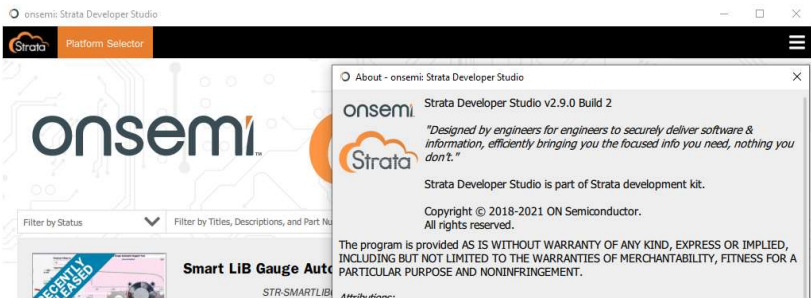

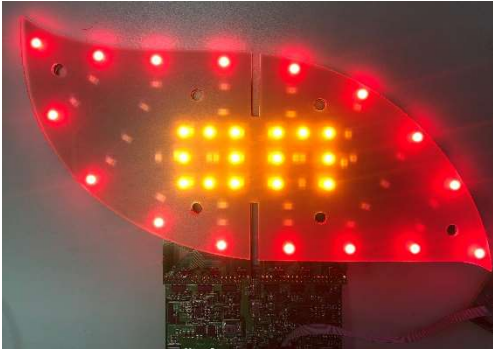


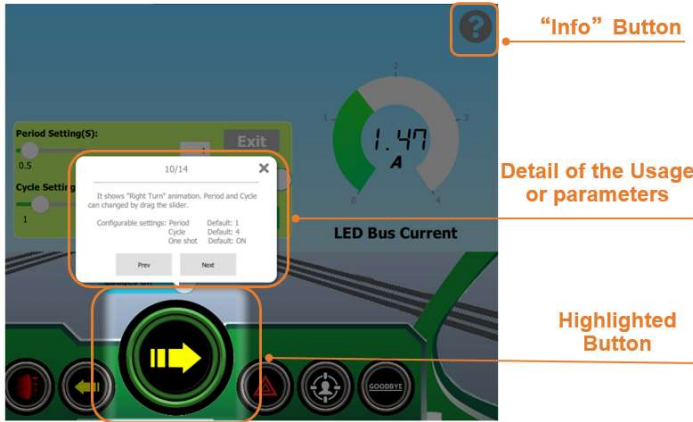





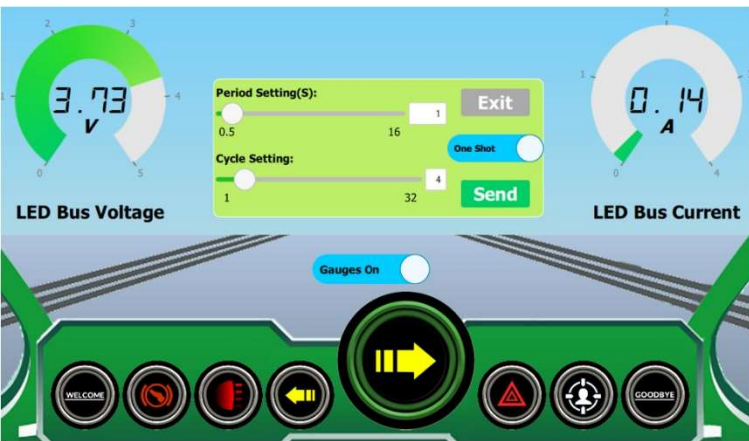
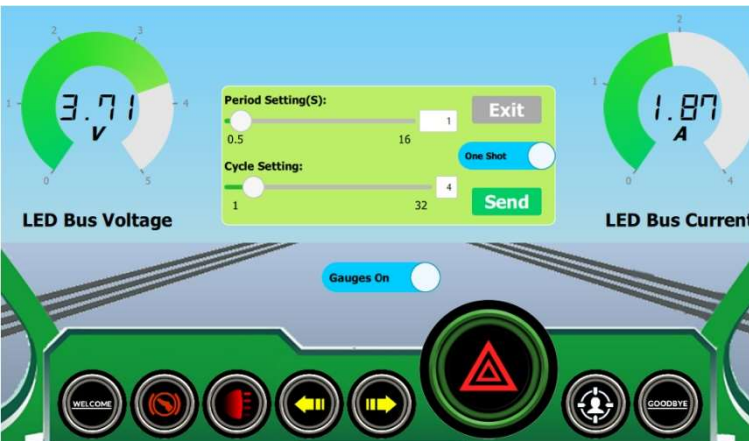


