
HalftoneFile			○	–	–	N/A	○	N/A
Highlight	1 – 255		○ *Grayscale / color	–	–	N/A	○ *Grayscale / color	N/A
ImageScanner			●	–	–	○	●	○
Indicator		True/False	●	–	–	○	●	○
IsExistsFB	True		○	–	–	○	○	○
	False		N/A	–	–	N/A	N/A	N/A
JobControl	0	None	○	–	–	N/A	N/A	N/A
	1	Include and Continue	○	–	–	N/A	N/A	N/A
	2	Include and Stop	○	–	–	N/A	N/A	N/A
	3	Exclude and Continue	○	–	–	N/A	N/A	N/A
	4	Exclude and Stop	○	–	–	N/A	N/A	N/A
JpegQuality	0	Level1 (High compression ratio)	●	–	–	○	●	○
	1	Level2	●	–	–	○	●	○
	2	Level3	●	–	–	○	●	○
	3	Level4	●	–	–	○	●	○
	4	Level5	●	–	–	○	●	○
	5	Level6	●	–	–	○	●	○
	6	Level7 (High image quality)	●	–	–	○	●	○
LongPage		True/False	○ Black & white 60.680inch (1541mm)	–	–	N/A	N/A	N/A
Mirroring		True/False	N/A	–	–	N/A	N/A	N/A
MultiFeed	0	None	○	–	–	N/A	N/A	N/A
	1	Mode0	○	–	–	N/A	N/A	N/A
	2	Mode1	○	–	–	N/A	N/A	N/A
	3	Mode2	○	–	–	N/A	N/A	N/A
	4	Mode3	○	–	–	N/A	N/A	N/A
NoiseRemoval	0	None	N/A	–	□	N/A	N/A	N/A
	1	Matrix2	N/A	–	□	N/A	N/A	N/A
	2	Matrix3	N/A	–	□	N/A	N/A	N/A
	3	Matrix4	N/A	–	□	N/A	N/A	N/A
	4	Matrix5	N/A	–	□	N/A	N/A	N/A
Orientation	0	Portrait	●	–	–	N/A	●	N/A
	1	Landscape	●	–	–	N/A	●	N/A

Property			fi-4340C				fi-60F	
				E *1	I *2	S *3		S *3
Outline			Black & white / color	–	–	N/A	Black & white / color	N/A
Black & white, or color only	0	None	○/○	–	–	N/A	○/○	N/A
	1	Outline Emphasis Low	○/○	–	–	N/A	○/○	N/A
	2	Outline Emphasis Medium	○/○	–	–	N/A	○/○	N/A
	3	Outline Emphasis High	○/○	–	–	N/A	○/○	N/A
	4	Outline Smooth	○/N/A	–	–	N/A	○/N/A	N/A
	5	Edge Extract (black & white) / De-Screen Level-1 (color)	○Black & white (slice) only /○	–	–	N/A	N/A /○	N/A
	6	De-Screen Level-2	N/A /○	–	–	N/A	N/A /○	N/A
	7	De-Screen Level-3	N/A /○	–	–	N/A	N/A /○	N/A
	8	De-Screen Level-4	N/A /○	–	–	N/A	N/A /○	N/A
OverScan		True/False	○	–	–	N/A	N/A	N/A
Overwrite	0	OFF(Mode0)	●	–	–	○	●	○
	1	ON	●	–	–	○	●	○
	2	Confirm(Mode0)	●	–	–	○	●	○
	3	OFF(Mode1)	●	–	–	○	●	○
	4	Confirm(Mode1)	●	–	–	○	●	○
PageCount			●	–	–	○	●	○
PaperSize			Length / width				Length / width	
	0	A3	N/A /N/A	–	–	N/A	N/A /N/A	N/A
	1	A4	○/N/A	–	–	N/A	N/A /N/A	N/A
	2	A5	○/○	–	–	N/A	N/A /N/A	N/A
	3	A6	○/○	–	–	N/A	○/N/A	N/A
	4	B4	N/A /N/A	–	–	N/A	N/A /N/A	N/A
	5	B5	○/N/A	–	–	N/A	N/A /N/A	N/A
	6	B6	○/○	–	–	N/A	N/A /N/A	N/A
	7	Letter	○/N/A	–	–	N/A	N/A /N/A	N/A
	8	Legal	○/N/A	–	–	N/A	N/A /N/A	N/A
	9	Executive	○/N/A	–	–	N/A	N/A /N/A	N/A
	10	Double Letter	N/A /N/A	–	–	N/A	N/A /N/A	N/A
	11	PostCard	○/○	–	–	N/A	○/ N/A	N/A
	12	Photo	○/○	–	–	N/A	○/ N/A	N/A
	13	Card	○/○	–	–	N/A	○/○	N/A
	99	Custom	○/N/A	–	–	N/A	○/N/A	N/A

