| *** Basic Information ***                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Create date] 2018/10/09                                                                                                                                                                                                                                                                             |
| [Program Name] NetworkDocBox                                                                                                                                                                                                                                                                         |
| [Version] 1.02                                                                                                                                                                                                                                                                                       |
| [PCB No.]                                                                                                                                                                                                                                                                                            |
| [Interchangeability] X / O                                                                                                                                                                                                                                                                           |
| [Other Firmware Requirements] None                                                                                                                                                                                                                                                                   |
| [PCB Requirements] None                                                                                                                                                                                                                                                                              |
| [Software category] Normal Release                                                                                                                                                                                                                                                                   |
| [Release category] Normal Release                                                                                                                                                                                                                                                                    |
| [Program category] Firmware                                                                                                                                                                                                                                                                          |
| Exported to(language) GEN(all) [Firmware No.] M1115245E [File Information] File Name M1115245E.fwu File Type Module for Service Size 0.96 MB ( 1005424 byte ) [File Information] File Name M1115245E.rfu File Type Module for Remote Upgrade Size 0.97 MB ( 1011968 byte ) [Availability of RFU] Yes |
| *** Note ***                                                                                                                                                                                                                                                                                         |
| [Note]                                                                                                                                                                                                                                                                                               |
| ======================================                                                                                                                                                                                                                                                               |
| [Important Notes]                                                                                                                                                                                                                                                                                    |
| *** Modification History ***                                                                                                                                                                                                                                                                         |

[Modifications made:]
Rank C

Other changes:

- The following values can be set with solution software that uses SOAP I/F.
- "SNMPv3 Setting"
  - SNMPv3 Trap Communication
  - Encryption Algorithm
  - Permit SNMPv3 Communication
- "Program/Change Administrator"
  - Encryption Password

-----

[Modification history]

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Version 1.01 1st Mass production

| *** Basic Information ***                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Create date] 2018/07/11                                                                                                                                                                                                                                                                         |
| [Program Name] Engine                                                                                                                                                                                                                                                                            |
| [Version] 1.24:14                                                                                                                                                                                                                                                                                |
| [PCB No.]                                                                                                                                                                                                                                                                                        |
| [Interchangeability] X / O                                                                                                                                                                                                                                                                       |
| [Other Firmware Requirements] None                                                                                                                                                                                                                                                               |
| [PCB Requirements] None                                                                                                                                                                                                                                                                          |
| [Software category] Normal Release                                                                                                                                                                                                                                                               |
| [Release category] Normal Release                                                                                                                                                                                                                                                                |
| [Program category] Firmware                                                                                                                                                                                                                                                                      |
| Exported to(language) GEN(all) [Firmware No.] M1115152G [File Information] File Name M1115152G.fwu File Type Module for Service Size 0.94 MB (983736 byte ) [File Information] File Name M1115152G.rfu File Type Module for Remote Upgrade Size 0.95 MB (991488 byte ) [Availability of RFU] Yes |
| [Production reflection] 2018/02                                                                                                                                                                                                                                                                  |
| ======================================                                                                                                                                                                                                                                                           |
| ======================================                                                                                                                                                                                                                                                           |

| *** Modification History ***                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Modifications made:] Rank C                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Symptom corrected:  - The timing of the cleaning of the Image Transfer Belt was changed to prevent a black line from being printed on the back side of the paper.  - The paper transfer bias voltage for IBACC was changed from positive to negative to prevent the side edge of the paper becoming dirty.  - If the outside air temperature drops below 15 degrees Celsius when printing in black and white mode, the mixed-color toner might stain the paper. |
| Other changes: - Added a reverse-rotating feature for the Image Transfer Belt to remove paper dust that can accumulate on the belt and stain the paper.                                                                                                                                                                                                                                                                                                         |
| [Modification history]                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Version 1.22:14 Symptom Corrected: The image density of a black solid image might be low due to variations in the ID sensor.                                                                                                                                                                                                                                                                                                                                    |
| Version 1.21:14 Supported: - Edge to Edge Print NOTE: There is a limitation in the printable width even when this feature is enabled due to width of the LED (211mm).  Fixed:                                                                                                                                                                                                                                                                                   |
| - SC332 under high print volume and low coverage                                                                                                                                                                                                                                                                                                                                                                                                                |
| Version 1.20:14 Symptom corrected: - Printing speed can falsely be adjusted in the SP mode SC641-02 may occur, if the door is opened immediately after the machines wakes from the sleep mode.                                                                                                                                                                                                                                                                  |
| Version 1.19:14 1st Mass production                                                                                                                                                                                                                                                                                                                                                                                                                             |

| *** Basic Information ***                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Create date] 2019/05/24                                                                                                                                                                                                                                                                                 |
| [Program Name] Network Support                                                                                                                                                                                                                                                                           |
| [Version] 15.70                                                                                                                                                                                                                                                                                          |
| [PCB No.]                                                                                                                                                                                                                                                                                                |
| [Interchangeability] X / O                                                                                                                                                                                                                                                                               |
| [Other Firmware Requirements] None                                                                                                                                                                                                                                                                       |
| [PCB Requirements] None                                                                                                                                                                                                                                                                                  |
| [Software category] Normal Release                                                                                                                                                                                                                                                                       |
| [Release category] Normal Release                                                                                                                                                                                                                                                                        |
| [Program category] Firmware                                                                                                                                                                                                                                                                              |
| Exported to(language) GEN(all) [Firmware No.] M1115254H [File Information] File Name M1115254H.fwu File Type Module for Service Size 10.46 MB ( 10971692 byte ) [File Information] File Name M1115254H.rfu File Type Module for Remote Upgrade Size 10.47 MB ( 10977536 byte ) [Availability of RFU] Yes |
| *** Note ***                                                                                                                                                                                                                                                                                             |
| [Note]                                                                                                                                                                                                                                                                                                   |
| *** Important Notes ***                                                                                                                                                                                                                                                                                  |
| [Important Notes]                                                                                                                                                                                                                                                                                        |
| *** Modification History ***                                                                                                                                                                                                                                                                             |

| [Modifications made:] Rank C                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Symptom corrected:  - DNS name resolution for the device might fail if DDNS is enabled in a DHCPv6 environment.  - The DHCP address renewal request might be discarded when the DHCP server is configured as a failover cluster.                                                                                                                                                                                                                 |
| [Modification history]                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Version 15.69<br>Rank C                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Symptom corrected:  - Fixed unnecessary processing affecting hard disk failure and deterioration.  - Unnecessary logs are recorded in the system logs when connecting to the network through a wireless LAN.  - In wireless LAN infrastructure mode, if changing the settings when the PSK in WPA2-PSK is empty, SC899 occurs.  - The device might fail to obtain the fax transmission result using FTP.  - SC819 might occur after ARFU or RFU. |
| Version 15.68 Symptom Corrected: - When the device is in STR mode, printing might stop and not be able to be conducted until the device is rebooted.                                                                                                                                                                                                                                                                                             |
| Other Changes:  - The default value of "Algorithm Signature" has been changed from SHA1-RSA 2048 to SHA256-RSA 2048 when the device creates a new device certificate.                                                                                                                                                                                                                                                                            |
| Version 15.67 Other changes: Minor bug correction.                                                                                                                                                                                                                                                                                                                                                                                               |
| Version 15.66 1st Mass production                                                                                                                                                                                                                                                                                                                                                                                                                |

