

#	Criteria	Excellent (4)	Good (3)	Needs Improvement (2)	Effort Points (1)
1	Capture Pulses	Accurately captures 10 digital pulses with no errors.	Captures the majority of the 10 pulses with minor errors.	Captures some of the pulses with noticeable errors.	You tried your best, but I must see some code and explanation
2	Pulses Data Storage	Successfully stores and retrieves pulse data on the microSD card.	Stores and retrieves pulse data after multiple tries.	Issues with either writing or retrieving data from microSD card.	
3	Replay Pulses	Accurately generate the desired sequence of pulses.	Generate the pulse sequence with minor inaccuracies or timing errors.	Generate the sequence with significant inaccuracies	
4	Analog and PWM Signal Analysis	Accurately measures and displays the Analog/PWM frequency and duty cycle	Measures and displays both frequency and duty cycle with minor inaccuracies.	Displays only some parameter (frequency or duty cycle) correctly.	
5	UART Analysis	Accurately measures the UART baud rate	Measures the baud rate with minor inaccuracies.	Fails to consistently measure the baud rate.	
6	WiFi Communication	Establishes a stable WiFi connection and reliably transmits data to the Dashboard.	Establishes a WiFi connection with occasional drops or delays.	Struggles to establish or maintain a WiFi connection.	
7	IDCODE Display	Displays the IDCODE on the Dashboard.	Displays the IDCODE after 2-3 tries.	Displays an incorrect IDCODE.	
8	Halt/Resume Commands	Successfully sends halt and resume commands to the device.	Experiences occasional delays or errors when sending commands.	Struggles to send commands reliably.	
9	Quality Integration Sub-Modules	Seamless integration with all components working flawlessly.	Modules are mostly well-integrated but show minor issues.	Poor integration of modules, leading to functionality breakdowns.	

Station	Description	Criteria
1	The device will capture a sequence of 10 digital pulses on input pin GP2. This pulse data will be stored on a microSD card. The device can then retrieve the stored pulse data and reproduce the exact sequence of 10 pulses on output pin GP3. This playback will be executed twice.	1, 2, 3, 9
2	The system can analyse signals and display the Analog (GP6) and PWM (GP7) frequency (for both Analog and PWM) and duty cycle (for PWM), and the UART baud rate (GP4), respectively, on the Dashboard (via WiFi).	4, 5, 6, 9
3	The Dashboard can display the device's IDCODE and allows sending halt/resume commands	6, 7, 8, 9