Property			fi-4340C				fi-60F	
				E *1	I *2	S *3		S *3
PaperSupply	0	Flatbed	○	–	–	N/A	○	N/A
	1	ADF	○	–	–	N/A	N/A	N/A
	2	ADF(Duplex)	○	–	–	N/A	N/A	N/A
	3	ADF(BackSide)	N/A	–	–	N/A	N/A	N/A
	4	ADF(CarrierSheet Spread A3)	N/A	–	–	N/A	N/A	N/A
	5	ADF(CarrierSheet Spread DL)	N/A	–	–	N/A	N/A	N/A
	6	ADF(CarrierSheet Spread B4)	N/A	–	–	N/A	N/A	N/A
	7	ADF(CarrierSheet Clipping)	N/A	–	–	N/A	N/A	N/A
	10	ADF(CarrierSheet Spread A3)	N/A	–	–	N/A	N/A	N/A
	11	ADF(CarrierSheet Spread DL)	N/A	–	–	N/A	N/A	N/A
	12	ADF(CarrierSheet Spread B4)	N/A	–	–	N/A	N/A	N/A
	13	ADF(CarrierSheet Clipping)	N/A	–	–	N/A	N/A	N/A
	14 – 49	ADF(CarrierSheet Clipping All) – ADF(CarrierSheet Clipping Duplex Custiom)	N/A	–	–	N/A	N/A	N/A
PixelType	0	Black & white	○	–	–	N/A	○	N/A
	1	Grayscale	○	–	–	N/A	○	N/A
	2	RGB color	○	–	–	N/A	○	N/A
PreFiltering		True/False	N/A	–	□	N/A	N/A	N/A
RegionLength			◎	–	–	N/A	◎	N/A
RegionLeft			◎	–	–	N/A	◎	N/A
RegionTop			◎	–	–	N/A	◎	N/A
RegionWidth			◎	–	–	N/A	◎	N/A
Report	0	OFF	●	–	–	○	●	○
	1	Display	●	–	–	○	●	○
	2	File	●	–	–	○	●	○
	3	Display+File	●	–	–	○	●	○
ReportFile			●	–	–	○	●	○
Resolution	0	200 x 200	○	–	–	N/A	○	N/A
	1	240 x 240	○	–	–	N/A	○	N/A
	2	300 x 300	○	–	–	N/A	○	N/A
	3	400 x 400	○	–	–	N/A	○	N/A
	4	500 x 500	○	–	–	N/A	○	N/A
	5	600 x 600	○	–	–	N/A	○	N/A
	6	700 x 700	○* Black & white only	–	–	N/A	N/A	N/A
	7	800 x 800	○* Black & white only	–	–	N/A	N/A	N/A
	99	Custom	○	–	–	N/A	○	N/A
Reverse		True/False	○* Black & white only	–	–	N/A	○	N/A
Rotation	0	None	●	–	–	N/A	●	N/A
	1	R90	●	–	–	N/A	●	N/A
	2	R180	●	–	–	N/A	●	N/A
	3	R270	●	–	–	N/A	●	N/A
ScanCount			○	–	–	○	N/A	N/A

Property			fi-4340C				fi-60F	
				E *1	I *2	S *3		S *3
ScanTo	0	File	●	–	–	○	●	○
	1	Dib Handle	●	–	–	○	●	○
	2	Raw Image Handle	●	–	–	○	●	○
SEE	0	OFF	○	–	–	N/A	N/A	N/A
	1	ON	○	–	–	N/A	N/A	N/A
Shadow	0 – 254		○ *Grayscale / color	–	–	N/A	○ *Grayscale / color	N/A
ShowSourceUI		True/False	●	–	–	○	●	○
SilentMode		True/False	●	–	–	○	●	○
SkipBlackPage	0 – 15		○	–	–	N/A	N/A	N/A
SkipWhitePage	0 – 15		○	–	–	N/A	N/A	N/A
Smoothing		True/False	N/A	–	□	N/A	N/A	N/A
SourceCurrentScan		True/False	●	–	–	N/A	●	N/A
Threshold	1 – 255	Binary (Black and White)	○	–	–	N/A	○	N/A
		Halftone (Halftone = 1 – 6)	N/A	–	–	N/A	N/A	N/A
		Automatic separation (AutoSeparation = 1)	N/A	–	□	N/A	N/A	N/A
		Selectable edge enhancement (SEE = 1)	N/A	–	–	N/A	N/A	N/A
		Grayscale	N/A	–	–	N/A	N/A	N/A
		Color	N/A	–	–	N/A	N/A	N/A
	0	Automatic binarization (simple or complete)	○Simple	–	□ Complete	N/A	○Simple	N/A
ThresholdCurve	0	Curve1	N/A	–	□	N/A	N/A	N/A
	1	Curve2	N/A	–	□	N/A	N/A	N/A
	2	Curve3	N/A	–	□	N/A	N/A	N/A
	3	Curve4	N/A	–	–	N/A	N/A	N/A
	4	Curve5	N/A	–	–	N/A	N/A	N/A
	5	Curve6	N/A	–	–	N/A	N/A	N/A
	6	Curve7	N/A	–	–	N/A	N/A	N/A
	7	Curve8	N/A	–	–	N/A	N/A	N/A
TwainDS			●	–	–	○	●	○
UndefinedScanning		True/False	○	–	–	N/A	N/A	N/A
Unit	0	Inches	●	–	–	N/A	●	N/A
	1	Centimeters	●	–	–	N/A	●	N/A
	2	Pixels	●	–	–	N/A	●	N/A

