

Statement of Volatility

imagePROGRAF iPF Series with Hard Disk Drive

The information contained in this document will:

Identify and describe the memory components contained in the imagePROGRAF printer's circuit boards with regards to the memory component type, memory volatility of each memory component, type of data stored on each respective memory component, as well as the data written / data clear method utilized for each respective memory component.

The information contained in this document was compiled by the Hardware / Software Engineering team within the large format printer development division at Canon Inc., the parent company of Canon U.S.A.

Canon's L-COA system architected devices which are included in the imagePROGRAF printer, are comprised of a variety of circuit boards which control device functions ranging from motor speed control to digital image processing. The construction of the device can be divided into several functional blocks including the Controller Block, Control Panel, Options Boards, and Printer Unit. All image data and image processing functions are performed in the Controller Block. Information in this document will be limited to functional area, circuit board descriptions, data types, storage mediums, and data clear methods.

Main Board Unit

1. Flash ROM

- Storage Medium: Flash ROM
- Volatility: Non volatile
- Data Type: Boot program, Printer control firmware, Device setting parameters, User customized device settings and job history.
- Presence of User Data: Yes
- Description: The Flash ROM is located on the main board unit. It contains mainly printer control firmware. Some areas are used to store Device setting parameters, user customized device settings, and job history.
- Data Write Method: Data written at the Canon factory is Device Setting parameters. User customized device settings and job history are revised by printer control firmware after user printer operations are performed. The Printer control firmware also can be updated by user operations.
- Data Clear Method: Data is cleared utilizing a special tool at the Canon factory.
- The information that is kept in the job log is shown in the chart below:

Information stored in the Job Log

Item	Contents
Time of job log	Time and date job log was stored
Job name	Name of printed job (32 characters) Job name will be stored. Job name provided by printing application.
User name	Name of print job user (32 characters) Login user name will be stored. User name provided by printing application.
Job ID	Unique ID for print job created by client PC will be stored. Used to identify unique job and application. Job ID can be specified by application. The iPF printer driver will send the workstation name, UUID. RIP software typically does not use this function.
Job submission time	Time and date of job submission is stored. Information is stored in GMT. Job submission time provided by printing application.
Job printed time	Start time and date of the job is stored.
Job completion time	End time and date of the job is stored.
Job status	Status of a job (completed, error, canceled)
Area printed	Printed area of a job is stored: number of pages, feed method, type of media, media size
Amount of ink used	Amount of ink used is stored.

2. NVRAM

- Storage Medium: EEPROM
- Volatility: Non volatile
- Data Type: Device Setting parameters and User customized device settings.
- Presence of User Data: No
- Description: The EEPROM is located on the main board unit. It contains Device setting parameters and User customized device settings.
- Data Write Method: The data written at the Canon factory is, Device Setting parameters. User customized device settings are revised by the printer control firmware after user printer operations are performed.
- Data Clear Method: Data is cleared utilizing a special tool at the Canon factory.

3. DRAM

- Storage Medium: SDRAM
- Volatility: Volatile
- Data Type: Printer control firmware and temporary storage of image data.
- Presence of User Data: Yes
- Description: The SDRAM is located on the main board unit. It is used to execute printer control program. Additionally, it is used to temporarily store image data.
- Data Write Method: The boot program will read the printer control firmware from the Flash ROM and write it to the SDRAM. Image data will also be electrically written in the SDRAM temporarily when printing is performed.
- Data Clear Method: Data is cleared immediately after removing power from the SDRAM by turning off the power switch.

Maintenance Cartridge Relay Board Unit

NVRAM

- Storage Medium: EEPROM
- Volatility: Non volatile
- Data Type: Back up the main board unit NVRAM.
- Presence of User Data: No
- Description: The EEPROM is located on the maintenance cartridge relay board unit. It contains Device setting parameters and User customized device settings.
- Data Write Method: The data written at the Canon factory is Device Setting parameters. User customized device settings are revised by the printer control firmware after user printer operations are performed.
- Data Clear Method: Data is cleared utilizing a special tool at the Canon factory.

Hard Disk Drive (HDD) Unit

- Storage Medium: Hard Disk Drive. This HDD is non-removable disk drive.
- Volatility: Non volatile
- Data Type: Print data, User customized device settings and job history
- Presence of User Data: Yes
- Description: The HDD is located next to the main board. It contains print data and media.
- Data Write Method: Print data is written during printing operations. User customized device settings and job history are revised by printer control firmware after user printer operations are performed.
- Data Clear Method: Data is cleared using the operation panel functions.