
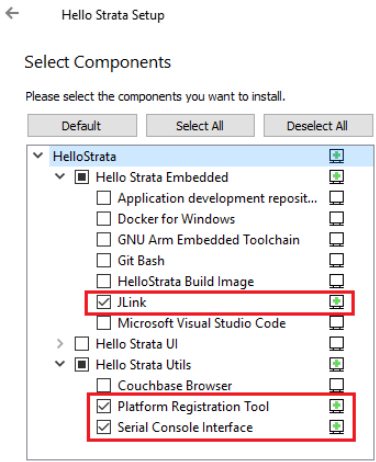
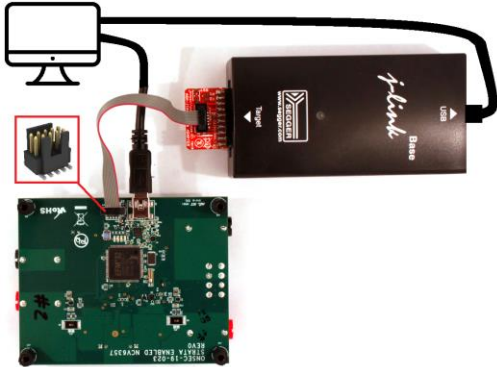



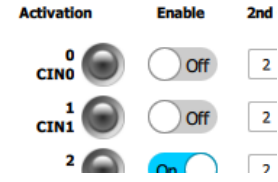


Each Strata platform requires validation before releasing to production. These tests can range from simply installing Strata and ensuring the evaluation board is detectable to using lab equipment to facilitate proper functionality.

Test	Instructions	Pass Condition	
One Time Tests			
Strata Version Confirmation	<ol style="list-style-type: none"> 1) Ensure Strata version is appropriate for validation 2) Open Strata and Login > Click the profile letter "X" > About 3) Version 2.1.0 or later is required <ol style="list-style-type: none"> a) If version is out of date, install the newest Strata release b) If the newest version not new enough, contact SEC for a Beta release 		<input type="checkbox"/> Version 2.1.0 or later is installed
Strata Platform Selector	<ol style="list-style-type: none"> 1) Open Strata and Login 2) On "Platform Selection" tab find the STR OPN in this list. <ol style="list-style-type: none"> a) STR-SENSORS-GEVK 3) Select "Browse Documentation" 		<input type="checkbox"/> Ensure all 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"
Setup	<ol style="list-style-type: none"> 1) Install "Hello Strata Utils" using the newest Hello Strata installer here <ol style="list-style-type: none"> a) \\usbserv1\deployment\hello_strata 2) ONLY REQUIRED TO INSTALL THE FOLLOWING!! See picture to right. <ol style="list-style-type: none"> a) JLink b) Platform Registration Tool c) Serial Console Interface 		<input type="checkbox"/> Installation completed
Platform Registration Tool	<ol style="list-style-type: none"> 1) Ensure "Setup" section was completed. Those instructions only need to be repeated if the "Hello Strata Utils" are not installed. 2) Connect the EVB as shown in the picture to the right 3) Open the "Platform Registration Tool" application <ol style="list-style-type: none"> a) Per OPN, download the .bin file from Strata's "Platform Documents" > "Downloads" section b) Browse to the downloaded .bin file in the "Firmware data file" browse "Select" dialog 4) Click "Begin" 5) Ensure programming was successful 6) Repeat steps 1) through 5) for the remaining boards before continuing to next step. Note: simply unplug JLink and platform and plug into another and the flash will start automatically. 		<input type="checkbox"/> Flash was successful 
Serial Console Interface	<ol style="list-style-type: none"> 1) Open the "Serial Console Interface" application and execute the following command <pre>{"cmd": "set_platform_id", "payload": {"platform_id": "", "class_id": "72ddcc10-2d18-4316-8170-5223162e54cf", "board_count": 0}}</pre> 2) Repeat steps 1) through 5) for the remaining boards before continuing to next step 		<input type="checkbox"/> Command status is "OK"

			<pre> 19:04:29.217 C { "cmd": "set_platform_id", "payload": { "platform_id": "", "class_id": "72ddcc10-2d18-4316-8170-5223162e54cf", "board_count": 0 } } 19:04:29.458 { "ack": "set_platform_id", "payload": { "return_value": true, "return_string": "command valid" } } 19:04:29.458 { "notification": { "value": "set_platform_id", "payload": { "status": "OK" } } } </pre>
All Board Tests	Tests below this line must be done on every board.		
Strata Detection	<ol style="list-style-type: none"> 1) Make sure to close "Serial Console Interface" 2) Unplug mini USB cable from previous steps (see picture to right for reference to which USB cable). 3) Open Strata and Login, you should see Platform Selection list 4) 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"/> The Touch tab is activated
Touch Tab	<ol style="list-style-type: none"> 1) Touch the sensors 0 through 7 		<input type="checkbox"/> LED on board next to each sensor is illuminated <input type="checkbox"/> Activation and Data indicators in Strata are activated per all 8 touches
Proximity Tab	<ol style="list-style-type: none"> 1) Click Proximity tab 2) Hover finger approximately 1/2" above A, B, C, and D sensors 		<input type="checkbox"/> LED on board next to each sensor is illuminated <input type="checkbox"/> Activation and Data indicators in Strata are activated per all 8 touches
Light Tab	<ol style="list-style-type: none"> 1) Use finger to change to Light sensor by touching the "LIGHT" sensor show in the picture to the right 2) Change gain from 8 to 0.25 3) Set the sensitivity to 140 using the slider 		<input type="checkbox"/> UI changes to Light tab <input type="checkbox"/> In normal office lighting conditions the Lux value should read <ul style="list-style-type: none"> o Around 2000-4000 lx for gain of 8 o Around 100 lx for gain of 0.25 <input type="checkbox"/> Sensitivity is coerced to 150 when set to 150 and Lux reading should increase
Temperature Tab	<ol style="list-style-type: none"> 1) Click Temperature tab 		<input type="checkbox"/> After about 15 seconds the Remote Temperature should be around 40°C and the Local Temperature should be around 32°C and slowly increasing.
Temperature Tab	<ol style="list-style-type: none"> 1) Reduce the Remote THERM and Local THERM Limits to 0°C 		<input type="checkbox"/> THERM, RTHRM, and LTHRM indicators in Strata should be lit up red
Temperature Tab	<ol style="list-style-type: none"> 1) Change the Range from 0-127°C to -64-191°C 		<input type="checkbox"/> ALERT, RHIGH, and LHIGH indicators in Strata should be lit up red. Along with THERM, RTHRM, and LTHRM indicators from previous step.
LC717A10AR Tab	<ol style="list-style-type: none"> 1) Click LC717A10AR tab 2) Disable CIN0 and CIN1 using the two Enable On/Off sliding buttons, see picture to right 3) Touch both CIN0 and CIN1 		<input type="checkbox"/> CIN0 and CIN1 LEDs on PCB do not illuminate and the Activation and Threshold indicators in Strata are not updated
LC717A10AR Tab	<ol style="list-style-type: none"> 1) Click the Export Registers button 2) Type a file name into the "File name" field and click Save 3) Open that file in a text editor 		<input type="checkbox"/> There are two lines of data exported in this file