



6550 ION Firmware Update Instructions

Firmware G1MU111 – January 30, 2026

Scope

This document describes the firmware upgrade process for Micron 6550 ION Gen5 NVMe SSD using either nvme-cli or msecli. For further assistance with this process please contact Micron support.

Firmware Compatibility Matrix

The table below specifies which NVMe Firmware Commit Actions (CA) are supported when upgrading or downgrading between firmware versions.

Firmware Commit Action 3, Activate Without Reset (AWOR), will cause the SSD to immediately begin running the new firmware version. No reset or power cycle is required. This Commit Action is the least disruptive to the host system and generally preferred when supported.

Firmware Commit Action 1, Activate With Reset (AWR), will cause the SSD to begin running the new firmware version after it receives an NVMe Reset from the host. This may be required for some firmware changes.

Rarely, a change may require the SSD to be power cycled to take effect. In this case, FW Commit Action 1 must be used, followed by a power cycle. This will be indicated in the table as AWR+PwrCyc.

The following firmware upgrade/downgrade paths are supported by this firmware:

From	Compatibility	To	CA Supported	Notes
G1MU003	↔	G1MU111	AWOR, AWR	1

Notes:

1. To enable Relaxed Ordering, a power cycle is required after the firmware upgrade. See the firmware change list for additional details.



Upgrade Using nvme-cli

1. Download and install latest version of nvme-cli from github.com:
 - a. <https://github.com/linux-nvme/nvme-cli/releases>
2. Obtain the required firmware from your Micron contact:
 - a. Firmware name: Micron_6550ION_G1MU111_release.ubi.enc

Note: The same firmware file is used for all form factors and capacities
3. List the SSDs in the system:

```
nvme list
```

Note: Note the device name (`nvmeX`) and firmware version of the target SSD

4. To download the firmware, use the following nvme-cli command:

```
nvme fw-download /dev/nvmeX -f Micron_6550ION_G1MU111_release.ubi.enc
```

5. To commit the firmware, use the following nvme-cli command(s):

- a. If AWOR is supported based upon the Firmware Compatibility Matrix

```
nvme fw-commit /dev/nvmeX -s 2 -a 3
```

- b. If AWR is required per the Firmware Compatibility Matrix or preferred in your application

```
nvme fw-commit /dev/nvmeX -s 2 -a 1
```

```
nvme reset /dev/nvmeX
```

6. Confirm the firmware has been successfully updated to version G1MU111

```
nvme id-ctrl /dev/nvmeX |grep fr
```



Upgrade Using msecli

1. Download and install latest version of msecli from micron.com:
 - a. <https://www.micron.com/sales-support/downloads/software-drivers/storage-executive-software>
2. Obtain the required firmware from your Micron contact:
 - a. Firmware name: Micron_6550ION_G1MU111_release.ubi.enc
Note: The same firmware file is used for all form factors and capacities
3. List the SSDs in the system:

```
msecli -L
```

Note: Note the device name (`nvmeX`) and firmware version of the target SSD

4. To download the firmware, use the following msecli command:
 - a. If AWOR is supported based upon the Firmware Compatibility Matrix

```
msecli -F -U Micron_6550ION_G1MU111_release.ubi.enc -C 3 -S 2 -n /dev/nvmeX
```
 - b. If AWR is required per the Firmware Compatibility Matrix or preferred in your application

```
msecli -F -U Micron_6550ION_G1MU111_release.ubi.enc -C 1 -S 2 -n /dev/nvmeX
```

Note: msecli will automatically issue a reset when the firmware download and commit completes
5. Confirm the firmware has been successfully updated to version G1MU111

```
msecli -L
```