

RELEASE NOTES: xxxAT.230.329, xxxBD.230.329, xxxBL.230.329, xxxBN.230.329, xxxCT.230.329, xxxGM.230.329, xxxGV.230.329, xxxGW.230.329, xxxLS.230.329, xxxMH.230.329, xxxMM.230.329, xxxPC.230.329, xxxPM.230.329, xxxPP.230.329, xxxSG.230.329, xxxSN.230.329, and xxxZJ.230.329

READ THIS FIRST: Special notes and considerations

- **Firmware upgrade warning:**
 - IMPORTANT: Always evaluate the firmware update on one device in the customer specific ecosystem and verify functionality before proceeding to update a fleet of devices
 - Any device running xxxBL.061.001 - xxxBL.061.999 must first update to a FW7 based release such as xxxBL.076.308 before upgrading to xxxBL.081.015 or newer. Failure to do so can result in a device that will not power up to “ready” state
 - Any device running FW5.1 or older (xxxxx.051.yyy or smaller numbers) must first update to a FW7 based release such as xxxxx.076.308 before upgrading to xxxxx.081.015 or newer
 - CS72x/CX72x Series devices and their equivalents running ATL.03x.yyy or ATL.02x.yyy firmware must first update to CSTAT.041.090 or CXTAT.041.090 as an initial intermediate release before updating to a FW7 based release, such as xxxxx.076.308, and then finally updating to xxxxx.081.015 or newer
 - Contact Lexmark Technical Support to obtain intermediate releases if needed
- **Firmware downgrade warning:**
 - Firmware downgrade is no longer supported, if there is a reason firmware downgrade is required, please contact Lexmark Technical Support and see KB Article SO8017
 - Downgrading firmware can result in exposure to known security vulnerabilities and will result in the loss of Apps, Security Features, and Settings
- **Ensure the firmware you download is the correct one for the product you have**

CUSTOMER RELEASE NOTES:

FW23.0, xxxAT.230.329, xxxBD.230.329, xxxBL.230.329, xxxBN.230.329, xxxCT.230.329, xxxGM.230.329, xxxGV.230.329, xxxGW.230.329, xxxLS.230.329, xxxMH.230.329, xxxMM.230.329, xxxPC.230.329, xxxPM.230.329, xxxPP.230.329, xxxSG.230.329, xxxSN.230.329, and xxxZJ.230.329

Changes in 230.329 (since 230.307):

New Features:

- Setting to allow extended compatibility with various CA certificate parameters
- etherFAX functionality is now available on MFP devices without the need for a license installation (note: subscription with etherFAX is still required)
- Customization of self-signed certificate expiration date

Security Issues Addressed:

- Updated Apache to version 2.4.60 to pick up several published security vulnerability fixes
- Protected various settings against cross site scripting
- General security hardening

Field Issues Addressed and Other Improvements:

- Improvements to reduce the risk of an incompatible firmware file being accepted by the device
- Fix for a scaling issue when printing via Microsoft Universal Print which caused output of random characters
- Fix for an intermittent issue resulting in corrupted copy or scan (Black output) after waking the device from sleep on CX96x and their equivalent devices (CXTLS firmware versions)
- Fix for an issue where device is stuck in the “Canceling” state after attempting to cancel a scan job following an ADF paper jam on CX96x and their equivalent devices (CXTLS firmware versions)
- Improvements to Microsoft Universal Print integration
- Fix for an issue where some devices fail to generate a valid Wifi Direct SSID
- Fix to ensure the image displayed in a scan preview uses the proper feed orientation on CX92x and their equivalent devices (CXTMH firmware version)
- Multiple fixes for wireless connectivity issues
- Add support for Diffie Hellman Group 15 (modp3072)
- Ensure correct A5 media size support for applicable media sources whenever the "A5 Loading" functionality is changed
- Address failures resulting from possible timing issues associated with fax sleep
- Change to support Flash as PCL font source
- Fix for Option Skew Adjustment not taking effect when set
- Fix to address a “Low resources” or “System busy” issue when using Scan to e-mail and a Custom Scan Size whose name is a numeric value
- SecureEmail change to allow Kerberos ticket to bind to the LDAP server
- Fix for a bug where you can't update a Kerberos file if you are logged in with any method
- Fix for 241.84 error codes to properly display jam areas on MS/MX72x and MS/MX82x and their equivalent devices (MSNGW, MSTGW, and MXTGW firmware versions)