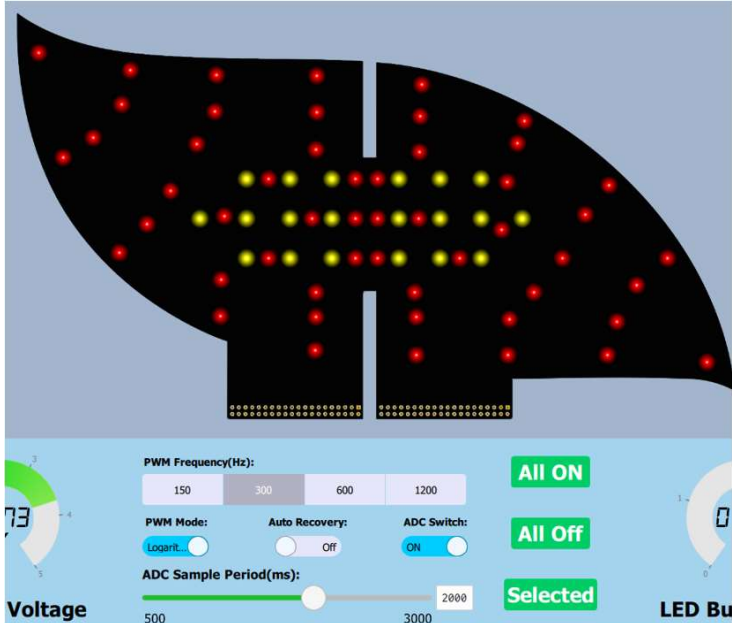


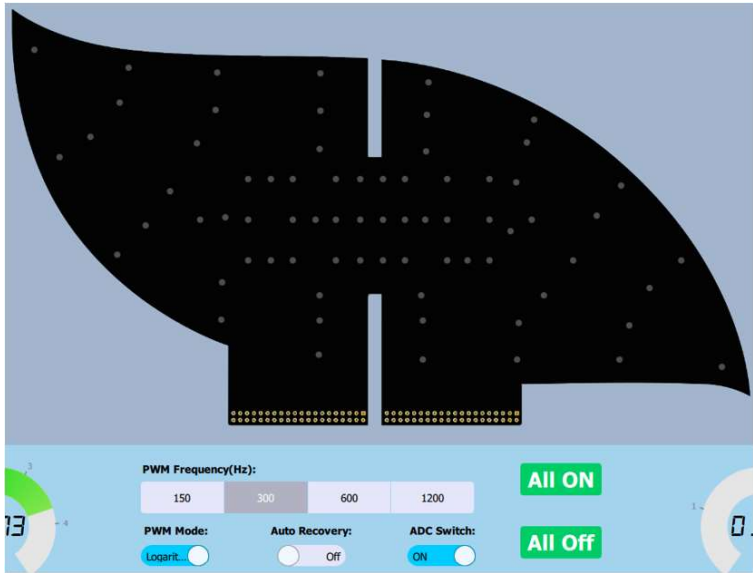
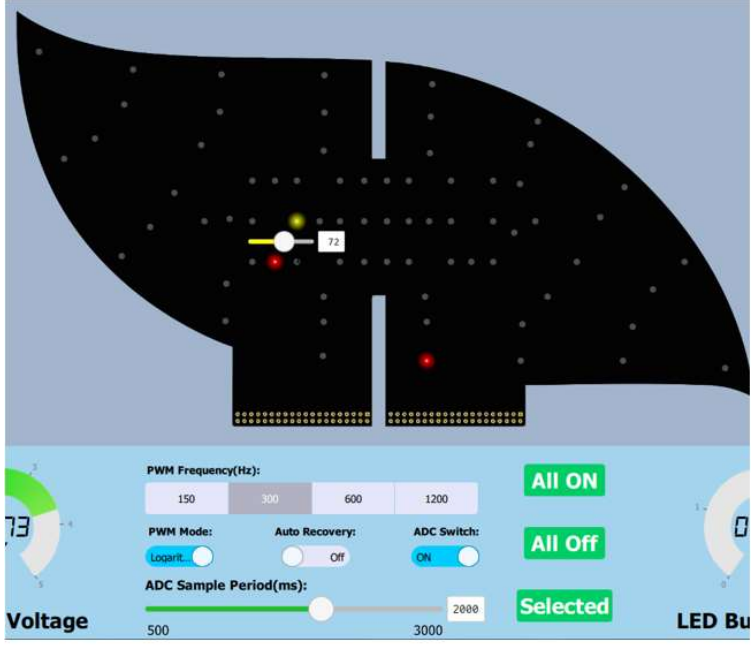
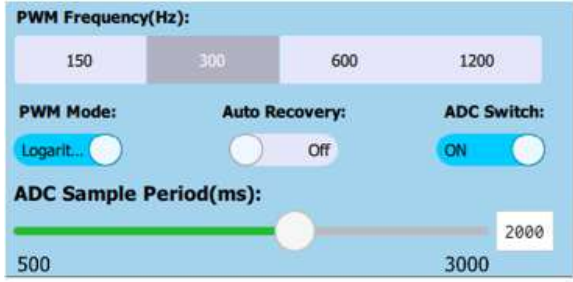
Getting Started Guide - STR-NCV7685-REAR-GEVK

Items	Instructions	Remarks	
Strata Developer Studio			
Strata Version	1) Ensure Strata version is appropriate for validation 2) Open Strata and Login 3) Click "About" to check Whether the version is greater than v2.9.0 Build 2		<input checked="" type="checkbox"/> Version higher than v2.9.0 Build 2
Strata Platform	1) Scroll down or use filter to find the "Multiple NCV7685 Chips for Rear Lighting Demo" platform		<input type="checkbox"/> Platform of "NCV7685 Chips for Rear Lighting Demo" in the list.
Hardware			
LED and Control Board	1) Assemble guide plate for LED board. 2) Connect LED board and Control board with 2 40pin connectors. 3) Plug in DC power supplier (12-24V).		<input type="checkbox"/> The start-up animation showed and stopped with faded yellow LED with "ON" characters.
RSL10 Linked Board	1) Connect Linked board to Control board with 2X8 connector. 2) Connect USB cable between linked board and PC. 3) Launch Strata and open "hardware".		<input type="checkbox"/> LED in RSL10 blinking <input type="checkbox"/> "STR-NCV7685-REAR-GEVK" GUI launched.
Strata GUI			

