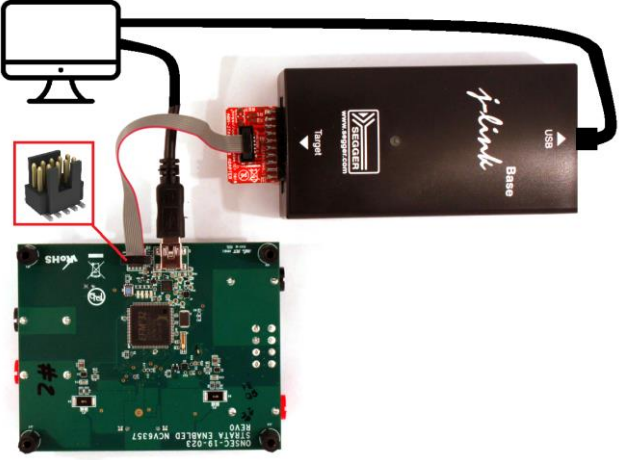
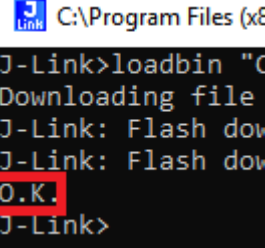
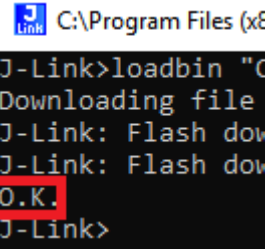
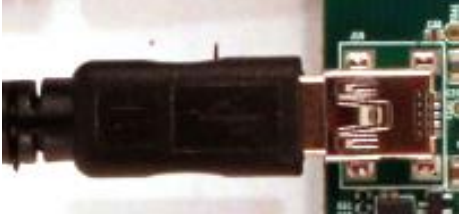
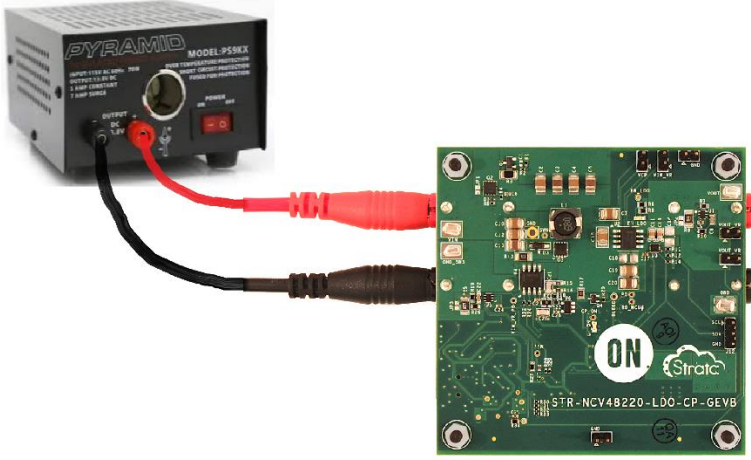


Each Strata platform requires validation before releasing to production. These tests can range from simply installing Strata and ensuring the evaluation board is detectable to using lab equipment to facilitate proper functionality.