| *** Basic Information ***                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Create date] 2019/05/27                                                                                                                                                                                                                                                                                                                  |
| [Program Name] System                                                                                                                                                                                                                                                                                                                     |
| [Version] 1.15                                                                                                                                                                                                                                                                                                                            |
| [PCB No.]                                                                                                                                                                                                                                                                                                                                 |
| [Interchangeability] X / O                                                                                                                                                                                                                                                                                                                |
| [Other Firmware Requirements] None                                                                                                                                                                                                                                                                                                        |
| [PCB Requirements] None                                                                                                                                                                                                                                                                                                                   |
| [Software category] Normal Release                                                                                                                                                                                                                                                                                                        |
| [Release category] Normal Release                                                                                                                                                                                                                                                                                                         |
| [Program category] Firmware                                                                                                                                                                                                                                                                                                               |
| Exported to(language) GEN(all) [Firmware No.] M1365218A [File Information] File Name M1365218A.fwu File Type Module for Service Size 22.48 MB ( 23568532 byte ) [File Information] File Name M1365218A.rfu File Type Module for Remote Upgrade Size 22.48 MB ( 23576832 byte ) [Availability of RFU] Yes  [Production reflection] 2019/05 |
| *** Note ***                                                                                                                                                                                                                                                                                                                              |
| [Note]                                                                                                                                                                                                                                                                                                                                    |
| *** Important Notes ***                                                                                                                                                                                                                                                                                                                   |
| [Important Notes]                                                                                                                                                                                                                                                                                                                         |
| *** Modification History ***                                                                                                                                                                                                                                                                                                              |

| [Modifications made:] Rank C                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Symptom corrected: - Wireless direct connection might fail in Group Owner Mode Image log might not be sent and stay in the device.                                                                    |
| [Modification history]                                                                                                                                                                                |
| Version 1.14 Rank C                                                                                                                                                                                   |
| Supported: - The CPU is replaced with a newer model, so the BIOS is also updated to support the new model.                                                                                            |
| Version 1.12 Rank C                                                                                                                                                                                   |
| Symptom corrected: - FAX transmission from PC-FAX driver might fail on the device with custom authentication, when the transmission is tried within five seconds after turning to energy saving mode. |
| Version 1.11 Rank C                                                                                                                                                                                   |
| Other changes: - The default setting for symbols and numbers on a Simplified/ Traditional Chinese soft keyboard has been changed from two-byte characters to one-byte characters.                     |
| Version 1.10 Rank C                                                                                                                                                                                   |
| Symptom corrected: - SC687 might be displayed if a user restarts a mass print job when the machine is in the following state Stop key is pressed - Cover Open - Toner-End comes - JAM happens         |
| Version 1.09 Symptom corrected: - An invalid value is returned when obtaining the counter MIB, ricohEngCounterValue, during device shutdown.                                                          |

/M1365218A\_System\_readme.txt[2019/06/11 13:40:42]

Version 1.08 Symptom Corrected: The keys on the operation panel do not work immediately after the machine starts up. Other changes: Support for a new eMMC used on the control board. Version 1.07 Symptom Corrected: - SC819 may occur after removing a jam that occurred while printing a large job that fully consumes the printer memory. - SC673-10 may occur when turning ON the machine power. - SC819 may occur, if the auto log-out timer and the energy saving timer are set to the same value. - When the remaining amount of toner reaches 10% and the near end alert appears, the LED does not blink and the banner message does not appear. Version 1.05 Symptom Corrected: - The "Shift to Power Off When Network Disconnected" function setting does not appear. (System Setting> Administrator Tools> Shift to Power Off When Netwrk Disconnctd) - Image density is unstable, because process control does not activate when the main power turns ON. - The machine might stall displaying "Please Wait" when the main

power turns ON.

Version 1.04 1st Mass production

| *** Basic Information ***                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Create date] 2018/10/02                                                                                                                                                                                                                                                                                                                  |
| [Program Name] System                                                                                                                                                                                                                                                                                                                     |
| [Version] 1.12                                                                                                                                                                                                                                                                                                                            |
| [PCB No.]                                                                                                                                                                                                                                                                                                                                 |
| [Interchangeability] X / O                                                                                                                                                                                                                                                                                                                |
| [Other Firmware Requirements] None                                                                                                                                                                                                                                                                                                        |
| [PCB Requirements] None                                                                                                                                                                                                                                                                                                                   |
| [Software category] Normal Release                                                                                                                                                                                                                                                                                                        |
| [Release category] Normal Release                                                                                                                                                                                                                                                                                                         |
| [Program category] Firmware                                                                                                                                                                                                                                                                                                               |
| Exported to(language) GEN(all) [Firmware No.] M1365243L [File Information] File Name M1365243L.fwu File Type Module for Service Size 22.48 MB ( 23568752 byte ) [File Information] File Name M1365243L.rfu File Type Module for Remote Upgrade Size 22.48 MB ( 23576832 byte ) [Availability of RFU] Yes  [Production reflection] 2018/09 |
| *** Note ***                                                                                                                                                                                                                                                                                                                              |
| [Note]                                                                                                                                                                                                                                                                                                                                    |
| *** Important Notes ***                                                                                                                                                                                                                                                                                                                   |
| [Important Notes]                                                                                                                                                                                                                                                                                                                         |
| *** Modification History ***                                                                                                                                                                                                                                                                                                              |

| [Modifications made:] Rank C                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Symptom corrected: - FAX transmission from PC-FAX driver might fail on the device with custom authentication, when the transmission is tried within five seconds after turning to energy saving mode. |
| [Modification history]                                                                                                                                                                                |
| Version 1.11 Rank C                                                                                                                                                                                   |
| Other changes: - The default setting for symbols and numbers on a Simplified/ Traditional Chinese soft keyboard has been changed from two-byte characters to one-byte characters.                     |
| Version 1.10 Rank C                                                                                                                                                                                   |
| Symptom corrected: - SC687 might be displayed if a user restarts a mass print job when the machine is in the following state Stop key is pressed - Cover Open - Toner-End comes - JAM happens         |
| Version 1.09 Symptom corrected: - An invalid value is returned when obtaining the counter MIB, ricohEngCounterValue, during device shutdown.                                                          |
| Version 1.08 Symptom Corrected: The keys on the operation panel do not work immediately after the machine starts up.                                                                                  |
| Other changes: Support for a new eMMC used on the control board.                                                                                                                                      |
| Version 1.07 Symptom Corrected: - SC819 may occur after removing a jam that occurred while printing a large job that fully consumes the printer memory.                                               |

- SC673-10 may occur when turning ON the machine power.
- SC819 may occur, if the auto log-out timer and the energy saving timer are set to the same value.
- When the remaining amount of toner reaches 10% and the near end alert appears, the LED does not blink and the banner message does not appear.

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Version 1.05

Symptom Corrected:

 The "Shift to Power Off When Network Disconnected" function setting does not appear.
 (System Setting> Administrator Tools> Shift to Power Off When Netwrk Disconnectd)

- Image density is unstable, because process control does not activate when the main power turns ON.
- The machine might stall displaying "Please Wait" when the main power turns ON.