5.2 Error code and how to fix error

The following describes error countermeasures and attributes for each error number.

■: Errors caused by hardware (critical), □: Errors caused by hardware (non-critical)

●: Errors caused by software (critical), ○: Errors caused by software (non-critical)

Error Number		Countermeasures	Atr.
0x00000000	EC_SUCCESS	-	-
0x00000001	EC_NOT_READY (Device is not ready)	Initialization in progress. Try again after the device becomes ready. Errors are numbered in the form of "0x00000001" so that they will be compatible with the numbering by the old versions.	□
0x00000002	EC_DETECT_SPECIAL_PAPER (Detected a special document)	Special document detection error. An error to notify the user. Check the document status.	□
0x00000003	EC_JAM (A paper jam has occurred)	Check the document status and try again.	□
0x00000004	EC_OPENED_ADFCOVER (ADF cover, or endorser / imprinter cover is open)	Close the ADF cover and try again. Note: Some devices report the error number 0x0000001B or 0x0000002A when the ADF cover is open.	□
0x00000005	EC_NOT_ENOUGH_PAPER (No more documents left)	Check the document status.	□
0x00000006	EC_RUNDOWN_FUSE_FBMOTOR (Motor fuse for FB is blown)	The part should be replaced, or the part may have failed. Refer to the User's Guide for your device.	■
0x00000007	EC_RUNDOWN_FUSE_ADFMOTOR (Motor fuse for ADF is blown)	The part should be replaced, or the part may have failed. Refer to the User's Guide for your device.	■
0x00000008	EC_RUNDOWN_FUSE_HEATER (Fuse for heater is blown)	The part should be replaced, or the part may have failed. Refer to the User's Guide for your device.	■
0x00000009	EC_RUNDOWN_FUSE_LAMP (Fuse for lamp is blown)	The part should be replaced, or the part may have failed. Refer to the User's Guide for your device.	■
0x0000000A	EC_RUNDOWN_FUSE_ENDORSER (Fuse for Endorser or Imprinter is blown)	The part should be replaced, or the part may have failed. Refer to the User's Guide for your device.	■
0x0000000B	EC_RUNDOWN_SYSTEM (Abnormal device drive system)	The carrier unit may be locked. Or the part should be replaced, or the part may have failed. Refer to the User's Guide for your device.	■
0x0000000C	EC_ABNORMAL_LIGHTLEVEL (Abnormal light level)	The part should be replaced, or the part may have failed. Refer to the User's Guide for your device.	■
0x0000000D	EC_CANNOT_CONTROL_SPC (Internal target error)	The part should be replaced, or the part may have failed. Refer to the User's Guide for your device.	■
0x0000000E	EC_ABNORMAL_ENDORSER (Endorser / Imprinter error)	The part should be replaced, or the part may have failed. Refer to the User's Guide for your device.	■
0x0000000F	EC_INVALID_COMMAND (Invalid command)	An illegal process in the driver or control, or an unknown device failure. Restart the computer and scanner device and try again.	● ■

