Test Writer	Sabin Maharjan		
Test Case Name	MultiWii Serial Protocol (MSP) Read Test	Test ID	1
Description	Communicate with MWC Flip 1.5 Flight Controller using MSP commands to read RC Values.	Type:	
Name of the Tester	Sabin Maharjan	Date	May 15, 2016
Hardware Version	N/A	Time	8:33 PM
Required	- Drone - Intel Edison with breakout board - GPIO Board attached to Intel Edison - MWC Flip 1.5 Flight Controller - WIFI with SSH connection with Edison - 2x Mini USB –type B connector - 4 female-female pin connector		
Setup	Connect Mini USB to Console port of the Intel Edison. Connect 4 female-female pin connector from serial port (Tx, Rx, Gnd, 5v) of the Flip 1.5 Flight Controller to GPIO Board's Serial Pin heads (Rx, Tx, Gnd, 5v). The blue light on Edison should be on. Red light on Flip 1.5 Controller should be on. Login to Edison using root. Change directory to "Drone/src ". Type "make all". The following actions are done under this directory. **The Drone battery is not connected for this test.**		

Step	Action	Header 3x(uint8_t)	Length (uint8_t)	Code (uint8_t)	Data (data type depends on code)	CRC (uint8_t)	Expected Result	P/F	Comment
1	./drone att	$M<	0	108	None	108	Header: $M> Length: 6 bytes Data: - (uint16_t) Angx: returns in the range of -1800 to 1800. Divide by 10 to get the Eular angle of type (float) - (uint16_t) Angy: returns in the range of -1800 to 1800. Divide by 10 to get the Eular angle of type (float)	P	

							- (uint16_t) heading: returns in the range of [-180;180]		
2	./drone rc-read	$M<	0	105	None	105	Header: $M> Length: 16 bytes Data: - (uint16_t)Roll: Range [1000;2000] - (uint16_t): Range Pitch [1000:2000] - (uint16_t): Range Yaw [1000:2000] - (uint16_t)Throttle: Range [1000:2000]	P	