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Version 1.04 1st Mass production

| [Firmware No.] M1365243K [File Information] File Name M1365243K.fwu File Type Module for Service Size 22.48 MB (23568336 byte) [File Information] File Name M1365243K.rfu File Type Module for Remote Upgrade Size 22.48 MB (23572736 byte) [Availability of RFU] Yes  [Production reflection] 2018/07  *** Note ***  [Note]  *** Important Notes ***                                                                                                                                                                                                                                           | *** Basic Information ***                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program Name   System     Version   1.11     PCB No.     Interchangeability   X / O     (Other Firmware Requirements   None     PCB Requirements   None     Software category   Normal Release     Release category   Normal Release     Release category   Firmware     Exported to(language) GEN(all)     Firmware No.   M1365243K     File Information     File Name                                                                                                                                                                                                                         |                                                                                                                                                                                                                        |
| [Version] 1.11  [PCB No.]  [Interchangeability] X / O  [Other Firmware Requirements] None  [PCB Requirements] None  [Software category] Normal Release  [Release category] Normal Release  [Program category] Firmware  Exported to(language) GEN(all)  [Firmware No.] M1365243K  [File Information]  File Name M1365243K.fwu  File Type Module for Service  Size 22.48 MB (23568336 byte)  [File Information]  File Name M1365243K.rfu  File Type Module for Remote Upgrade  Size 22.48 MB (23572736 byte)  [Availability of RFU] Yes  [Production reflection] 2018/07  **** Note ****  [Note] | [Program Name] System                                                                                                                                                                                                  |
| [Interchangeability] X / O [Other Firmware Requirements] None [PCB Requirements] None [Software category] Normal Release [Release category] Firmware [Exported to(language) GEN(all) [Firmware No.] M1365243K [File Information] File Name M1365243K.fwu File Type Module for Service Size 22.48 MB (23568336 byte) [File Information] File Name M1365243K.ffu File Type Module for Remote Upgrade Size 22.48 MB (23572736 byte) [Availability of RFU] Yes [Production reflection] 2018/07  **** Note ****  [Note]                                                                              | [Version] 1.11                                                                                                                                                                                                         |
| [Interchangeability] X / O [Other Firmware Requirements] None  [PCB Requirements] None  [Software category] Normal Release  [Release category] Firmware  Exported to(language) GEN(all) [Firmware No.] M1365243K [File Information] File Name M1365243K.fwu File Type Module for Service Size 22.48 MB (23568336 byte) [File Information] File Name M1365243K.rfu File Type Module for Remote Upgrade Size 22.48 MB (23572736 byte) [Availability of RFU] Yes  [Production reflection] 2018/07  **** Note ***  [Note]  **** Important Notes ***                                                 | [PCB No.]                                                                                                                                                                                                              |
| [PCB Requirements] None  [Software category] Normal Release  [Release category] Firmware  Exported to(language) GEN(all) [Firmware No.] M1365243K [File Information] File Name M1365243K.fwu File Type Module for Service Size 22.48 MB (23568336 byte) [File Information] File Name M1365243K.rfu File Type Module for Remote Upgrade Size 22.48 MB (23572736 byte) [Availability of RFU] Yes  [Production reflection] 2018/07  **** Note ***  [Note]                                                                                                                                          |                                                                                                                                                                                                                        |
| [PCB Requirements] None  [Software category] Normal Release  [Release category] Firmware  Exported to(language) GEN(all) [Firmware No.] M1365243K [File Information] File Name M1365243K.fwu File Type Module for Service Size 22.48 MB ( 23568336 byte ) [File Information] File Name M1365243K.rfu File Type Module for Remote Upgrade Size 22.48 MB ( 23572736 byte ) [Availability of RFU] Yes  [Production reflection] 2018/07  *** Note ***  [Note]  *** Important Notes ***                                                                                                              |                                                                                                                                                                                                                        |
| [Software category] Normal Release  [Release category] Firmware  Exported to(language) GEN(all) [Firmware No.] M1365243K [File Information] File Name M1365243K.fwu File Type Module for Service Size 22.48 MB ( 23568336 byte ) [File Information] File Name M1365243K.rfu File Type Module for Remote Upgrade Size 22.48 MB ( 23572736 byte ) [Availability of RFU] Yes  [Production reflection] 2018/07  **** Note ***  [Note]  **** Important Notes ***                                                                                                                                     | [PCB Requirements] None                                                                                                                                                                                                |
| [Release category] Normal Release  [Program category] Firmware  Exported to(language) GEN(all) [Firmware No.] M1365243K [File Information] File Name M1365243K.fwu File Type Module for Service Size 22.48 MB ( 23568336 byte ) [File Information] File Name M1365243K.rfu File Type Module for Remote Upgrade Size 22.48 MB ( 23572736 byte ) [Availability of RFU] Yes  [Production reflection] 2018/07  **** Note ***  [Note]  **** Important Notes ***                                                                                                                                      | [Software category] Normal Release                                                                                                                                                                                     |
| [Program category] Firmware  Exported to(language) GEN(all) [Firmware No.] M1365243K [File Information] File Name M1365243K.fwu File Type Module for Service Size 22.48 MB ( 23568336 byte ) [File Information] File Name M1365243K.rfu File Type Module for Remote Upgrade Size 22.48 MB ( 23572736 byte ) [Availability of RFU] Yes  Production reflection] 2018/07  **** Note ****  [Note]  **** Important Notes ***                                                                                                                                                                         | [Release category] Normal Release                                                                                                                                                                                      |
| Exported to(language) GEN(all) [Firmware No.] M1365243K [File Information] File Name M1365243K.fwu File Type Module for Service Size 22.48 MB (23568336 byte) [File Information] File Name M1365243K.rfu File Type Module for Remote Upgrade Size 22.48 MB (23572736 byte) [Availability of RFU] Yes  [Production reflection] 2018/07  **** Note ***  [Note]  **** Important Notes ***                                                                                                                                                                                                          | [Program category] Firmware                                                                                                                                                                                            |
| *** Note ***  [Note]  *** Important Notes ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | [File Information] File Name M1365243K.fwu File Type Module for Service Size 22.48 MB ( 23568336 byte ) [File Information] File Name M1365243K.rfu File Type Module for Remote Upgrade Size 22.48 MB ( 23572736 byte ) |
| Note                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | [Production reflection] 2018/07                                                                                                                                                                                        |
| *** Important Notes ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | *** Note ***                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | [Note]                                                                                                                                                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                        |
| [Important Notes]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | *** Important Notes ***                                                                                                                                                                                                |
| [Important Notes]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | [Important Notes]                                                                                                                                                                                                      |

| *** Modification History ***                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ======================================                                                                                                                                                        |
| Other changes:  - The default setting for symbols and numbers on a Simplified/ Traditional Chinese soft keyboard has been changed from two-byte characters to one-byte characters.            |
| [Modification history]                                                                                                                                                                        |
| Version 1.10 Rank C                                                                                                                                                                           |
| Symptom corrected: - SC687 might be displayed if a user restarts a mass print job when the machine is in the following state Stop key is pressed - Cover Open - Toner-End comes - JAM happens |
| Version 1.09 Symptom corrected: - An invalid value is returned when obtaining the counter MIB, ricohEngCounterValue, during device shutdown.                                                  |
| Version 1.08 Symptom Corrected: The keys on the operation panel do not work immediately after the machine starts up.                                                                          |
| Other changes:<br>Support for a new eMMC used on the control board.                                                                                                                           |
| Version 1.07 Symptom Corrected: - SC819 may occur after removing a jam that occurred while printing                                                                                           |

timer are set to the same value.

a large job that fully consumes the printer memory.

