

Test Writer	Sabin Maharjan		
Test Case Name	Arm and Disarm Drone Test	Test ID	1
Description	Communicate with MWC Flip 1.5 Flight Controller using MultiWii Serial Protocol (MSP) commands to arm and disarm the drone.	Type:	
Name of the Tester	Sabin Maharjan	Date	May 15, 2016
Hardware Version	N/A	Time	8:33 PM
Required	<ul style="list-style-type: none"> <li>- Drone</li> <li>- Intel Edison with breakout board</li> <li>- GPIO Board attached to Intel Edison</li> <li>- MWC Flip 1.5 Flight Controller</li> <li>- WIFI with SSH connection with Edison</li> <li>- 2x Mini USB –type B connector</li> <li>- 4 female-female pin connector</li> </ul>		
Pre-Requirement	RC read test should be completed		
Setup	<p>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.</p> <p>Login to Edison using root. Change directory to “Drone/src”. Type “make all”. The following actions are done under this directory.</p> <p>The flight controller should be configured so that the yaw, pitch, roll and throttle values are at minimum 1000.</p> <p><b>The Drone battery is not connected for this test.</b></p>		

Step	Action	Header	Length	Code	Data	CRC	Expected Result	P/F	Comment
1	./drone arm	\$M<	16	200	1000 1000 2000 1000	1248	Blue light on flight controller is on.	P	
2	./drone disarm	\$M<	16	200	1000 1000 1000 1000	216	Blue light on flight controller is off	P	