Test	Instructions	Pass Condition	
One Time Tests	These tests only need to be done one time per OPN.		
Strata Platform Selector	<ol style="list-style-type: none"> 1) Download and install the newest Strata release, version <x.x.x> or later is required 2) Open Strata and Login 3) On "Platform Selection" tab find STR-NCV48220-LDO-CP-GEVB 4) Select "Browse Documentation" 	<input type="checkbox"/> Ensure OPN is in the "Platform Selection" list <input type="checkbox"/> At least one document is shown on "Platform Content" tab under "Platform Documents" and optionally documents displayed on "Part Datasheets" and "Downloads"	
Flash Setup	<ol style="list-style-type: none"> 1) Download SEGGER JLink software <ol style="list-style-type: none"> a) https://www.segger.com/downloads/jlink/JLink_Windows.exe 2) Connect JLink USB + mini USB to the computer. Then connect the 10pin debug header to from JLink to platform. (see image to right) 3) Run JLink.exe, path may change with software version <ol style="list-style-type: none"> a) For example = "C:\Program Files (x86)\SEGGER\JLink_Vxxx\JLink.exe" b) Type the following <ol style="list-style-type: none"> i) connect ii) EFM32GG380F1024 iii) S iv) 4000 kHz (default) v) loadbin "C:\<full_path_to_binary.bin>", 0x0 c) Download the .bin file from Strata's "Platform Documents" > "Downloads" section 		<input type="checkbox"/> Flash was successful with "O.K." indicator. 
All Board Tests	Tests below this line must be done on every board. The tests should be completed in the order shown with the individual steps completed sequentially.		
Flash	<ol style="list-style-type: none"> 1) Ensure "Flash Setup" section was completed. Those instructions only need to be repeated if JLink.exe window was closed. 2) Type the following <ol style="list-style-type: none"> a) connect b) loadbin "C:\<full_path_to_binary.bin>", 0x0 		<input type="checkbox"/> Flash was successful with "O.K." indicator 
Strata Detection	<ol style="list-style-type: none"> 1) Unplug mini USB cable from previous steps (see picture to right for reference to which USB cable). 2) Open Strata and Login, you should see Platform Selection list 3) Plug in board to computer using mini USB cable 		<input type="checkbox"/> Strata detects board and user interface is automatically shown on "Platform Controls" tab <input type="checkbox"/> "Board Temperature" gauge should read room temperature, approximately 21-26°C <input type="checkbox"/> All voltage/current telemetry info boxes read near zero <input type="checkbox"/> All UI LED indicators should be off (black).

Input Voltage	1) Provide evaluation board with 16V DC with at least 2A current limit (see image to right for polarity)		<input type="checkbox"/> “Board Input Voltage” info box reads 16V within 5%. <input type="checkbox"/> All other voltage/current info boxes read near zero <input type="checkbox"/> “Buck Regulator Input Voltage Valid” LED indicator in UI is green
LDO Input Voltage Selection	1) Change the option in the “LDO Input Voltage Selection” combo box to “Bypass Input Regulator”. Check pass condition 1 2) Change the option in the “LDO Input Voltage Selection” combo box to “DC-DC Buck Input Regulator”. Check pass condition 2	<input type="checkbox"/> 1. “LDO CP Input Voltage” info box reads 16V within 5% <input type="checkbox"/> 2. “LDO CP Input Voltage info box reads 12V within 5%. “Buck Regulator Power Good” LED indicator in UI is green	
LDO/Onboard Load Enable	1) Set the “Enable LDO” switch to On position. Check pass condition 1 2) Change the “Set Output Load Current” value to 50mA via the slider or the input box. Set the “Enable Onboard Load” switch to the On position. Check pass condition 2	<input type="checkbox"/> 1. “LDO CP Output Voltage” info box reads 5V within 5% <input type="checkbox"/> 2. “Output Current” info box reads 50 mA ± 5mA	
Interrupts/Status Indicators	1) Change the “Set DC-DC Buck Output Voltage” value to 5V via the slider or the input box. Check pass condition 1 2) Change the “Set Output Load Current” value to 500mA via the slider or the input box. Check pass condition 2 3) Change the “Set DC-DC Buck Output Voltage” value to 15V via the slider or the input box. Change the “Set Output Load Current” value to 150mA via the slider or the input box. Check pass condition 3 4) Change the “Set DC-DC Buck Output Voltage” value to 2.5V via the slider or the input box. Check pass condition 4 5) Change the option in the “LDO Input Voltage Selection” combo box to “Bypass Input Regulator”	<input type="checkbox"/> 1. “Charge Pump On” LED indicator in UI is green <input type="checkbox"/> 2. “LDO Current Limit or TSD” LED indicator in UI is red <input type="checkbox"/> 3. “LDO Temperature Alert” LED indicator in UI is red <input type="checkbox"/> 4. “LDO Input Under Voltage” LED indicator in UI is red	
OS#/ALERT#	1) Change the “Set Output Load Current” value to 200mA via the slider or the input box. Wait until the “Board Temperature” gauge reading is greater than or equal to 50°C (may take up to 10 minutes)	<input type="checkbox"/> “OS#/ALERT#” LED indicator in UI is red	