<p>Help Function</p>	<ol style="list-style-type: none"> 1) Click  icon on top-right corner. 2) Click "next" to check quick help information in both pages 		<ul style="list-style-type: none"> <input type="checkbox"/> In "Animation Demo" page, each quick help information shows. <input type="checkbox"/> In "Customized Test" page, each quick help information shows.
<p>Button Function</p>	<ol style="list-style-type: none"> 1) Hover mouse on each button. 2) Click each button then exit. 		<ul style="list-style-type: none"> <input type="checkbox"/> Inactive icon in white ring and original size. <input type="checkbox"/> Hovered in, the icon in yellow ring and bigger size. <input type="checkbox"/> Clicked, the icon in green ring and bigger size.
<p>Function in "Animation Demo" tab</p>	<ol style="list-style-type: none"> 1) Click "Welcome" icon. 2) Adjust Setting and click "Send". 3) Click "Exit". 		<ul style="list-style-type: none"> <input type="checkbox"/> Switch, "Exit" and "Send" works. <input type="checkbox"/> "Welcome" animation shows as setting on LED board.
	<ol style="list-style-type: none"> 1) Click "Brake" icon. 2) Adjust Setting and click "Send". 3) Click "Exit". 		<ul style="list-style-type: none"> <input type="checkbox"/> "PWM_DUTY" slider, "Exit" and "Send" works. <input type="checkbox"/> "Brake" animation shows as setting on LED board.