- Fix for light print particularly in black images on CS82x, CX82x, and CX860 and their equivalent devices (CSTPP and CXTPP firmware versions)
- Fix for an issue where the scanning dialog persisted on the copy workflow screen after the last copy job was completed
- Fix for an issue where the size of the document being scanned is detected incorrectly for mixed size duplex scanning at 400dpi or higher resolution on CX93x, CX94x, and MX93x and equivalent devices (CXTPC and MXTPM firmware versions)
- Fix for an issue updating the TPM firmware if the printer is in sleep mode
- IPv6 fixes for certification
- Converted several engine errors to allow them to be continuable by the user pressing OK (applicable to mono devices only)
 - 111.32 => 611.32A
 - 111.34 => 611.34
 - 111.35 => 611.35
- Fix for a cause of 845.03 Service Scanner Failure or 680.40K errors due to a timing issue (applicable to MFP devices only)
- Improvements for multiple sources of 900 errors, some causes include:
 - Scanning multiple pages to PDF
 - Scanner jam while scanning to FTP
 - Searching Held Jobs
 - Intermittent issue when receiving a fax
 - Device having no settings mirror causing ui-qt-touch killed by SIGSEGV error
 - Printing a specific PDF or PCL5 print job
 - Buffer overflow when printing a document

Changes in 230.307 (since 230.217):

New Features:

- Improvements to reduce the risk of an incompatible firmware file being accepted by the device
- Added ThinPrint support for MS531/MS631 (MSNSN firmware version)

Security Issues Addressed:

- Upgraded open-source components to apply latest security patches

Field Issues Addressed and Other Improvements:

- Change to prevent 901.01 Firmware Errors on CS/CX82x and CX860 and their equivalent devices (CSTPP and CXTPP firmware versions)
- Display “tiered billing coverage” information on EWS page for all Color devices
- Fix for an issue where “update tasks” in Cloud Fleet Management (CFM) can appear stuck or show as not yet completed even though the task is done
- Fix for some SNMP traps not being reported as expected
- Fix for accessibility tabbing to correctly traverse the user interface (op panel)
- Fix for a "Firmware Update Failed - Invalid Version" error when trying to update some devices to 230.217

- Fix for printer not always redisplaying "Ready" after printing the device (menu) settings report
- Fix for out of memory error when using forms merge
- Fix for an issue causing 802.1x connectivity loss after reboot on certain devices
- Fix for issue preventing CSF app from loading
- Fix for 129.x0 Machine Check error on CS/CX92x devices and their equivalents (CSTMH and CXTMH firmware versions)
- Fix for intermittent smart card authentication issues
- Fix for an issue with opening encrypted emails scanned from devices using the Secure Email app
- Fix for an issue in prior FW23 releases (firmware versions 230.001-230.218, inclusive) where the device immediately turned on when the power cord was connected
- Fix for an issue with completing Out of Service Erase on MS/MX53x, MS/MX63x, CS/CX53x, and CS/CX63x devices and their equivalents (MSNSN, MSTSN, MXTSN, CSNGV, CSTGV, and CXTGV firmware versions)
- Fix for incorrect output issue when scanning via Scan Center app with JPEG compression enabled
- Fix for issue with resetting HEPA filter life after replacement on CS/CX82x and CX860 devices and their equivalents (CSTPP and CXTTP firmware versions)
- Fix for some causes of 842.99 or 900.00 errors when using the scanner
- Fix for an issue that can cause light print, especially in black images, on CS/CX82x and CX860 devices and their equivalents (CSTPP and CXTTP firmware versions)
- Fix for an issue where "standard bin" was shown when the staple/hole punch finisher option is installed on certain devices
- Fix for an issue where the printer shows "busy" then goes back to ready without printing anything for specific types of PDF's being directly printed
- Fix for an issue that prevented printing some universal size media from certain trays on MS/MX53x and MS/MX63x devices and their equivalents (MSNSN, MSTSN, and MXTSN firmware versions)
- Fix for an issue where setting "Require All Jobs to be Held" also held incoming faxes
- Fix for an issue where device inaccurately reported "too many trays attached" after an Out of Service Erase operation was performed
- Change to select correct media source when "Multiple Universal Sizes" is enabled
- Improvements for multiple sources of 900 errors, some causes include:
 - When device is asleep, attempting to perform "Reset Printer" from printer web page (EWS) on CS/CX93x and CS/CX94x devices and their equivalents (CSTPC and CXTPC firmware versions)
 - Attempting to access settings when the system is busy on B/MB2236, CS/CX331, MS/MX331, CS/CX431, and MS/MX431 devices and their