Error Number		Countermeasures	Atr.
0x00000010	EC_INVALID_CDB_FIELD (Unknown code in the CDB field)	An illegal process in the driver or control, or an unknown device failure. Restart the computer and scanner device and try again.	● ■
0x00000011	EC_UNSUPPORTED_LOGICAL_UNIT (Unsupported logical unit)	An illegal process in the driver or control, or an unknown device failure. Restart the computer and scanner device and try again.	● ■
0x00000012	EC_INVALID_PARAM_FIELD (Invalid parameter field)	An illegal process in the driver or control, or an unknown device failure. Restart the computer and scanner device and try again.	● ■
0x00000013	EC_ABNORMAL_WINDOWID (Window ID combination error)	An illegal process in the driver or control, or an unknown device failure. Restart the computer and scanner device and try again.	● ■
0x00000014	EC_ERROR_SEQUENCE (Sequence error)	An illegal process in the driver or control, or an unknown device failure. Restart the computer and scanner device and try again.	● ■
0x00000015	EC_UNIT_ATTENTION (Device is being reset)	Initialization in progress. Try again after the device becomes ready.	□
0x00000016	EC_ERROR_TRANSFER_IMAGE (Image transfer error)	The internal memory of the device may be insufficient. Reduce the scan image size and try again.	□ ○
0x00000017	EC_ERROR_SCSI_PARITY (SCSI parity error)	The interface section (SCSI card, SCSI cable, etc.) of the device may have failed. Check the interface section.	■
0x00000018	EC_ERROR_LOAD_SM (Source manager load error)	The scanner driver may not be installed correctly. Check if the scanner driver is installed correctly.	○
0x00000019	EC_ERROR_OPEN_SM (Source manager open error)	The scanner driver may not be installed correctly. Check if the scanner driver is installed correctly.	○
0x0000001A	EC_ERROR_OPEN_DS (Data source open error)	The device may not be powered on, the scanner driver may be in use by another application, or the scanner driver may not be installed correctly. Check the power on the device, terminate any other applications, or check if the scanner driver is installed correctly.	○
0x0000001B	EC_ERROR_ENABLE_DS (Data source enable error)	The device may have an error. This may be output if the ADF cover is open when the ClearPage is issued. Or cancellation is responded to the message "Please wait for the scanner lamp to warm up." or "Please perform user authentication by fi-5000N before scanning."	○ □
0x0000001D	EC_DEVICE_NOT_FOUND (Cannot find the connected device)	Check if the device is connected correctly and if the device is powered on. Also, check if the device is being used by another application. If using the scanner-sharing device (fi-5000N), check if the device is being used by other users.	○ □
0x0000001E	EC_UNSUPPORTED_XFERMECH (Transfer mode is not supported)	An unsupported transfer mode has been specified. Modify the ScanTo property and try again.	○
0x0000001F	EC_UNSUPPORTED_FILE_TYPE (File type is not supported)	An unsupported file type has been specified. Modify the FileType property and try again.	○

Error Number		Countermeasures	Atr.
0x00000020	EC_CANNOT_MAKE (Cannot create a file)	Check the character string (file path) specified in the FileName property.	○
0x00000022	EC_UNSUPPORTED_DS_UIONLY (Data source does not support the configuration screen only mode)	Check the version of the Fujitsu TWAIN driver.	○
0x00000023	EC_INVALID_WINDOWHANDLE (Window handle of the application is invalid)	The specified Window handle is invalid. Check if the Window handle is specified correctly.	○
0x00000024	EC_UNSUPPORTED_DEVICEONLINE (Data source in use does not support the DeviceOnline function)	The version of the scanner driver may be old. Or, other company's scanner driver may have been specified. Check the specified scanner driver.	○
0x00000025	EC_UNSUPPORTED_FEEDER (ADF is not supported)	The ADF is not supported. Check if the device is equipped with an ADF. Also, check the PaperSupply property and try again.	□
0x00000026	EC_UNSUPPORTED_FLATBED (Flatbed (FB) is not supported)	The flatbed (FB) is not supported. Check the PaperSupply property and try again.	□
0x00000027	EC_ERROR_FEEDPAGE (Paper feed error)	Check if there are any documents on the ADF.	□
0x00000028	EC_ERROR_CLEARPAGE (Paper eject error (or the ClearPage function is not supported))	Check if a paper jam has occurred. Or, check if the driver supports the ClearPage function.	■
0x00000029	EC_ERROR_NOT_DS_FJTWAIN (PRODUCT FAMILY is not "FUJITSU")	A non-Fujitsu TWAIN driver error. Check the currently selected driver source and select the Fujitsu TWAIN driver.	○
0x0000002A	EC_ERROR_CANCELED (Canceled by the user, or detected an error which causes the device to be unable to continue scanning)	A cancel detection error. An error to notify the user. Or, an error which causes the device to be unable to continue scanning (insufficient disk space, pattern file error, insufficient memory, image transfer error, etc.) Check the available disk space of the drive specified in the FileName property, check if the pattern file is correct, and reduce the scan image size and resolution and try again.	□ ○
0x0000002B	EC_ERROR_MAX_CONNECTIONS (Driver is in use by another application)	The driver is in use by another application. Try again after other applications are finished.	○
0x0000002C	EC_ERROR_LOW_MEMORY (Insufficient memory)	Reduce the scan image size and resolution, and try again.	○
0x0000002D	EC_ERROR_LOW_DISK (Insufficient disk space, or file writing error)	Check the available disk space on the drive specified in the FileName property. And check if any other error is occurring.	○
0x0000002E	EC_ERROR_ACCESSDENIED (File is in use)	Check the file path specified in the FileName property.	○
0x0000002F	EC_ERROR_ENV_SAVEFILE (File save environment error)	Check the file path specified in the FileName property.	○