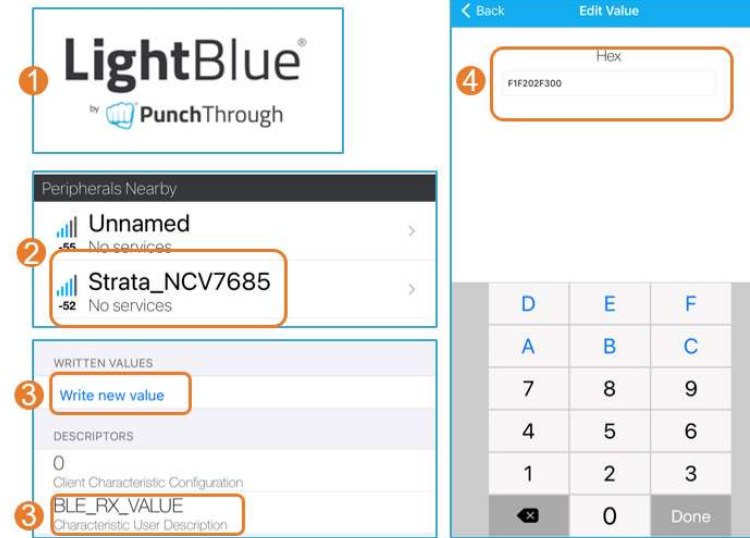
<ol style="list-style-type: none"> 1) Click "Fading" icon. 2) Adjust Setting and click "Send" 3) Click "Exit". 		<ul style="list-style-type: none"> <input type="checkbox"/> "Period" and "Cycles" slider, "one-shot" switch, "Exit" and "Send" works. <input type="checkbox"/> "Fading" animation shows as setting on LED board.
<ol style="list-style-type: none"> 1) Click "Left Turn" icon. 2) Adjust Setting and click "Send" 3) Click "Exit". 		<ul style="list-style-type: none"> <input type="checkbox"/> "Period" and "Cycles" slider, "one-shot" switch, "Exit" and "Send" works. <input type="checkbox"/> "Left Turn" animation shows as setting on LED board.
<ol style="list-style-type: none"> 1) Click "Right Turn" icon. 2) Adjust Setting and click "Send" 3) Click "Exit". 		<ul style="list-style-type: none"> <input type="checkbox"/> "Period" and "Cycles" slider, "one-shot" switch, "Exit" and "Send" works. <input type="checkbox"/> "Right Turn" animation shows as setting on LED board.
<ol style="list-style-type: none"> 1) Click "Hazard light" icon. 2) Adjust Setting and click "Send" 3) Click "Exit". 		<ul style="list-style-type: none"> <input type="checkbox"/> "Period" and "Cycles" slider, "one-shot" switch, "Exit" and "Send" works. <input type="checkbox"/> "Hazard Light" animation shows as setting on LED board.