SC673-10 may occur when turning ON the machine power.SC819 may occur, if the auto log-out timer and the energy saving

| *** Basic Information ***                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Create date] 2019/05/27                                                                                                                                                                                                                                                                         |
| [Program Name] Printer                                                                                                                                                                                                                                                                           |
| [Version] 1.15                                                                                                                                                                                                                                                                                   |
| [PCB No.]                                                                                                                                                                                                                                                                                        |
| [Interchangeability] X / O                                                                                                                                                                                                                                                                       |
| [Other Firmware Requirements] None                                                                                                                                                                                                                                                               |
| [PCB Requirements] None                                                                                                                                                                                                                                                                          |
| [Software category] Normal Release                                                                                                                                                                                                                                                               |
| [Release category] Normal Release                                                                                                                                                                                                                                                                |
| [Program category] Firmware                                                                                                                                                                                                                                                                      |
| Exported to(language) GEN(all) [Firmware No.] M1365257L [File Information] File Name M1365257L.fwu File Type Module for Service Size 4.97 MB (5213888 byte) [File Information] File Name M1365257L.rfu File Type Module for Remote Upgrade Size 4.98 MB (5218560 byte) [Availability of RFU] Yes |
| ======================================                                                                                                                                                                                                                                                           |
| ======================================                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                  |
| *** Important Notes ***                                                                                                                                                                                                                                                                          |
| [Important Notes]                                                                                                                                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                                  |
| *** Modification History ***                                                                                                                                                                                                                                                                     |

| [Modifications made:] Symptom corrected: - If the machine reboots due to a forced shut-down, a power outage, unplugging a power cable, or an SC819 error, jobs using certain applications might not print.                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Modification history]                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Version 1.11 Rank C                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Symptom corrected: - An SC899 error might occur if displaying the print job history on the Web Image Monitor after printing a file with a long name.                                                                                                                                                                                                                                                                                                     |
| Version 1.10 Rank C                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Symptom corrected: - Printing job might hang after recovering from a paper feed error.                                                                                                                                                                                                                                                                                                                                                                   |
| Version 1.09 Symptom corrected: - IPDS printing might stall if IPDS jobs are printed continuously.                                                                                                                                                                                                                                                                                                                                                       |
| Version 1.07 Symptom corrected:  1. The wrong content might be written on the Printer Configuration page.  2. The operation panel might continue to show the error message "Please remove paper" even after removing paper from the output tray.  3. When printing from AirPrint, the paper weight "Plain 2 (75 to 81g/square metre)" is out of the search target of "Auto Tray Select" even if "Plain Paper or Recycled Paper" is specified in the job. |
| Version 1.06 Symptom corrected: A PCL font numbered 64 or later cannot be used as the default font. (GFPR#RE17010004)                                                                                                                                                                                                                                                                                                                                    |
| Version 1.05 Symptom corrected:  1. "Shift to Main Power Off When Network Disconnected" is not                                                                                                                                                                                                                                                                                                                                                           |

displayed in the System Settings menu.

2. After an SC reboot occurs, if the dialog window stating that the automatic reboot has occurred is not closed, SDK-J applications

cannot be started, which results in an SC990 error occurring.

Version 1.04
1st Mass production

| *** Basic Information ***                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Create date] 2019/05/24                                                                                                                                                                                                                                                                                                              |
| [Program Name] IRIPS PDF                                                                                                                                                                                                                                                                                                              |
| [Version] 1.13                                                                                                                                                                                                                                                                                                                        |
| [PCB No.]                                                                                                                                                                                                                                                                                                                             |
| [Interchangeability] X / O                                                                                                                                                                                                                                                                                                            |
| [Other Firmware Requirements] None                                                                                                                                                                                                                                                                                                    |
| [PCB Requirements] None                                                                                                                                                                                                                                                                                                               |
| [Software category] Normal Release                                                                                                                                                                                                                                                                                                    |
| [Release category] Normal Release                                                                                                                                                                                                                                                                                                     |
| [Program category] Firmware                                                                                                                                                                                                                                                                                                           |
| Exported to(language) GEN(all) [Firmware No.] M1365275N [File Information] File Name M1365275N.fwu File Type Module for Service Size 3.02 MB ( 3171180 byte ) [File Information] File Name M1365275N.rfu File Type Module for Remote Upgrade Size 3.03 MB ( 3178752 byte ) [Availability of RFU] Yes  [Production reflection] 2019/05 |
| *** Note ***                                                                                                                                                                                                                                                                                                                          |
| [Note]                                                                                                                                                                                                                                                                                                                                |
| *** Important Notes ***                                                                                                                                                                                                                                                                                                               |
| [Important Notes]                                                                                                                                                                                                                                                                                                                     |
| *** Modification History ***                                                                                                                                                                                                                                                                                                          |

| Modifications made:] Rank C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Symptom corrected: When printing a PDF file that contains circled letters or numbers, the circle itself might be distorted.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| PDF files that are generated by certain applications might not print via Direct Print.  The minus sign (-) in a PDF file might not be printed via PDF Direct.                                                                                                                                                                                                                                                                                                                                                                                                        |
| Modification history]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Version 1.12<br>Rank C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Symptom corrected: Images might not appear as expected when printing a PDF file via AirPrint. When printing a PDF file that contains exceptionally small fonts, an invalid font error might occur, and the print job might not be printed correctly. When printing a file containing images as a booklet, the output might be distorted. A locked print job might not be stored on the machine if it is printed using PJL commands. When printing a PDF file that contains downloaded fonts, an invalid font error might occur, and the print job might be canceled. |
| Version 1.11<br>Rank C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Symptom corrected: Data that includes a masked background image might not print correctly. An SC899 error might occur when printing PostScript data that includes a watermark with a non-standard font using the PS V4 driver. When printing from a memory storage device from the Bypass Tray, if there is a paper size mismatch between the System Settings and the paper size specified for the Bypass Tray, it might not print correctly.                                                                                                                        |
| Version 1.10<br>Rank C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Symptom corrected:  When printing images using the PostScript driver with the following settings, the printed color might be weaker than expected.  - Color Profile is set to 'ICM (Image Color Management)'.  - Paper Type is set to anything other than 'Plain'.                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

#### Symptom corrected:

- Some Symbolic fonts in a PDF might not print correctly.
- The image might be rotated 180 degrees when printing Landscape document via the SmartSDK.
- Some Type 0 fonts in a PDF might not print correctly.

-----

Version 1.08

Rank C

## Symptom corrected:

- When printing a PDF with an embedded TrueType font, some characters might be garbled.
- Characters might be printed with the wrong magnification if a CID font is used.
- Linux print jobs in Stored Print might be canceled.
- Characters might become too thick if the transparency is specified.
- Pages printed as a booklet might be centered incorrectly.
- With booklet printing or N-Up printing, the scaling ratio might be wrong.
- The scaling might be wrong when printing PDF data that contains the FITTOPAGESIZE command but not PRINTSCALING.

-----

Version 1.07

Fixed:

- SC899 might occur while PDF printing.
- Both ends of the watermark might be cut off when printing from the V4 driver.
- Some characters might be garbled when using the TrueType Font.
- The top and bottom ends might be missing if the size is scaled when PDF printing.
- Some characters might print in the wrong position when printing a PDF containing certain fonts.
- Characters in italics might be unrecognizable.
- PS printing might stall if PS jobs are printed continuously.
- SC899 might occur when a watermark is printed from the V4 driver.

