



Statement of Volatility

Nuvera™ EA/MX

100/120/144/157 and 200/288/314 IPM

Production Systems Engine

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Statement of Volatility

Nuvera™ EA/MX Production Systems

Notice

This document describes the locations, capacities and contents of volatile and non-volatile memory devices within the Nuvera™ EA/MX Production Systems.

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Statement of Volatility

Nuvera™ EA/MX Production Systems

Introduction

The Nuvera™ EA/MX Production Systems are used to perform the following tasks:

- High Speed Production Printing
- High Speed Production Copying
- High Speed Scanning (Local and network)

The Nuvera™ EA/MX Production Systems consists of:

- 1 or 2 Print Engines (Marking Module)
- Print Station Interface Platform (PSIP) & Free Flow® Print Server (FFPS)
 - shared hardware physically integrated in system
- Feeder Modules
- Finishing Modules
- Integrated Onboard Scanner (optional)

These modules provide the basic configuration. Depending on what is purchased, the number and types of feeders and finishers can change.

This document describes the amounts and types of memory contained in the device in an easy to read tabular format. To allow security issues to be addressed as needed, specific commentary has been included about job data and where Personally Identifiable Information (PII) can be found in the system.

The information contained in this document has been verified at the time the product is released for sale. Manufacturing process changes may require that memory amounts are increased but, the purpose or contents of the memory should not change.

General Memory Information

Volatile Memory


- All volatile memory listed is cleared after power is removed (decay occurs generally within 20 seconds at room temperature).
- All volatile memory listed is required for normal system operation and during service and diagnostic procedures.
- Removal of any volatile memory will void the warranty.

Non-Volatile Memory

- All non-volatile memory listed is required for normal system operation and during service and diagnostic procedures.
- Removal of any non-volatile memory will void the warranty.
- None of the non-volatile memory in the system can be accessed by accidental keystrokes.

**Xerox FreeFlow® Print Server (Digital Front End)
& Print Station Interface Platform (PSIP) System Descriptions
FreeFlow® Print Server & PSIP Signature Block**

This evaluation and summary was completed by:

Signature	
Printed Name	Russell R. Roberts
Job Title	Technical Specialist / Project Manager I
Job Function	Commercial Off The Shelf (COTS) Integration
Preparation Date	August 9, 2012

The data tables below detail the information regarding the volatile and non-volatile memory contained in the Digital Front End/PSIP used on the Nuvera™ EA/MX Production Systems.

The Digital Front End/PSIP is a PC-type motherboard. It is equipped with a BIOS, main RAM and Video memory.

Volatile Memory Descriptions				
Type (SRAM, DRAM, etc)	Size	User Modifiable (Y/N)	Function or Use	Process to Clear:
SDRAM	4GB for the 100/120/144/157ppm 200/288/314 ppm configurations 8GB option kit for 200/288/314 ppm configuration	N	Main System RAM to contain executable code. No job data stored here persistently	Power Off System
SDRAM	512MB / 1GB	N	Video Display memory No job data stored here persistently	Power Off System
SRAM	3MB [Intel® Core™2 Duo Processor E7400] 6MB [Intel® Core™2 Duo Processor E8400 & Intel® Core™2 Quad Processor Q9400]	N	CPU L2 Cache No job data stored here persistently	Power Off System
SDRAM	1MB	N	DVD Writer Buffer Memory Cache No job data stored here persistently	Power Off System
SDRAM	16MB / 64MB	N	Hard Disk Drive Buffer Memory Cache No job data stored here persistently	Power Off System

**Xerox FreeFlow® Print Server (Digital Front End)
& Print Station Interface Platform (PSIP) System Descriptions (continued)**

Non-Volatile Memory Descriptions				
Type (Flash, EEPROM, etc)	Size	User Modifiable (Y/N)	Function or Use	Process to Clear:
Flash	2MB	Y – upgrade firmware version	System BIOS firmware No job data stored here	N/A
CMOS RAM	256 Bytes	Y	Battery Backed-up storage of configuration information/settings. No job data stored here	Remove battery & +3.3V standby power, Clear CMOS jumper

Xerox FreeFlow® Print Server (Digital Front End)

& Print Station Interface Platform (PSIP) System Descriptions (continued)

The data tables below detail the information regarding the storage devices contained in the FreeFlow® Print Server used on the Nuvera™ EA/MX Production Systems.

