

# Chromium Controller Firmware Update Procedure

FOR USE WITH

Chromium Controller & Next GEM Accessory Kit PN-120223

Chromium Single Cell Controller & Next GEM Accessory Kit PN-1000202

**Instructions are applicable for use with a Windows PC ONLY**

## Notices

### Document Number

CG000150 | Rev D

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### Support

Email: [support@10xgenomics.com](mailto:support@10xgenomics.com)

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**Firmware Update Procedure**

**GET STARTED!**

Action	Item	10x PN	Other Suppliers
<b>Obtain</b>	Cable USB A MALE - B MALE 1M BLK	3000173	Digi-Key Part Number 1175-1417-ND



**System Requirements**

**Instructions are applicable for use with a Windows PC ONLY.**

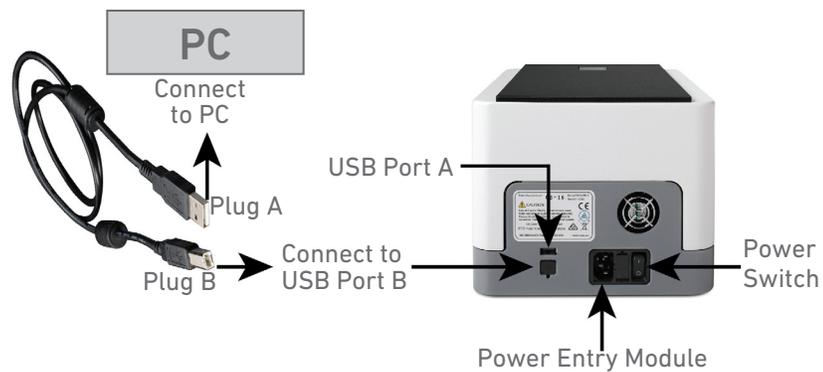
Windows systems that meet these minimum requirements:

- Quad-core Intel or AMD processor
- 32GB (64 recommended)
- 8GB free disk space
- Windows 8, 10 (64 or 32bit) - .NET 4.5
  - ◊ Admin privileges are required to install the application

## 1. Initialize the Chromium Controller

These instructions are applicable for use with a **Windows PC only**.

- a. Ensure the PC is turned ON and connected to the Internet.
- b. Ensure the Chromium Controller is positioned in accordance with recommendations in the Controller Specifications and is turned OFF.
- c. Remove the rubber cap from **USB port B** on the back of the Controller. A tweezer or a pointed object may be used to remove the rubber cap.
- d. Insert **plug B** of the USB cable into the complementary **USB port B** of the Controller.
- e. Turn the Controller ON using the power switch on the back of the Controller. The Controller touchscreen will indicate initialization is in progress.



## 2. Verify Chromium Controller Function

- a. After initialization is complete, insert **plug A** of the same USB cable into the complementary **USB port A** on the PC (see above illustration).
- b. Open and close the Controller tray to check tray functionality.
- c. Verify the firmware by selecting the menu (hamburger stack) in the upper right-hand corner of the Controller home screen
- d. Use the “device” tab and the “firmware” tab to check current firmware version.

3. Initiate the Firmware Update

- a. Download and install the Chromium Controller Firmware Update Program on the PC from [support.10xgenomics.com](http://support.10xgenomics.com). After the program has launched and has detected the Controller, click the play button on the PC screen to begin update. A progress bar will be displayed on the PC screen during the update. The update will take 2–3 min.



During the firmware update, **both the PC and the Controller should remain turned ON with the USB cable connected.**

**Representative PC Screen**  
Click the Play Button to Update



Update in Progress



- b. After update is complete, the PC screen will display “Firmware Upgrade Complete”. Disconnect the USB cable from the Controller and the PC.
- c. Turn the Controller OFF.
- d. Turn the Controller ON. Confirm the firmware update by selecting the menu (hamburger stack) in the upper right-hand corner of the Controller touchscreen. The “device” tab should display the same Control Board Firmware Version as displayed on the PC screen at step b.
- e. Consult the Chromium Single Cell Controller Readiness Test (Document CG00051) or the Chromium Controller Readiness Test (Document CG00025) to run the System Readiness Test.

Contact [support@10xgenomics.com](mailto:support@10xgenomics.com) if any errors are encountered during the procedure.