-----

Version 1.06

Symptom corrected:

- The printing of a PDF file created by the "Microsoft Print to PDF" function might be canceled.
- Some characters might be printed upside down.
- An "Invalidfont" error might occur when printing a job including specific data.
- An incorrect paper size may be fed while printing via AirPrint.

-----

Version 1.05

Symptom corrected:

Adjusting the color balance in the driver doesn't work as expected.

The device may stall when printing many pages and using specific fonts.

Version 1.04
Symptom corrected:

When conducting host printing, if a resident font is specified in the data, cedillas will not print as expected.

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Version 1.03 1st Mass production

| *** Basic Information ***                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Create date] 2019/03/06                                                                                                                                                                                                                                                                             |
| [Program Name] IRIPS Font                                                                                                                                                                                                                                                                            |
| [Version] 1.14                                                                                                                                                                                                                                                                                       |
| [PCB No.]                                                                                                                                                                                                                                                                                            |
| [Interchangeability] X / O                                                                                                                                                                                                                                                                           |
| [Other Firmware Requirements] None                                                                                                                                                                                                                                                                   |
| [PCB Requirements] None                                                                                                                                                                                                                                                                              |
| [Software category] Normal Release                                                                                                                                                                                                                                                                   |
| [Release category] Normal Release                                                                                                                                                                                                                                                                    |
| [Program category] Firmware                                                                                                                                                                                                                                                                          |
| Exported to(language) GEN(all) [Firmware No.] M1365277C [File Information] File Name M1365277C.fwu File Type Module for Service Size 7.04 MB ( 7386496 byte ) [File Information] File Name M1365277C.rfu File Type Module for Remote Upgrade Size 7.05 MB ( 7393536 byte ) [Availability of RFU] Yes |
| *** Note ***                                                                                                                                                                                                                                                                                         |
| ======================================                                                                                                                                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                      |
| *** Important Notes ***                                                                                                                                                                                                                                                                              |
| [Important Notes]                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                      |
| *** Modification History ***                                                                                                                                                                                                                                                                         |

| Modifications made:] Rank C                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------|
| Symptom corrected: When conducting host printing, if a resident font is specified in the data, cedillas will not print as expected. |
| Modification history]                                                                                                               |
| version 1.08 st Mass production                                                                                                     |

| *** Basic Information ***                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Create date] 2018/10/05                                                                                                                                                                                                                                                                                                              |
| [Program Name] Web Support                                                                                                                                                                                                                                                                                                            |
| [Version] 1.03                                                                                                                                                                                                                                                                                                                        |
| [PCB No.]                                                                                                                                                                                                                                                                                                                             |
| [Interchangeability] X / O                                                                                                                                                                                                                                                                                                            |
| [Other Firmware Requirements] None                                                                                                                                                                                                                                                                                                    |
| [PCB Requirements] None                                                                                                                                                                                                                                                                                                               |
| [Software category] Normal Release                                                                                                                                                                                                                                                                                                    |
| [Release category] Normal Release                                                                                                                                                                                                                                                                                                     |
| [Program category] Firmware                                                                                                                                                                                                                                                                                                           |
| Exported to(language) GEN(all) [Firmware No.] M1365248D [File Information] File Name M1365248D.fwu File Type Module for Service Size 6.17 MB ( 6471068 byte ) [File Information] File Name M1365248D.rfu File Type Module for Remote Upgrade Size 6.18 MB ( 6476032 byte ) [Availability of RFU] Yes  [Production reflection] 2018/10 |
| *** Note ***                                                                                                                                                                                                                                                                                                                          |
| [Note]                                                                                                                                                                                                                                                                                                                                |
| *** Important Notes ***                                                                                                                                                                                                                                                                                                               |
| [Important Notes]                                                                                                                                                                                                                                                                                                                     |
| *** Modification History ***                                                                                                                                                                                                                                                                                                          |

[Modifications made:]
Rank C

Other changes:
- The following values can be set with solution software that uses SOAP I/F.

"SNMPv3 Setting"
- SNMPv3 Trap Communication

- Encryption Algorithm
- Permit SNMPv3 Communication
- "Program/Change Administrator"
- Encryption Password

-----

[Modification history]

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Version 1.02

1st Mass production

| *** Basic Information ***                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Create date] 2018/12/17                                                                                                                                                                                                                                                                             |
| [Program Name] PCL                                                                                                                                                                                                                                                                                   |
| [Version] 1.06                                                                                                                                                                                                                                                                                       |
| [PCB No.]                                                                                                                                                                                                                                                                                            |
| [Interchangeability] X / O                                                                                                                                                                                                                                                                           |
| [Other Firmware Requirements] None                                                                                                                                                                                                                                                                   |
| [PCB Requirements] None                                                                                                                                                                                                                                                                              |
| [Software category] Normal Release                                                                                                                                                                                                                                                                   |
| [Release category] Normal Release                                                                                                                                                                                                                                                                    |
| [Program category] Firmware                                                                                                                                                                                                                                                                          |
| Exported to(language) GEN(all) [Firmware No.] M1365256J [File Information] File Name M1365256J.fwu File Type Module for Service Size 1.38 MB ( 1445648 byte ) [File Information] File Name M1365256J.rfu File Type Module for Remote Upgrade Size 1.38 MB ( 1450240 byte ) [Availability of RFU] Yes |
| *** Note ***                                                                                                                                                                                                                                                                                         |
| [Note]                                                                                                                                                                                                                                                                                               |
| *** Important Notes ***                                                                                                                                                                                                                                                                              |
| [Important Notes]                                                                                                                                                                                                                                                                                    |
| *** Modification History ***                                                                                                                                                                                                                                                                         |

| [Modifications made:]<br>Rank C                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Symptom corrected:  - Double-byte characters of Asian languages such as Japanese, Chinese, and Korean might be missing.                                                                                                                                                                                                                                       |
| [Modification history]                                                                                                                                                                                                                                                                                                                                        |
| Version 1.05<br>Rank C                                                                                                                                                                                                                                                                                                                                        |
| Symptom corrected:  - Some characters might be filled with black when the color balance is set below zero.  - The overlay image might not be correctly printed with PCL.  - Even though Toner Saving is enabled on the operation panel and economy color values have been specified in the SP settings, it might not be reflected when printing.              |
| Version 1.04 Symptom corrected:: - When printing PCL6 jobs containing the TrueType Font, the job might be canceled and the Illegal Font Data error printed instead The device might stall when printing a heavy-duty job.                                                                                                                                     |
| Version 1.03 Symptom corrected:  The printing results of the second and subsequent pages might not be as expected while PCL5 host printing.  Image backgrounds might be filled unexpectedly.  A pattern put on top of an image or graphic might be blacked out.  When printing a PCL job which contains images via host printing, an SC899 error might occur. |
| Version 1.02 Symptom corrected:  1. PCL macros that were uploaded to the HDD cannot be printed. (GFPR#RE16080014)  2. When conducting host printing, if a resident font is specified in the data, cedillas will not print as expected.                                                                                                                        |
| Version 1.01 1st Mass production                                                                                                                                                                                                                                                                                                                              |