Hard Disk Descriptions					
Complete this table if the device has media storage capability					
Drive / Partition (System, Image):	Removable Y / N	Size:	User Modifiable: Y / N	Function:	Process to Clear:
System Disk	No	Minimum 160GB 1TB [optional secondary system disk]	N with normal operation	Operating System, Fonts, configuration file storage, incoming network print jobs, saved jobs	Diagnostic Procedure
Image Disk	No	Minimum 160GB	N with normal operation	Job Images	Diagnostic Procedure
<p>Additional Information: This System disk contains the Solaris Operating System and stores executables, fonts, and settings files. During normal operation job files remain stored on this disk until completed or removed. Under typical system usage job images may also be stored temporarily on the System disk in the Solaris-managed “swap partition”. Images are stored in a proprietary encoded format and fragments of the job data are stored at random locations in the swap partition. Reverse engineering of the swap partition area would be needed to retrieve the encoded image which would then need to be decoded for viewing. The optional second system disk is typically used as a large repository for the “Saved Job Queue” holding jobs indefinitely for reprint on-demand. The additional disk space could also be used for storage of large amounts of font data, etc.</p> <p>The Image Disk stores page images in a proprietary encoded format in contiguous blocks.</p> <p>NOTE: User data and image data may be completely erased if optional Disk Overwrite kit is installed and enabled. This disks are cleared using a four-pass algorithm which conforms to U.S. Department of Defense Directive 5200.28-M (DOD Directive 8500.1 supersedes 5200.28M).</p> <p>NOTE: For even greater security, Xerox provides a Removable Hard Drives (RHD) option so that disk drives may be removed from the system and physically secured elsewhere.</p>					

Media and Storage Descriptions					
Type (disk drives, tape drives, CF/SD/XD memory cards, etc.):	Removable Y / N	Size:	User Modifiable: Y / N	Function:	Process to Clear:
DVD/CD Writer	Y	8.5GB	Yes File storage	Backup Device, Print Job Submission	Destroy media Overwrite RW media
<p>Additional Information: Print Jobs can be stored on removable media which can be used to back up or store desired jobs. Once copied to media, that information must be physically secured by the user to prevent data loss.</p>					

Xerox FreeFlow® Print Server (Digital Front End)


& Print Station Interface Platform (PSIP) System Descriptions (continued)

USB Port(s)	
Complete an entry for each USB port	
USB port and location	Purpose
FreeFlow Print Server DFE / PSIP motherboard contains 12 USB 2.0 ports with a speed of up to 480Mbps: 6 ports on the rear I/O panel, two onboard ports, and two onboard dual USB headers	2 of the 6 Rear I/O panel USB ports are brought out to the front cover: One port used for USB keyboard One port available for User to store scanned images of job files on Flash Media or submit print jobs from Flash Media. Physical security of this information is the responsibility of the User or Operator. 1 of the 6 Rear I/O panel USB ports connects to USB hub built in to Dell 19"W monitor. Remainder of USB ports are unused.
19"W Monitor with built-in USB Hub	Ports of USB hub allow User to store scanned images of job files on Flash Media or submit print jobs from Flash Media. Physical security of this information is the responsibility of the user or operator.
USB keyboard with built-in USB Hub	USB Mouse can be connected to one port of the USB hub. Additional ports of USB hub allow User to store scanned images of job files on Flash Media or submit print jobs from Flash Media. Physical security of this information is the responsibility of the user or operator.
Additional Information: A number of devices can be connected to USB ports on the FreeFlow Print Server DFE/PSIP. Once information has been copied (either as a back-up data set or as a transfer medium) physical security of this information is the responsibility of the user or operator.	

Print Engine (Marking Module) Descriptions

Print Engine (Marking Module) Signature Block

This evaluation and summary was completed by:

Signature	
Printed Name	Russell R. Roberts
Job Title	Technical Specialist / Project Manager I
Job Function	Commercial Off The Shelf (COTS) Integration
Preparation Date	February 9, 2012

The data tables below detail the information regarding the volatile and non-volatile memory contained in the Nuvera™ EA/MX Production Systems print engine.

The Print Engine is controlled by a series of custom circuit boards.

Volatile Memory Description				
Type (SRAM, DRAM, etc)	Size	User Modifiable (Y/N)	Function or Use	Process to Clear:
SDRAM	512MB	N	Page images. No job data stored here persistently [Bacchus II]	Power Off System
SDRAM	512MB	N	Executable code, Printer control data [Sedora]	Power Off System
SRAM	12.5KB	N	Executable code, Printer control data [RCB]	Power Off System
SRAM	2560Bytes	N	Executable code, Printer control data [PPC]	Power Off System
SRAM	512Bytes	N	Executable code, Printer control data [RCM]	Power Off System
SRAM	1KB	N	Executable code, Printer control data [PRC]	Power Off System
SRAM	1KB	N	Executable code, Printer control data [XDC]	Power Off System
SRAM	512Bytes	N	Executable code, Printer control data [SEM PWBA]	Power Off System
SRAM	8KB	N	Executable code, Printer control data [FTC]	Power Off System
Additional Information: Except Bacchus II, all memory listed above contains code for execution and configuration information. No user or job data is stored in these locations.				


Print Engine (Marking Module) Descriptions (continued)

Non-Volatile Memory Description				
Type (Flash, EEPROM, etc)	Size	User Modifiable (Y/N)	Function or Use	Process to Clear:
Flash	64-Mbit	N	Firmware [Bacchus II]	N/A
SRAM w/Battery Backup	4-Mbit	N	eTags/Configuration/Billing Counters [Bacchus II]	Remove battery
Flash	288KB	N	Firmware [RCB]	N/A
Flash	160KB	N	Firmware [PPC]	N/A
Flash	32KB	N	Firmware [RCM]	N/A
Flash	64KB	N	Firmware [PRC]	N/A
Flash	64KB	N	Firmware [XDC]	N/A
Flash	32KB	N	Firmware [SEM PWBA]	N/A
Flash	32KB	N	Firmware [FTC]	N/A
EEPROM	2KB	N	Control set points, configuration settings [RCM]	N/A
Additional Information: All memory listed above contains code for execution and configuration information. No user or job data is stored in these locations.				