Error Number		Countermeasures	Atr.
0x00000030	EC_ERROR_WRITEDENIED_FILE (No write privileges to the file)	Check the file path specified in the FileName property.	○
0x00000031	EC_ERROR_UNSETING_FILENAME (File name is not specified)	Indicate the file name in the file path specified in the FileName property.	○
0x00000032	EC_ERROR_BAD_PATH (Specified path is invalid)	Check if the file path is correctly specified in the FileName property.	○
0x00000033	EC_ERROR_WRITEDENIED_DIRECTORY (No write privileges to the specified directory)	Check if you have write privileges on the directory in the file path specified in the FileName property.	○
0x00000034	EC_ERROR_NOT_NCEVENT (Not the NegotiateCapabilities event)	Call the GetCapability or SetCapability method using the NegotiateCapabilities event.	○
0x00000035	EC_ERROR_BAD_PARAMETER (Specified parameter is invalid)	The parameter specified for the GetCapability method is invalid. Check the parameter.	○
0x00000036	EC_DOUBLEFEED (Detected paper multi-feed or double-feed)	A paper multi-feed (double-feed) detection error. An error to notify the user. Check the document status and try again.	□
0x00000037	EC_ABNORMAL_IPCOPTION (Anomaly in IPC option)	The part should be replaced, or the part may have failed. Refer to the User's Guide for your device.	■
0x00000038	EC_ADF_SETUPERROR (ADF setup error)	The ADF pick roller may be attached incorrectly, or the device may have failed. Refer to the User's Guide for your device.	■
0x00000039	EC_ABNORMAL_ENDORSER_PRINTAREA (Imprinter (Endorser) print area specification error)	The print area specification in Imprinter (Endorser) is invalid. Modify the print position.	□
0x0000003A	EC_ENDORSER_PRINTHEAD_CHECK (Check Imprinter (Endorser) ink cartridge)	Check the ink cartridge for Imprinter (Endorser).	□
0x0000003B	EC_UNSUPPORTED_FEEDERLOADED (FeederLoaded method is not supported)	The version of the scanner driver may be old. Or, other company's scanner driver may have been specified. Check the specified scanner driver.	○

Error Number		Countermeasures	Atr.
0x00000062	EC_ERROR_SYSENV (System environment error)	Restart the computer and scanner device and try again. If the error persists, contact Fujitsu Support.	•
0x00000063	EC_ERROR_INTERNAL (Internal error)	Restart the computer and scanner device and try again. If the error persists, contact Fujitsu Support.	•
0x000003E9	EC_ERROR_CS_VLINE_NOT_FOUND (The vertical line on the Carrier Sheet not sensed)	Failed to process images as the vertical line on the Carrier Sheet was not sensed. Retry. If the error persists, contact Fujitsu Support.	• ■
0x000003EA	EC_ERROR_CS_HLINE_NOT_FOUND (The horizontal line on the Carrier Sheet not sensed)	Failed to process images as the horizontal line on the Carrier Sheet was not sensed. Retry. If the error persists, contact Fujitsu Support.	• ■
0x000003EC	EC_ERROR_CS_INPUT_ERROR (Illegal input parameters for merging the images scanned using the Carrier Sheet)	The material you scanned is not a Carrier Sheet. Load the Carrier Sheet again, and then retry.	•
0x000007D0	EC_ERROR_CS_INVALID_DS (Data source not supported Carrier Sheet)	The specified data source (Image Processing Software Option) does not support the Carrier Sheet. Do not specify Image Processing Software Option as the data source.	○
0x01050000	The specified read area is not suitable for the document size when the AutoBorderDetection function and Read Area Specification function are combined. Or the document detection sensor error occurs.	Change the read area specification. Or the part should be replaced, or the part may have failed.	○ ■
0x02000001	EC_ERROR_JAVA_NOINITIALIZE	Internal initialization for Java is not called. Call internal initialization for Java.	○
0x02000002	EC_ERROR_JAVA_SDKABNORMITY	An SDK environmental error occurred. Check if the SDK is installed properly.	•
0x02000003	EC_ERROR_METHOD_SEQUENCE	The method is being executed in another form. Try again after the current execution of the method has completed.	•
0x02000004	EC_ERROR_SIPC_NOTINSTALL	The Image Processing Software Option is not installed. Install the Image Processing Software Option.	•
0x02000005	EC_ERROR_TEMPLATEGET	Failed to acquire the total number/names/numbers of templates in the Image Processing Software Option. Check if the Image Processing Software Option is installed properly.	•
0x02000006	EC_ERROR_TEMPLATESET	Failed to configure numbers for templates in the Image Processing Software Option. Check if the Image Processing Software Option is installed properly.	•
0x02000007	EC_ERROR_FISCN_NOTFOUND	Resource file "FiScn.dll" was not found. Check if the "FiScn.dll" file is stored together with "FiScn.jar" in the same place.	○
0x02000010	EC_ERROR_TWAIN_NOTINSTALL	TWAIN driver is not installed. Install a TWAIN driver.	•