| *** Basic Information ***                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Create date] 2018/10/09                                                                                                                                                                                                                                                                             |
| [Program Name] PDF                                                                                                                                                                                                                                                                                   |
| [Version] 1.03                                                                                                                                                                                                                                                                                       |
| [PCB No.]                                                                                                                                                                                                                                                                                            |
| [Interchangeability] X / O                                                                                                                                                                                                                                                                           |
| [Other Firmware Requirements] None                                                                                                                                                                                                                                                                   |
| [PCB Requirements] None                                                                                                                                                                                                                                                                              |
| [Software category] Normal Release                                                                                                                                                                                                                                                                   |
| [Release category] Normal Release                                                                                                                                                                                                                                                                    |
| [Program category] Firmware                                                                                                                                                                                                                                                                          |
| Exported to(language) GEN(all) [Firmware No.] M5005659B [File Information] File Name M5005659B.fwu File Type Module for Service Size 4.44 MB ( 4656376 byte ) [File Information] File Name M5005659B.rfu File Type Module for Remote Upgrade Size 4.45 MB ( 4661504 byte ) [Availability of RFU] Yes |
|                                                                                                                                                                                                                                                                                                      |
| *** Note ***                                                                                                                                                                                                                                                                                         |
| [Note]                                                                                                                                                                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                      |
| *** Important Notes ***                                                                                                                                                                                                                                                                              |
| [Important Notes]                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                      |
| *** Modification History ***                                                                                                                                                                                                                                                                         |

## [Modifications made:]

Rank C

#### Symptom corrected:

- The device might stall if a job includes text outside the printable area of the page.
- Printing might be cancelled due to memory leak when using a color profile.
- The device might stall during PDF direct printing if a spot color is used.
- A PDF might not print if the previous PDF print job was cancelled manually.
- Printing a PDF with a transparent image and a shaded image might take a long time due to memory release processing, and the shaded image might not be printed as expected.
- The device might stall during PDF direct printing if a job contains a Bezier curve.
- SC899 might occur when printing a PDF file with many characters or typefaces directly or with the PS driver.
- When printing a PDF file that contains graphics or text via PDF Direct, an SC899 error might occur.
- An incorrect paper size may be fed while printing via AirPrint.

|                 |         | <br> |  |
|-----------------|---------|------|--|
| [Modification h | istory] |      |  |

Version 1.02

Symptom corrected:

- An SC899 error might occur when printing a document that has fewer than four colors for CMYK specified.
- When printing PDF data that includes overprinting via PDF Direct Print, after taking a significant amount of time to print the first few pages in a job, the job might be cancelled.

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Version 1.01 1st Mass production

| *** Basic Information ***                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Create date] 2019/02/13                                                                                                                                                                         |
| [Program Name] Java VM v12 for eDC                                                                                                                                                               |
| [Version] 12.65.01                                                                                                                                                                               |
| [PCB No.]                                                                                                                                                                                        |
| [Interchangeability] X / O                                                                                                                                                                       |
| [Other Firmware Requirements] None                                                                                                                                                               |
| [PCB Requirements] None                                                                                                                                                                          |
| [Software category] Normal Release                                                                                                                                                               |
| [Release category] Normal Release                                                                                                                                                                |
| [Program category] Firmware                                                                                                                                                                      |
| Exported to(language) GEN(all) [Firmware No.] M5005752F_edc [File Information] File Name M5005752F_edc.ifu File Type Module for Service Size 63.83 MB ( 66930708 byte ) [Availability of RFU] No |
| [Production reflection]                                                                                                                                                                          |
| *** Note ***                                                                                                                                                                                     |
| [Note]                                                                                                                                                                                           |
| *** Important Notes ***                                                                                                                                                                          |
| [Important Notes]                                                                                                                                                                                |
| *** Modification History ***                                                                                                                                                                     |
| [Modifications made:] Rank C                                                                                                                                                                     |

#### Symptom corrected:

- Errors might be occured by using the Globalscan.
- When JavaVM launched "NullPointerException" error message may be displayed, and JavaVM startup may fail.
- SDK application might not startup if the Stream Line NX settings changed.

| [Modification history] |
|------------------------|
| Version 12.61.03       |

D - --1- C

Rank C

## Symptom corrected:

- Gloria don't start up when power off/on then system settings can't be used.
- The package firmware might not be updated if the firmware includes an application that needs to be rebooted when updated.

## Other changes:

- Minor changes for its internal operations.
- Login might fail if attempting to log in with an IC card while the On-demand Print screen is displayed.

Version 12.57.00

Rank C

### Symptom corrected:

- The SDK application icon might not be displayed after recovering from energy saving mode under the following conditions:
  - An SDK application is set as a priority function.
  - An SDK application is set as a function key.
- SC899-00 may occur if logging in from a keyboard.
- FAX cannot be transmitted if CAP v2 is installed
- The printing speed is not as fast as the past model if CAP V2 is installed.
- The SDK application may stop suddenly due to the increase of memory usage.
- The wrong JavaVM firmware can be mistakenly installed on any machine, possibly leading to unexpected errors occurring with JavaVM or bootup failing.

-----

Version 12.52.00

- SDK applications (e.g. Streamline NX, GlobalScan NX, CAP/ELP) may not be able to start during the boot process due to a Java VM error.
- If only IPv6 is enabled on the device, utility tools (e.g. Device Manager NX family or Streamline NX v3) will fail to install applications remotely.
- The following issues occur if any device certificate is imported using the Device Manager NX Enterprise Certificate Management Tool.
  - Device Manager NX Enterprise fails to retrieve the information about the application(s) installed on the device.
  - GlobalScan NX fails to apply profiles or retrieve device information when using the AdminTool.

-----

#### Version 12.48.02

Symptom corrected:

Under the following conditions, when performing on-demand printing with the Enhanced Locked Print, the SC899 error might occur.

- More than 100 connected devices are set as the host name.
- Host name resolution fails on DNS server.

-----

#### Version 12.46.01

Symptom corrected:

- Replacing with a new controller board installed with the latest Java VM version may disallow downgrading to previous version or retrieve customized version and cause trouble for users who wish to use specific or customized versions.
- When the relationship between the host name and the IP address on the DNS server is modified, Java VM might not recognize the change.
- When conducting location-free printing or authentication processing by using a solution product, an SC899 error might occur or Java VM might close unexpectedly and an SC error related to Java VM not responding might occur.
- The DSDK application fails to connect to the LDAP server when using Kerberos authentication.

-----

#### Version 12.43.01

Symptom corrected:

- 1. If the "Chng Stgs" button is pressed after pressing the "Preview" button in ELP-NX, the "Change Print Settings" configuration may not be set correctly.
- 2. After applying the security update that changes the priority order for cipher suites, SSL communication fails between an application that includes an SSL server function and the Windows operating system.
- 3. When "Tracking Permission" and "Stop Printing" are enabled in "Enhanced Print Volume Limitation", processing of the job might fail.
- 4. SDK application behavior may be incorrect or inconsistent. (CAP/ELP/SLNX/GSNX/etc.)

Both the Standard (Compatibility mode) application and the SOP Optimized (Hybrid mode) application are affected by these issues.

- Cannot log in.
- Cannot scan.
- Cannot print.
- Error message appears.

etc.

\_\_\_\_\_

#### Version 12.39.02

- Cannot use applications because the Java VM does no activate.
- Sending fax from the document server using IPv4-mapped address may result in an error.
- If attempted to install an application from Web Image Monitor, installation may fail with an error.