	<ol style="list-style-type: none"> 1) Click "Setting" icon. 2) Adjust Setting and click "Send" 3) Click "Exit". 		<ul style="list-style-type: none"> <input type="checkbox"/> "PWM Freq" radio button, "Mode" and "Auto R" switches, "one-shot" switch, "Exit" and "Send" works.
	<ol style="list-style-type: none"> 1) Click "Goodbye" icon. 2) Adjust Setting and click "Send" 3) Click "Exit". 		<ul style="list-style-type: none"> <input type="checkbox"/> Switch, "Exit" and "Send" works. <input type="checkbox"/> "Goodbye" animation shows as setting on LED board.
<p>Function in "Customized Test" tab</p>	<ol style="list-style-type: none"> 1) Switch to "Customized Test" tab. 2) Click "All ON". 3) Click "All OFF". 		<ul style="list-style-type: none"> <input type="checkbox"/> All LEDs turn on in LED board. <input type="checkbox"/> All LEDs turn off in LED board.

			
	<ol style="list-style-type: none"> 1) Hover on select LED and drag the slider to setting intensity value. 2) Click "Selected" after all selected LEDs setting done. 		<input type="checkbox"/> Selected LEDs turn into to setting intensity on LED board.
	<ol style="list-style-type: none"> 1) Click or drag for each setting 		<input type="checkbox"/> "PWM Freq" radio button, "Mode" and "Auto R" switches, "ADC Period" Slider works.

BLE App Control

- 1) Launch Mobile App.
- 2) Search and tap “Strata_NCV7685”.
- 3) Tap “Write new value” In “BLE_RX_VALUE” bar.



“Strata_NCV7685” can be find and connected.

- 1) Input commands following the protocol

Command	Header (Byte 0-1)	Length (Byte 2)	Code (Byte 3)	Parameters (Byte 4 -- 15)	Examples
WELCOME	F1 F2		F3		f1 f2 02 f3 00 Demo welcome animation once.
LEFTTURN	F1 F2		F4		f1 f2 05 f4 00 08 d0 07 Demo left turn animation once; cycles = 6 times; period = 2000ms.
RIGHTTURN	F1 F2		F5		f1 f2 05 f5 01 08 d0 07 Repeat demo right turn animation; cycles = 6 times; period = 2000ms.
BRAKE	F1 F2		F6		f1 f2 02 f6 7f Demo brake light to maximum value.
FADING	F1 F2		F7		f1 f2 05 f7 00 02 40 1f Demo breathing animation once; cycles = 2 times; period =8000ms.
WARNING	F1 F2		F8		f1 f2 05 f8 01 02 e8 03 Repeat demo hazard light; cycles = 2 times; period =1000ms.
BYEBYE	F1 F2		F9		f1 f2 02 f9 01 Repeat demo goodbye animation.
LEDALL	F1 F2		FA		f1 f2 02 fa 01 All 72 LEDs turn on.
SETPWM	F1 F2		FB		f1 f2 05 fb 00 12 0c 01 autor disable, PWM freq=300Hz, Logarithmic mode
CHIP_1	F1 F2		C1		f1 f2 0d c1 81 82 83 84 85 86 87 88 89 8a 8b 8c Update 12 LEDs of chip_1 values.
CHIP_2	F1 F2		C2		f1 f2 0d c2 71 72 73 74 75 76 77 78 79 7a 7b 7c Update 12 LEDs of chip_2 values.
CHIP_3	F1 F2		C3		f1 f2 0d c3 71 72 73 74 75 76 77 78 79 7a 7b 7c Update 12 LEDs of chip_3 values.
CHIP_4	F1 F2		C4		f1 f2 0d c4 71 72 73 74 75 76 77 78 79 7a 7b 7c Update 12 LEDs of chip_4 values.
CHIP_5	F1 F2		C4		f1 f2 0d c5 71 72 73 74 75 76 77 78 79 7a 7b 7c Update 12 LEDs of chip_5 values.
CHIP_6	F1 F2		C6		f1 f2 0d c8 71 72 73 74 75 76 77 78 79 7a 7b 7c Update 12 LEDs of chip_6 values.

Send “f1 f2 02 f3 00”, Demo welcome animation once.

Send “F1 f2 06 f4 01 0A 00 04”, “Left Turn” animation shows on the LED board as below: period is 1S, cycle is 5, show once.