Optional Integrated Onboard Scanner Description

Integrated Onboard Scanner Signature Block

This evaluation and summary was completed by:

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Printed Name	Russell R. Roberts
Job Title	Technical Specialist / Project Manager I
Job Function	Commercial Off The Shelf (COTS) Integration
Preparation Date	February 9, 2012

The data tables below detail the information regarding the volatile and non-volatile memory contained in the Nuvera™ EA/MX Production Systems optional Integrated Onboard Scanner.


Volatile Memory Description				
Type (SRAM, DRAM, etc)	Size	User Modifiable (Y/N)	Function or Use	Process to Clear:
SRAM	512Bytes	N	Executable code, Printer control data [RIS PWBA]	Power Off System
SRAM	512Bytes	N	Executable code, Printer control data [SDDF PWBA]	Power Off System
Additional Information: All memory listed above contains code for execution and configuration information. No user or job data is stored in these locations.				

Non-Volatile Memory Description				
Type (Flash, EEPROM, etc)	Size	User Modifiable (Y/N)	Function or Use	Process to Clear:
Flash	32K	N	Firmware [RIS PWBA]	N/A
Flash	32K	N	Firmware [SDDF PWBA]	N/A
EEPROM	8K	N	Motor Control set points, Calibration, settings, NVM configuration settings [RIS PWBA]	N/A
EEPROM	8K	N	Motor Control setpoints, configuration settings [SDDF PWBA]	N/A
Additional Information: All memory listed above contains code for execution and configuration information. No user or job data is stored in these locations.				

Feeder Module Descriptions

Feeder Module Signature Block

This evaluation and summary was completed by:

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Printed Name	Russell R. Roberts
Job Title	Technical Specialist / Project Manager I
Job Function	Commercial Off The Shelf (COTS) Integration
Preparation Date	February 9, 2012

The text below details the information regarding the volatile and non-volatile memory contained in the Nuvera™ EA/MX Production Systems supported feeders. This document lists the available options. Depending on the configuration purchased, your system will contain one or more of these devices. **NOTE: None of these devices store any job data in electronic form.**

Oversized High Capacity Sheet-feed Module

The Feeder device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

Standard Sheet-feed Module

The Feeder device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

High Capacity Sheet-feed Insertion Module

The Feeder device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

Standard Sheet-feed Insertion Module

The Feeder device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.


DocuSheeter™ NV Roll Feeder with Optional Grain Rotator

The DocuSheeter device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

Finisher Module Descriptions

Finisher Module Signature Block

This evaluation and summary was completed by:

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Job Title	Technical Specialist / Project Manager I
Job Function	Commercial Off The Shelf (COTS) Integration
Preparation Date	February 9, 2012

The text below details the information regarding the volatile and non-volatile memory contained in the Nuvera™ EA/MX Production Systems supported finishers. This document lists the available options as of the document Preparation Date. Additional finishers are continuously being certified, check with your Salesperson for a current list. Depending on the configuration purchased, your system will contain one or more of these devices. **NOTE: None of these finishing devices store any job data in electronic form.**

Xerox® Production Stacker Module

The Production Stacker Module device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

Xerox® Multifunction Finisher: Professional and Pro Plus

The High Capacity Stacker finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

Xerox® Basic Finisher Module (BFM), BFM Plus and BFM - Direct Connect

The High Capacity Stacker finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

Xerox® Document Stacker 3500 (DS3500)

The Stacker finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

Xerox® Production Stacker (PSG)

The High Capacity Stacker finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

Xerox® Tape Binder

The Tape Binder finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

Xerox® DB120-D Document Binder

The Document Binder finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

Finisher Module Descriptions (continued)

Third Party DFA-connected finishing devices

Duplo DBM-5001 Inline Booklet Maker

The Duplo Booklet Maker finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

Plockmatic Pro 30 Booklet Maker

The Plockmatic Booklet Maker finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

C.P. Bourg Book Factory with CMT 330 3 Knife Trim

The Bourg Book Factory finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

C.P. Bourg BDFx Booklet Maker with Square Edge

The Booklet Maker finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

C.P. Bourg PowerSquare™ 200

The PowereSquare finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

GBC® FusionPunch® II with Offset Stacker

The Fusion Punch finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

GBC® eBinder 200™

The eBinder finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

LaserMate® LM-15

The LaserMate finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.

CEM DocuConverter™

The DocuConverter finishing device never contains job data or Personally Identifiable Information. All memory inside the device is used for configuration settings and normal operation. Removal of any memory will void the warranty. Access to any memory is by system programs or diagnostics only.