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Version 12.26.05 1st Mass production

| ### Basic Information ###    Create date   2019/02/13     Program Name   Java VM v12 UpdatcTool     Version   12.65.01     PCB No.     Content   Content   Content     PCB No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                         |                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Program Name  Java VM v12 UpdateTool  Version  12.65.01  PCB No.   Interchangeability  X / O  Other Firmware Requirements  None  PCB Requirements  None  PCB Requirements  Nore   Software category  Normal Release  Release category  Normal Release  Program category  Firmware  Exported to(language) GEN(all)  File Information   File Information   File Information   File Name M5005752F_upd.exe  File Type Module for Service  Size 63.55 MB (66641057 byte)    Check Sum - SBit Sum: (S5F - 16Bit Sum(Little Endian): AD46 - 16Bit Sum(Big Endian): 7A19  Availability of RFUJ No  Production reflection   *** Note ***  Important Notes ***  Important Notes ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | *** Basic Information ***                                                                                                                                                                                                                                                               |                                        |
| Program Name   Java VM v12 UpdateTool     Version   12.65.01     PCB No.     [Interchangeability] X / O     Other Firmware Requirements   None     PCB Requirements   None     Software category   Normal Release     Release category   Normal Release     Program category   Firmware     Exported to(language) GFN(all)     Firmware No.   M5005752F_upd     File Information     File Name   M5005752F_upd.exe     File Type   Module for Service     Size   63.55 MB (66641057 byte )     Check Sum -8Bit Sum; C85F     -16Bit Sum(Little Endian): AD46     -16Bit Sum(Little Endian): 7A19     [Availability of RFU] No     Production reflection     *** Note ***     Note     *** Important Notes ***     Important Notes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                         |                                        |
| [Version] 12.65.01  [PCB No.]  [Interchangeability] X / O  [Other Firmware Requirements] None  [PCB Requirements] None  [Software category] Normal Release  [Release category] Normal Release  [Program category] Firmware  Exported to(language) GEN(all)  [Firmware No.] M5005752F_upd  [File Information]  File Name M5005752F_upd.exe  File Type Module for Service  Size 63.55 MB (6641057 byte)  Check Sum -8Bit Sum: C85F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | [Program Name] Java VM v12 UpdateTool                                                                                                                                                                                                                                                   |                                        |
| [Interchangeability] X / O [Other Firmware Requirements] None [PCB Requirements] None [Software category] Normal Release [Release category] Normal Release [Program category] Firmware  Exported to(language) GEN(all) [Firmware No.] M5005752F_upd [File Information] File Name M5005752F_upd.exe File Type Module for Service Size 63.55 MB (66641057 byte) Check Sum -8Bit Sum: C85F -16Bit Sum(Little Endian): AD46 -16Bit Sum(Big Endian): 7A19 [Availability of RFU] No [Production reflection]  **** Note ***  [Interchangeability] X / O  [Int | [Version] 12.65.01                                                                                                                                                                                                                                                                      |                                        |
| [Interchangeability] X / O [Other Firmware Requirements] None [PCB Requirements] None [Software category] Normal Release [Release category] Normal Release [Program category] Firmware  Exported to(language) GEN(all) [Firmware No.] M5003752F_upd [File Information] File Name M5005752F_upd.exe File Type Module for Service Size 63.55 MB (66641057 byte) Check Sum -8Bit Sum: C85F -16Bit Sum(Little Endian): AD46 -16Bit Sum(Little Endian): AD46 -16Bit Sum(Big Endian): 7A19 [Availability of RFU] No [Production reflection]  **** Note *** [Note]  **** Important Notes ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | [PCB No.]                                                                                                                                                                                                                                                                               |                                        |
| [Other Firmware Requirements] None  [PCB Requirements] None  [Software category] Normal Release  [Release category] Firmware  Exported to(language) GEN(all)  [Firmware No.] M5005752F_upd  [File Information]  File Name M5005752F_upd.exe  File Type Module for Service  Size 63.55 MB (66641057 byte)  Check Sum -8Bit Sum: C85F  -16Bit Sum(Little Endian): AD46 -16Bit Sum(Little Endian): 7A19  [Availability of RFU] No  [Production reflection]  **** Note ***  [Note]  **** Important Notes ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                         |                                        |
| [PCB Requirements] None [Software category] Normal Release [Release category] Firmware  Exported to(language) GEN(all) [Firmware No.] M5005752F_upd [File Information] File Name M5005752F_upd.exe File Type Module for Service Size 63.55 MB (66641057 byte ) Check Sum -8Bit Sum: C85F -16Bit Sum(Lite Endian): 7A19 [Availability of RFU] No [Production reflection]  **** Note ***  [Note]  **** Important Notes ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | [Other Firmware Requirements] None                                                                                                                                                                                                                                                      |                                        |
| [Software category] Normal Release  [Release category] Firmware  Exported to(language) GEN(all) [Firmware No.] M5005752F_upd [File Information] File Name M5005752F_upd.exe File Type Module for Service Size 63.55 MB (66641057 byte) Check Sum -8Bit Sum: C85F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                         |                                        |
| [Program category] Firmware  Exported to(language) GEN(all) [Firmware No.] M5005752F_upd [File Information] File Name M5005752F_upd.exe File Type Module for Service Size 63.55 MB ( 66641057 byte ) Check Sum -8Bit Sum: C85F -16Bit Sum(Little Endian): AD46 -16Bit Sum(Big Endian): 7A19 [Availability of RFU] No  [Production reflection]  **** Note ***  [Note]  **** Important Notes ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                         |                                        |
| [Program category] Firmware  Exported to(language) GEN(all) [Firmware No.] M5005752F_upd [File Information] File Name M5005752F_upd.exe File Type Module for Service Size 63.55 MB (66641057 byte) Check Sum -8Bit Sum: C85F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                         |                                        |
| Exported to(language) GEN(all) [Firmware No.] M5005752F_upd [File Information] File Name M5005752F_upd.exe File Type Module for Service Size 63.55 MB (66641057 byte) Check Sum -8Bit Sum: C85F -16Bit Sum(Little Endian): AD46 -16Bit Sum(Big Endian): 7A19 [Availability of RFU] No  [Production reflection]  **** Note ***  [Note]  **** Important Notes ***  [Important Notes]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                         |                                        |
| *** Note ***  [Note]  *** Important Notes ***  [Important Notes]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Exported to(language) GEN(all) [Firmware No.] M5005752F_upd [File Information] File Name M5005752F_upd.exe File Type Module for Service Size 63.55 MB ( 66641057 byte ) Check Sum -8Bit Sum: C85F -16Bit Sum(Little Endian): AD46 -16Bit Sum(Big Endian): 7A19 [Availability of RFU] No |                                        |
| [Note]  *** Important Notes ***  [Important Notes]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | [Production reflection]                                                                                                                                                                                                                                                                 |                                        |
| [Important Notes]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                         | ====================================== |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | *** Important Notes ***                                                                                                                                                                                                                                                                 |                                        |
| *** Modification History ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | [Important Notes]                                                                                                                                                                                                                                                                       |                                        |
| *** Modification History ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                         |                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | *** Modification History ***                                                                                                                                                                                                                                                            |                                        |

# [Modifications made:] Rank C

## Symptom corrected:

- Errors might be occured by using the Globalscan.
- When JavaVM launched "NullPointerException" error message may be displayed, and JavaVM startup may fail.
- SDK application might not startup if the Stream Line NX settings changed.

| [Modification history] |  |
|------------------------|--|
| Version 12.61.03       |  |

## Symptom corrected:

Rank C

- Gloria don't start up when power off/on then system settings can't be used.
- The package firmware might not be updated if the firmware includes an application that needs to be rebooted when updated.