Error Number		Countermeasures	Atr.
0x02000011	EC_ERROR_TWAIN_TEMPLATEGET	Failed to acquire the total number/names/numbers of setting files in the TWAIN driver. Check if the TWAIN driver is installed properly.	•
0x02000012	EC_ERROR_TWAIN_TEMPLATESET	Failed to configure the setting file numbers in the TWAIN driver. Check if the TWAIN driver is installed properly.	•
0x02000100	EC_ERROR_FISCN_UNKNOWN	A system error occurred. Retry the process. If the error persists, contact Fujitsu Support.	•
0x0F000000 - 0x0F00FFFF	Error details set when the GetCapability/SetCapability method is called.	The Condition Code in the TWAIN protocol is set at lower 2-byte. Refer to http://www.twain.org/ for the TWAIN protocol.	○
0xFFFFFC16	EC_ERROR_CS_MEMORY (Insufficient Memory)	Failed to process the images scanned with the Carrier Sheet due to a memory failure. Retry. If the error persists, contact Fujitsu Support.	•

If the problem persists after applying the above countermeasures, or returns error codes other than the above, make a note of the error code and contact Fujitsu Support.

5.3 Relationships Between Properties

The following describes relationships between properties. Since some properties also have priority order; refer also to "**5.4 Property Priority Order**."
A property is invalid (ignored) if a valid condition is not configured on a target property.
Also, the property is invalid if even one invalid condition is configured on a property.
Note: Properties which are not supported by some devices are not taken into consideration in the following table. (* Refer to "5.1 Properties Enabled According to Devices.")

Property	Conditions (property values) which make the property on the left valid or invalid		
	Valid / Invalid	Property	Value
AutoBorderDetection	N/A Disabled.	UndefinedScanning	"True"
	N/A Disabled.	PaperSupply	"0 - Flatbed" "4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)" "10 – ADF(CarrierSheet Clipping)" - "49 – ADF(CarrierSheet Clipping Duplex Custom)"
AutoSeparation	○Valid	PixelType	"0 - Black & White"
BackgroundColor	N/A Disabled.	AutoBorderDetection	"True"
	N/A Disabled	OverScan	"1 – On"
	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)" "10 – ADF(CarrierSheet Clipping)" - "49 – ADF(CarrierSheet Clipping Duplex Custom)"
	N/A Disabled.	UndefinedScanning	"True"
Binding	○Valid	PaperSupply	"2 - ADF(Duplex)"
	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
Brightness	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
CloseSourceUI	○Valid	ShowSourceUI	"True"
CompressionType	N/A Disabled.	FileType	"0 - BMP" Note: Except when the ScanTo property is set to "2 – Raw Image Handle"

Property	Conditions (property values) which make the property on the left valid or invalid		
	Valid / Invalid	Property	Value
CompressionType “6 – Old JPEG”	N/A Disabled.	①FileType	"4 - PDF" "5 - Multipage PDF"
		②PixelType	"1 - Grayscale" "2 - RGB"
CompressionType "1 - CCITT G3(1D)" "2 - CCITT G3(2D) KFactor = 2" "3 - CCITT G3(2D) KFactor = 4" "4 - CCITT G4" "6 - Old JPEG"	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
Contrast	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
CustomGamma	○Valid	Gamma	"4 – Custom"
	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
CustomPaperLength, CustomPaperWidth	○Valid	PaperSize	"99 - Custom"
CustomResolution	○Valid	Resolution	"99 - Custlom"
Endorser	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)" "10 – ADF(CarrierSheet Clipping)" - "49 – ADF(CarrierSheet Clipping Duplex Custom)"
EndorserCountDirection, EndorserCounter, EndorserCountStep, EndorserDirection EndorserOffset, EndorserString	○Valid	Endorser	"True"
FileCounter	○Valid	ScanTo	"0 - File"
FileName	○Valid	ScanTo	"0 - File"
FileType	○Valid	ScanTo	"0 - File"
Filter	N/A Disabled.	PixelType	"2 - RGB"
Gamma	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"