equivalents (MSLSG, MXLSG, CSLBL, CXLBL, MSLBD, MXLBD, CSLBN, and CXLBN firmware versions)

- Out of Memory
- Specific PDF test case sending data outside the bounds of the page
- System detecting headphones are unplugged while printer is sleeping

Known Issues/Notes of Interest:

- Some MFP devices may intermittently experience a “Service Scanner Failure [845.03] reason Back Side Cable Failure” error when performing duplex scans. A firmware fix for this issue is in progress. Contact Technical Support if needed.

Changes in 230.217 (since 230.207):

Security Issues Addressed:

- CVE-2023-50733 - Server-Side Request Forgery (SSRF) vulnerability
- CVE-2023-50738 - Firmware downgrade prevention vulnerability
- CVE-2023-50739 - IPP buffer overflow vulnerability
- Upgraded open-source components to apply latest security patches
- Additional security hardening

Field Issues Addressed and Other Improvements:

- Updates to support features for Native Agent to enhance compatibility with Lexmark Cloud Services
- Fix to address delay with small PCL-XL encrypted print jobs
- Fix to address clipping on Korean keyboard
- Change to prevent 940.00 Firmware Error caused by EEPROM corruption
- Fix for intermittent issues with erratic operator panel behavior such as miscolored text, missing icons, etc.
- Fix for an issue that causes toner levels above 10% to jump to reporting 100% after firmware update on CS/CX82x and CX860 and their equivalent devices (CSTPP and CXTTP firmware versions)
- Fix for an issue with shifted output after a duplex scan on a device with a recirculating ADF
- Fix for Configuration Bundle combined with Firmware FLS file to be accepted and correctly applied/updated
- Fix for some causes of 940.00 errors
- Fix for an 840.02 error when waking up from Sleep Mode on some multifunction devices
- Fix for a 126.06B error intermittently occurring at start of print on MS/MX53x and MS/MX63x devices and their equivalents (MSNSN, MSTSN, and MXTSN firmware versions)
- Fix for devices which intermittently become stuck at a screen while scanning
- Fix for an intermittent "Busy, Please Wait" hang after updating firmware on CS/CX82x and CX860 and their equivalent devices (CSTPP and CXTTP firmware versions)
- Fix for a directory permissions issue which prevents LSDM app from receiving captured images for scan tasks

- Updated messaging for usability improvements on panel and Reports pages
- Fix for an issue where the device op panel showed Black Toner Level in gray rather than in black, blending too much into the background of the panel and making it difficult to determine the supply level
- Reduce delays in print processing time for MICR jobs
- Fix for an issue where immediately after an Out of Service Erase, the printer may not be able to be found and added via the Lexmark driver
- Fix for an intermittent issue where scans to JPEG file type may have the bottom portion of the scan missing or replaced by a gray block
- Improvements for multiple sources of 900 errors, some causes include:
 - Scan operations resulting in crash
 - Kernel errors
 - Specific types/contents of print jobs

Known Issues/Notes of Interest:

- Please contact TSC if you need firmware for a particular device that does not show up on https://support.lexmark.com/en_us/drivers-downloads.html
- CS92x and CX92x and their equivalent devices (CSTMH and CXTMH firmware versions) exhibit toner cartridge reporting 4% instead of empty resulting in 129.00, 129.10, 129.20, or 129.30 error codes. To prevent the light color print quality issue, users can enable Custom Supplies Notification on the device via web page or panel and change the “Very Low” Supply Level Behavior setting to “Non Continuable Stop” for every cartridge (black, yellow, magenta, and cyan). This custom notification prevents the 129.00, 129.10, 129.20, and 129.30 error codes from reoccurring and forces a new supply to be inserted. This is a temporary solution until a firmware fix is available. See https://support.lexmark.com/en_us/rd/kb/fw23-supply-issue-notice.html for additional details.