## Other changes:

- Minor changes for its internal operations.
- Login might fail if attempting to log in with an IC card while the On-demand Print screen is displayed.

Version 12.57.00 Rank C

## Symptom corrected:

- The SDK application icon might not be displayed after recovering from energy saving mode under the following conditions:
  - An SDK application is set as a priority function.
  - An SDK application is set as a function key.
- SC899-00 may occur if logging in from a keyboard.
- FAX cannot be transmitted if CAP v2 is installed
- The printing speed is not as fast as the past model if CAP V2 is installed.
- The SDK application may stop suddenly due to the increase of memory usage.
- The wrong JavaVM firmware can be mistakenly installed on any machine, possibly leading to unexpected errors occurring with JavaVM or bootup failing.

Version 12.52.00

- SDK applications (e.g. Streamline NX, GlobalScan NX, CAP/ELP) may not be able to start during the boot process due to a Java VM error.
- If only IPv6 is enabled on the device, utility tools (e.g. Device Manager NX family or Streamline NX v3) will fail to install applications remotely.
- The following issues occur if any device certificate is imported using the Device Manager NX Enterprise Certificate Management Tool.
  - Device Manager NX Enterprise fails to retrieve the information about the application(s) installed on the device.

- GlobalScan NX fails to apply profiles or retrieve device information when using the AdminTool. Version 12.48.02 Symptom corrected: Under the following conditions, when performing on-demand printing with the Enhanced Locked Print, the SC899 error might occur. - More than 100 connected devices are set as the host name. - Host name resolution fails on DNS server. Version 12.46.01 Symptom corrected: - Replacing with a new controller board installed with the latest Java VM version may disallow downgrading to previous version or retrieve customized version and cause trouble for users who wish to use specific or customized versions. - When the relationship between the host name and the IP address on the DNS server is modified, Java VM might not recognize the change. - When conducting location-free printing or authentication processing by using a solution product, an SC899 error might occur or Java VM might close unexpectedly and an SC error related to Java VM not responding might occur. - The DSDK application fails to connect to the LDAP server when using Kerberos authentication. Version 12.43.01 Symptom corrected: - If the "Chng Stgs" button is pressed after pressing the "Preview" button in ELP-NX, the "Change Print Settings" configuration may not be set correctly. - After applying the security update that changes the priority order for cipher suites, SSL communication fails between an application that includes an SSL server function and the Windows operating system. - When "Tracking Permission" and "Stop Printing" are enabled in "Enhanced Print Volume Limitation", processing of the job might fail. - SDK application behavior may be incorrect or inconsistent. (CAP/ELP/SLNX/GSNX/etc.) Both the Standard (Compatibility mode) application and the SOP Optimized (Hybrid mode) application are affected by these issues. - Cannot log in. - Cannot scan.

- Cannot print.

- Error message appears.

etc.

Version 12.39.02

- Cannot use applications because the Java VM does no activate.
- Sending fax from the document server using IPv4-mapped address may

result in an error.

- If attempted to install an application from Web Image Monitor, installation may fail with an error.

Version 12.26.05
1st Mass production

| *** Basic Information ***                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Create date] 2018/10/23                                                                                                                                                                                                                                                                                                              |
| [Program Name] PDF                                                                                                                                                                                                                                                                                                                    |
| [Version] 1.04                                                                                                                                                                                                                                                                                                                        |
| [PCB No.]                                                                                                                                                                                                                                                                                                                             |
| [Interchangeability] X / O                                                                                                                                                                                                                                                                                                            |
| [Other Firmware Requirements] None                                                                                                                                                                                                                                                                                                    |
| [PCB Requirements] None                                                                                                                                                                                                                                                                                                               |
| [Software category] Normal Release                                                                                                                                                                                                                                                                                                    |
| [Release category] Normal Release                                                                                                                                                                                                                                                                                                     |
| [Program category] Firmware                                                                                                                                                                                                                                                                                                           |
| Exported to(language) GEN(all) [Firmware No.] M5005833E [File Information] File Name M5005833E.fwu File Type Module for Service Size 4.46 MB ( 4681192 byte ) [File Information] File Name M5005833E.rfu File Type Module for Remote Upgrade Size 4.47 MB ( 4686080 byte ) [Availability of RFU] Yes  [Production reflection] 2018/10 |
| *** Note ***                                                                                                                                                                                                                                                                                                                          |
| ======================================                                                                                                                                                                                                                                                                                                |
| *** Important Notes ***                                                                                                                                                                                                                                                                                                               |
| [Important Notes]                                                                                                                                                                                                                                                                                                                     |
| *** Modification History ***                                                                                                                                                                                                                                                                                                          |

[Modifications made:] Rank C Symptom corrected: - The device might stall during PDF direct printing if a job contains a Bezier curve. - The device might stall during PDF direct printing if a spot color is used. - Printing might be cancelled due to memory leak when using a color profile. - If a PDF contains transparent images, printing might be canceled due to a lack of memory. - A PDF might not print if the previous PDF print job was cancelled manually. - Printing a PDF with a transparent image and a shaded image might take a long time due to memory release processing, and the shaded image might not be printed as expected. - When printing a PDF file that contains transparent images via PDF Direct, the output might be distorted. - Images might be missing and an invalid font error might occur when printing a webpage with Adobe Typekit fonts. [Modification history] Version 1.03 Symptom corrected: - Images in Postscript or PDF jobs which require a lot of memory might not be printed correctly. - The device might stall if a job includes text outside the printable area of the page. - SC899 might occur if there is a large number of different characters used in a print job. - An incorrect paper size may be fed while printing via AirPrint. - It takes a significant amount of time to output the first page by using PDF Direct Print when the print data contains a large number of pages. (GFPR#RE16060016) - SC899 might occur while printing via PDF Direct if a job includes more than 500 pages. Version 1.02 Symptom corrected: - When printing PDF data that includes overprinting via PDF Direct Print, after taking a significant amount of time to print the

first few pages in a job, the job might be cancelled.

- An SC899 error might occur when printing a document that has fewer than four colors for CMYK specified.

- When printing a PDF file that contains graphics or text via PDF Direct, an SC899 error might occur.

Version 1.01 1st Mass production



<<Package>>
package\_ALL [VEP1Da\_pk]
M1365287 Ver. 1.00

<<Separate>>
System [VEP1Da\_system]
M1365243J Ver. 1.10

Engine [VEP1a\_eplot] M1115152G Ver. 1.24:14

NetworkDocBox [VEP1a\_netfile] M1115245D Ver. 1.01

OpePanel [VESP1a\_epanel] M1365283C Ver. 1.03

Network Support [VEP1a\_net] M1115254G Ver. 15.69

Printer [VEP1Dd\_printer] M1365258H Ver. 1.10

Printer [VEP1De\_printer] M1365257J Ver. 1.10

PCL [VEP1d\_prt\_PCL] M5005660C Ver. 1.03

PCL [VEP1e\_prt\_PCL] M1365256G Ver. 1.04

PDF [VEP1e\_prt\_PDF] M5005659A Ver. 1.02

IRIPS PDF [VEP1d\_prt\_IPDF] M1365274J Ver. 1.09

IRIPS PDF [VEP1e\_prt\_IPDF] M1365275J Ver. 1.09

IRIPS Font [GW5a\_ips\_fntI] M1365277C Ver. 1.14