Property	Conditions (property values) which make the property on the left valid or invalid		
	Valid / Invalid	Property	Value
GammaFile	○Valid	Gamma	"3 - Gamma Pattern File"
Halftone	○Valid	PixelType	"0 - Black & White"
	○Valid	CompressionType	"0 – No Compress"
HalftoneFile	○Valid	Halftone	"5 - Dither Pattern File"
Highlight	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
	○Valid	PixelType	"2 - RGB"
	○Valid	①Gamma	"4 - Custom"
		②PixelType	"1 - Grayscale"
Indicator	○Valid	ShowSourceUI	“False”
JpegQuality	○Valid	①ScanTo	"0 - File"
		②FileType	"3 - JPEG" "4 - PDF" "5 - Multipage PDF"
	○Valid	①ScanTo	"0 - File"
		②FileType	"1 - TIFF", "2 - Multipage TIFF"
		③CompressionType	“5 - JPEG”, “6 - Old JPEG”
LongPage	○Valid	PaperSize	"99 - Custom"
	N/A Disabled.	PaperSupply	"0 - Flatbed" "3 - ADF(BackSide)" "4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)" "10 – ADF(CarrierSheet Clipping)" - "49 – ADF(CarrierSheet Clipping Duplex Custom)"
MultiFeed	N/A Disabled.	PaperSupply	"0 – Flatbed" "4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
NoiseRemoval	○Valid	①PixelType	"0 - Black & White"
		②Threshold	"0"
Orientation	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
Outline	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"

Property	Conditions (property values) which make the property on the left valid or invalid		
	Valid / Invalid	Property	Value
Outline – “0 – None” “1 - Outline Emphasis Low” “2 - Outline Emphasis Mid” “3 - Outline Emphasis High” “4 - Outline Smooth” “5 - Edge Extract”	○Valid	PixelType	"0 - Black & White"
Outline – “0 – None” “1 - Outline Emphasis Low” “2 - Outline Emphasis Mid” “3 - Outline Emphasis High” “5 - De-Screen Level 1” “6 - De-Screen Level 2” “7 - De-Screen Level 3” “8 – De-Screen Level 4”	○Valid	PixelType	"2 - RGB"
OverScan	N/A Disabled.	AutoBorderDetection	"True"
	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)" "10 – ADF(CarrierSheet Clipping)" - "49 – ADF(CarrierSheet Clipping Duplex Custom)"
	N/A Disabled.	UndefinedScanning	"True"
Overwrite	○Valid	ScanTo	"0 - File"
PaperSize	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)" "10 – ADF(CarrierSheet Clipping)" - "49 – ADF(CarrierSheet Clipping Duplex Custom)"
PixelType- "0 – Black&White"	N/A Disabled.	FileType	"3 - JPEG"
	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
PixelType- "1 - Grayscale"	N/A Disabled.	①ScanTo	"0 - File"
		②FileType	"1 - TIFF", "2 - Multipage TIFF"
		③CompressionType	"1 - CCITT G3(1D)" "2 - CCITT G3(2D) KFactor = 2" "3 - CCITT G3(2D) KFactor = 4" "4 - CCITT G4"
	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"

Property	Conditions (property values) which make the property on the left valid or invalid		
	Valid / Invalid	Property	Value
PreFiltering	○Valid	①PixelType	"0 - Black & White"
		②Threshold	"0"
RegionLeft RegionLength RegionTop RegionWidth	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)" "10 – ADF(CarrierSheet Clipping)" - "49 – ADF(CarrierSheet Clipping Duplex Custom)"
ReportFile	○Valid	Report	"2 – File," "3 – Display+File"
Reverse	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
Rotation	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
ScanCount	N/A Disabled.	PaperSupply	"0 - Flatbed" "4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
ScanTo – “2 – Raw Image Handle”	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)" "10 – ADF(CarrierSheet Clipping)" - "49 – ADF(CarrierSheet Clipping Duplex Custom)"

Property	Conditions (property values) which make the property on the left valid or invalid		
	Valid / Invalid	Property	Value
SEE	○Valid	PixelType	"0 - Black & White"
	N/A Disabled.	AutoSeparation	"ON"
	N/A Disabled.	Halftone	“0 – None”
Shadow	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
	○Valid	PixelType	"2 - RGB"
	○Valid	①Gamma	"4 - Custom"
		②PixelType	"1 - Grayscale"
ShowSourceUI	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
SkipBlackPage SkipWhitePage	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)"
Smoothing	○Valid	①PixelType	"0 - Black & White"
		②Threshold	"0"
ThresholdCurve	○Valid	①PixelType	"0 - Black & White"
		②Threshold	"0"
UndefinedScanning	N/A Disabled.	PaperSupply	"4 – ADF(CarrierSheet Spread A3)" "5 – ADF(CarrierSheet Spread DL)" "6 – ADF(CarrierSheet Spread B4)" "7 – ADF(CarrierSheet Clipping)" "10 – ADF(CarrierSheet Clipping)" - "49 – ADF(CarrierSheet Clipping Duplex Custom)"