Changes in 230.207 (since 230.041):

New Features:

- Added support for Port 9100 in Recovery Mode

Security Issues Addressed:

- CVE-2023-50735 - Heap corruption vulnerability in the PostScript interpreter
- CVE-2023-50736 - Memory corruption vulnerability in the PostScript interpreter
- CVE-2023-50734 - Buffer overflow vulnerability in the PostScript interpreter
- Upgraded open-source components to apply latest security patches

Field Issues Addressed and Other Improvements:

- Memory management improvements to reduce memory related crashes
- Print speed performance improvements
- Messaging improvements around firmware update
- Usability improvements for refilled Regular cartridges
- Added value for anonymous data collection setting to the Menu Settings Page report
- Fix for an issue where Lite devices were not able to boot to recovery mode

- Change to handle SNMP community names up to 32 characters
- Change to allow import of LDAP settings on Lite boxes with LDAP license
- Fix for issue with garbage output when printing large encrypted print jobs
- Fix for an issue where export logs was hidden if the “Import/Export All Settings” function access control was disabled
- Fix for some “39.01 Page is too complex” errors
- Fix for issue encountered when enabling 802.1x
- Fix for issue where device hung at Lexmark logo during boot
- Fix for “secure element not recognized” error message after Out of Service Wipe
- Fix for device becoming hung in cancelling state after clearing a scanner jam
- Improvements for multiple sources of 900 errors, some causes include:
 - Start key depressed longer than expected
 - Viewing “more info” videos on the device panel
 - Crash while scanning a job to a network folder
 - Attempting to cancel while performing a scan
 - Opening the tray and change the paper while on the bookmark print workflow, before pressing PRINT

Known Issues/Notes of Interest:

- Upgrading the CS82x, CX82x, and CX86x devices and their equivalents (CSTPP and CXTTP firmware) to a 230.xxx firmware release may cause the toner level of the device to begin reporting 100% even if the cartridge is not full. This will correct itself when the cartridge level reaches 10% full. A fix is in progress for this issue and will be available at a later date. Contact Technical Support if needed.
- Due to the power dissipation of some devices, increased the recommended wait time after power off before power on to 30 seconds

Changes in 230.041 (since 230.039):

Field Issue Addressed

- Addressed an issue where certain older versions of some apps stop functioning after update to 230.039 release – additional information is available in this article: https://support.lexmark.com/en_us/rd/kb/fw23-app-compatibility-notice.html

Changes in 230.039 (since 221.214):

New Features:

- Added Smart Card support for PrintCryption
- Lexmark OnePrint Enhancements
- Multiple Universal Size support now includes PCL-XL
- Support for transition to the new Lexmark mobile app

Security Issues Addressed:

- Implement restriction to firmware downgrades to protect devices against firmware with known security vulnerabilities
- Added support for User Data Encryption on several device models – additional information is available in this article:

https://support.lexmark.com/en_us/printers/printer/MS821/article/v59061173/user-data-encryption-ude.html

- CVE-2023-50737 - Input validation vulnerability in the SE Menu
- General security hardening
- Upgraded open-source components to apply latest security patches

Field Issues Addressed and Other Improvements:

- Fix for an issue causing reduced image quality in certain scenarios on CX532, CX635, XC2335, CS531, CS632, C2335 and equivalent devices (CXTGV, CSNGV, CSTGV firmware versions) - it is recommended to run a color calibration (Settings>Print>Advanced Imaging>Color Adjust) on these devices after upgrading to 230.039 if the device is experiencing the issue
- Fix for an issue where CS/CX82x and CX860 devices and their equivalents did not show the photoconductor status with other supplies statuses (CSTPP and CXTTP firmware versions)
- Fix for an issue where CS/CX82x and CX860 devices and their equivalents were not able to clear the "Missing Photoconductor" IR after the error state was resolved (CSTPP and CXTTP firmware versions)
- Resolve registration issues with Microsoft Universal Print
- Fix for an issue that was requiring AirPrint to be enabled to use IPP over USB
- Add support for additional media sizes to Prescribe's Set Paper SiZe (SPSZ) command with a parameter of 0
- Enhanced logging in Event Log
- Fix for an incorrect print output when printing certain types of PDF, PCL5, or PCL-XL jobs
- Added support for IdPrime 930 smart card
- Fix for an issue where 802.1x connections intermittently drop (affected releases are 221.204 through and including 221.220)
- Fix for an intermittent but inaccurate "Tray 1 Empty" warning occurring on CS/CX72x and their equivalent devices (CSTAT and CXTAT firmware versions)
- Fix for an issue where a lock icon appears on the device homescreen after upgrade to FW22.1 (release numbers 221.001 thru 221.999)
- Fix for intermittent 912.76 errors when printing A5 size paper on CS/CX82x and CX860 devices and their equivalents (CSTPP and CXTTP firmware versions)
- Fixes for multiple fax issues
 - Fix for 900.00 Out of memory error when using etherFax
 - Fix for issue where printer locks up when using Fax over IP
 - Fix for issue where held faxes are not held after out of service wipe
- Fixes for multiple sources of 900 errors, some causes include:
 - "callback_timer_expired" 900.00 error occurs in the middle of printing certain jobs
 - "powermanager" 900.00 error intermittently on devices
 - "lwsmd" 900.00 error intermittently on devices
 - 900.00 error when scanning via Cloud Bridge Solutions with an unsupported media size

Known Issues/Notes of Interest:

- A change in the IPP over USB device behavior in this firmware update may cause a second copy of the driver to show up on the PC for devices that are USB connected to a Windows machine running a Lexmark driver
- Starting at firmware level xx.222.031, a change was implemented for Common Criteria, which requires the X509v3 constraint "CA:TRUE" field. If a certificate does not have this constraint, then the error message "Certificate file failed validation check" appears when a user tries the user attempts to upload the certificate. Users must contact their system administrator and request a reissued certificate signed with the "CA:TRUE" constraint. For additional details, see: https://support.lexmark.com/en_us/printers/printer/CX735/article/v59211981/certificate-file-failed-validation-check-error-message.html

Supported Models:

| Color Models | Firmware Version |
|--------------------------------|-------------------------|
| Single Function Devices | |
| CS33x Series, C3224, C3326 | CSLBL.230.329 |
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| CS42x Series, C2325, C2425 | CSNZJ.230.329 |
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| CS43x Series, C3426 | CSLBN.230.329 |
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| CS52x Series, C2535 | CSNZJ.230.329 |
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| CS531, C2335 | CSNGV.230.329 |
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| CS62x Series, C2240 | CSTZJ.230.329 |
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| CS632 | CSTGV.230.329 |
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| CS72x Series, C4150 | CSTAT.230.329 |
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| CS73x Series, C4342, C4352 | CSTMM.230.329 |
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| CS82x Series, C6160 | CSTPP.230.329 |
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| CS92x Series, C9235 | CSTMH.230.329 |
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| CS93x Series | CSTPC.230.329 |
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| CS96x Series | CSTLS.230.329 |
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| Multi-Function Devices | |
| CX33x Series, MC3224, MC3326 | CXLBL.230.329 |
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| CX42x Series, MC2325, MC2425 | CXNZJ.230.329 |

