

Test Author: Team 2 - Ahlih, Angelo, Bendjy, Ibrahim						
	Test Case Name:	LCD Display 1 Test	Test ID #:		LCD-01	
	Description:	Verify the button inputs work by displaying appropriate button inputs. Each button has a number or action associated with it so, when a button is pushed, the corresponding number/action must be displayed on the LCD screen.	Type:		<input type="checkbox"/> white box <input checked="" type="checkbox"/> black box <input type="checkbox"/> _____	
Tester Information						
	Name of Tester:		Date:			
	HW/SW Version:	1.0	Time:			
	Setup:	Verify overall wiring reflects the schematic and LCD screen is OFF, nothing on the screen should be displayed but it must be tied to power.				
S T E P	Action	Expected Result	P A S S	F A I L	N / A	Comments
1	Press the 'ON' button	LCD screen turns ON and is blank				
2	Press the '1' button	1 appears on the top row of screen				
3	Press the '2' button	12 appears on the top row of screen				
4	Press the '3' button	123 appears on the top row of screen				
5	Press the '4' button	1234 appears on the top row of screen				
6	Press the '5' button	12345 appears on the top row of screen				
7	Press the '6' button	123456 appears on the top row of screen				
8	Press the '7' button	1234567 appears on the top row of screen				
9	Press the '8' button	12345678 appears on the top row of screen				
10	Press the '9' button	123456789 appears on the top row of screen				
11	Press the '0' button	1234567890 appears on the top row of screen				
12	Press the 'CLR' button	LCD screen is still ON but blank				
13	Press the 'OFF' button	LCD screen turns OFF				
	Overall test result:					

Test Author: Team 2 - Ahlih, Angelo, Bendji, Ibrahim						
	Test Case Name:	I2C Communication	Test ID #:		I2C-COM-01	
	Description:	Verify that the I2C bus is communicating with the LCD. Information must be able to be transmitted through the I2C to the LCD and then accurately displayed on the screen.	Type:		<input type="checkbox"/> white box <input checked="" type="checkbox"/> black box <input type="checkbox"/> _____	
Tester Information						
	Name of Tester:	Bendjy Faurestal	Date:		11/30/2022	
	HW/SW Version:	1.0	Time:		8:00pm	
	Setup:	Have the LCD screen OFF and tied to power, ground, I2C SDA and I2C SCL.				
S T E P	Action	Expected Result	P A S S	F A I L	N / A	Comments
1	Send 'on' signal	LCD screen is powered and turned ON with a clear screen	✓			The display is blank each time it is powered on.
2	Send value of '1'	LCD screen displays '1' on the top row	✓			
3	Send value of '2'	LCD screen displays '12' on the top row	✓			
4	Send 'off' signal	LCD screen turns OFF	✓			
	Overall test result:		✓			

Test Author: Team 2 - Ahliah, Angelo, Bendji, Ibrahim						
	Test Case Name:	Mathematical Operations Software Test			Test ID #:	Math-01
	Description:	Verify that the math functions work properly and that the correct data is displayed in the console with decimal, binary and hex as a result.			Type:	<input type="checkbox"/> white box <input checked="" type="checkbox"/> black box <input type="checkbox"/> _____
Tester Information						
	Name of Tester:	Angelo Maldonado-Liu			Date:	11/30/2022
	HW/SW Version:	1.0			Time:	6:30pm
	Setup:	Plug Ras-Pi Pico chip into a computer and open the console.				
STEP	Action	Expected Result	P A S S	F A I L	N / A	Comments
	1 Perform '15 + 26' Math operation, then display result	'41' displayed in console	✓			
	2 Change display from last result (41 decimal) to a hex value	'29' displayed in console	✓			
	3 Change display from last result (29 hex) to binary	'101001' displayed in the console	✓			
	4 Perform '14 / 6' math operation, then display result	'2' is displayed in the console	✓			
	5 Perform '3 * 18' math operation, then display result	'54' is displayed in the console	✓			
	6 Perform '31 - 9' math operation, then display result	'22' is displayed in the console	✓			
		Overall test result:		✓		