Note: When the SourceCurrentScan property is set to "True," all properties are invalid except the ScanTo, FileType, FileName, CompressionType, ScanCount, ShowSourceUI, SilentMode, FileCounter, and JpegQuality properties.

5.4 Property Priority Order

There are the following cases where only one property (effect) becomes valid (others are all invalid) even if valid values are set on multiple properties (effects).
The following indicates that the properties on the right of an inequality sign take precedence over the properties on the left.
Note: Properties which are not supported by some devices are not taken into consideration in the following table. (* Refer to "5.1 Properties Enabled According to Devices.")

- BackgroundColor < OverScan < AutoBorderDetection < UndefinedScanning

- PixelType "0 - Black & White" < Threshold "0" < Halftone < SEE < AutoSeparation < PixelType "1 - Grayscale," "2 - RGB"

- PixelType "1 - Grayscale", "2 - RGB" < CompressionType "1 - CCITT G3(1D)," "2 - CCITT G3(2D) KFactor = 2," "3 - CCITT G3(2D) KFactor = 4," "4 - CCITT G4"
  (Only when the FileType property is set to "1 - TIFF" or "2 - Multipage TIFF.")

- PixelType “0 – Black&White”,"1 - Grayscale" < PaperSupply "4 – ADF(CarrierSheet Spread A3)","5 – ADF(CarrierSheet Spread DL)","6 – ADF(CarrierSheet Spread B4)","7 – ADF(CarrierSheet Clipping)"

5.5 Valid Specifications When Using the Image Processing Software Option

Property
  Refer to "5.1 Valid Properties for Devices."
Method
  All methods are valid except the SetCapability and GetCapability methods.
Event
  All events are valid.

5.6 Explanation of Terms Used

ASPI (Advanced SCSI Programming Interface)
Advanced SCSI interface driver. One of the SCSI interface drivers which has a general application interface.

Capability
A function which is used to communicate with the source (driver) by the TWAIN interface.

TWAIN
A standard specification for communications between a software application and an image input device such as an image scanner.

Imprinter (Endorser)
A type of printer mechanism and an optional device for the fi series image scanners. Image scanners equipped with this optional device are able to print numbers to identify documents before and after the scan. (Some image scanners do not support this option)

Gamma adjustment
An adjustment which brightens or darkens the image sensor output which is proportional with the light reflected from the document.

Image Processing Software Option
An optional software product which provides high quality image processing at low price for image scanners which is not supported by image processing boards.

Image processing board
An optional board which provides high speed and high quality image processing on scanned image data before transmitting it to an image processing application. (Some image scanners do not support this option)

Error diffusion method
A pseudo halftone method which balances high gradation quality and high resolution quality, by rearranging black pixels in their density order based upon the sum total of density of focused pixels and surrounding pixels, and the relationship between adjacent pixels.

Contrast
The ratio between the brightest part and darkest part of an image on the document. Contrast is high where black and white are distinct.

Silent mode
A mode which does not issue notifications such as error messages.

Background adjustment
An automatic contrast adjustment applied when scanning a document whose background is not white.

Automatic separation

A process which captures lines in black and white, and images in halftone by distinguishing line areas (characters) and image areas (photos) at scanning.

Jam

A state that the document clogs up at the middle of the transfer route in an image scanner.

Job control

Control of a process which is performed when a special document (document of a particular form) is detected.

Threshold

A threshold value used as criteria to distinguish black and white on a black and white image.

Selectable edge enhancement

A process to scan both the line areas (characters) and image areas (photos) using halftone and to enhance line areas only.

Source (data source)

The control section of image scanners such as "FUJITSU TWAIN32 driver."

Source manager (data source manager)

Indicates TWAIN.DLL or TWAIN_32.DLL. An application and a source (driver) communicate through this source manager.

Multi-feed (double-feed)

A phenomenon where two or more pages of a document are fed together.

Halftone process

A process to express pseudo gray using black and white.

Dropout color

Colors of characters or images which are printed on a document; though they are visible to the human eye, they do not appear on the image scanned by an image scanner.

Brightness

Degree of luminosity on the image.

Outline smoothing

This process removes rough lines and will smooth curved lines in the image.

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