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| CX43x Series, MC3426 | CXLBN.230.329 |
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| CX52x Series, MC2535, XC2235 | CXTZJ.230.329 |
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| CX532, XC2335 | CXTGV.230.329 |
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| CX62x Series, MC2640, XC4240 | CXTZJ.230.329 |
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| CX635 | CXTGV.230.329 |
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| CX72x Series, XC414x Series, XC415x Series | CXTAT.230.329 |
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| CX73x Series, XC4342, XC4352 | CXTMM.230.329 |
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| CX82x Series, XC615x Series, XC8155 | CXTPP.230.329 |
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| CX833, XC8355 | CXTLS.230.329 |
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| CX86x Series, XC816x Series | CXTPP.230.329 |
| | |
| CX92x Series, XC92xx Series | CXTMH.230.329 |
| | |
| CX93x Series, XC93xx Series | CXTPC.230.329 |
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| CX94x Series, XC94xx Series | CXTPC.230.329 |
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| CX96x Series, XC96xx Series | CXTLS.230.329 |
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| Mono Models | Firmware Version |
| Single Function Devices | |
| B2236 | MSLSG.230.329 |
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| MS32x Series, B2338 | MSNGM.230.329 |
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| MS33x Series, B3340 | MSLBD.230.329 |
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| MS42x Series, B2442, M1242 | MSNGM.230.329 |
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| MS431 Series, B3442 | MSLBD.230.329 |
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| MS52x Series, B2546, M1246 | MSNGM.230.329 |
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| MS531 | MSNSN.230.329 |
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| MS621, B2650 | MSNGM.230.329 |
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| MS622, M3250 | MSTGM.230.329 |
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| MS631 | MSNSN.230.329 |
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| MS632, M3350 | MSTSN.230.329 |
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| MS72x Series | MSNGW.230.329 |
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| MS821, MS823, MS825, B2865 | MSNGW.230.329 |
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| MS822, MS824, MS826, M5255, M5265, M5270 | MSTGW.230.329 |
| | |
| Multi-Function Devices | |
| MB2236 | MXLSG.230.329 |
| | |
| MX32x Series, MB2338 | MXNGM.230.329 |
| | |
| MX33x Series | MXLBD.230.329 |
| | |
| MX42x Series, MB2442, XM1238 | MXTGM.230.329 |
| | |
| MX43x Series, MB3442 | MXLBD.230.329 |
| | |
| MX432 Series | MXTCT.230.329 |
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| MX52x Series, MB2546, XM1242, XM1246 | MXTGM.230.329 |
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| MX532 | MXTSN.230.329 |
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| MX62x Series, MB2650, XM3250 | MXTGM.230.329 |
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| MX632, XM3350 | MXTSN.230.329 |
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| MX72x Series, MB2770, XM5370 | MXTGW.230.329 |
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| MX82x Series, XM73xx Series | MXTGW.230.329 |
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| MX93x Series, XM93x Series | MXTPM.230.329 |

Additional notes and considerations

- **Firmware upgrade warning:**

- It may take up to 20 minutes and multiple firmware steps to update devices to FW23 code if the code level currently on the device is FW2 or FW3 based
- To know if the device is currently running FW2 or FW3 based code, check the firmware version on the device. FW2 and FW3 based code will have the following version format:
 - ATL.03x.yyy or ATL.02x.yyy
 - CB.03x.yyy or CB.02x.yyy
 - PP.03x.yyy or PP.02x.yyy
 - YK.03x.yyy or YK.02x.yyy
- **Understanding firmware nomenclature:**
 - Beginning with FW4, firmware versions are named in the pattern ABCDD.xxy.zzz where:
 - A tells whether the printer is Mono or Color (M = mono, C = color)
 - B tells whether the printer is Single or Multi-function (S = single function printer (SFP), X = multi-function printer (MFP))
 - C tells whether the UI is a touch screen, non-touch/non-eSF capable, or “lite feature set” (T = touch screen with 4.3” or larger screen, N = non-touch screen or non-eSF capable and non-lite, L = lite)
 - DD tells the model family
 - xx tells the major firmware EC version, while y tells the minor firmware EC version (050 = FW5.0, 051 = FW5.1, etc.)
 - zzz tells the release number within that firmware EC
 - FW2 or FW3 firmware versions are named in the pattern DD.xxy.zzz using the same mapping as above. However, the DD model families used on FW2 and FW3 were changed on FW4 and newer:
 - ATL on FW2 and FW3 becomes AT on FW4 and newer
 - CB on FW2 and FW3 becomes AT on FW4 and newer
 - YK on FW2 and FW3 becomes PP on FW4 and newer