

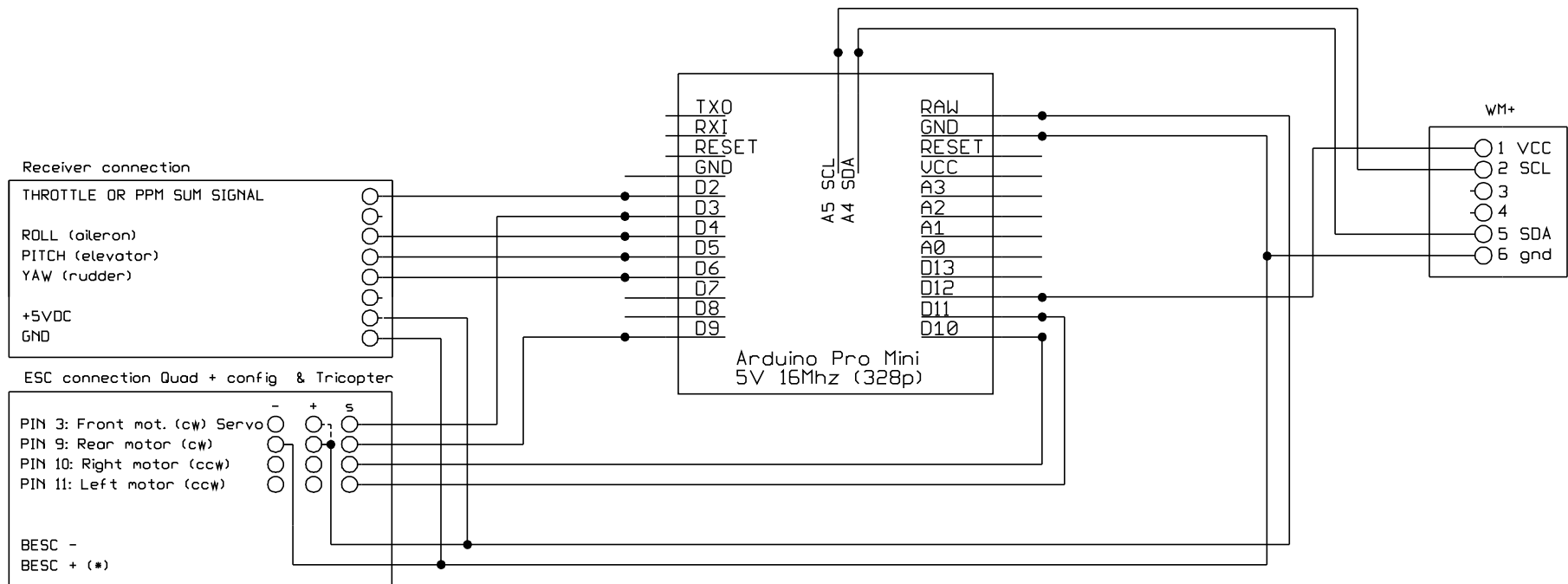
MultiWii Connection Diagrams

All diagrams are fully compatible with the latest MultiWii firmware version 1.8

Content:

- 1 Basic connection diagram
- 2 Full connection diagram
- 3 Full connection diagram Y6 & Hexa
- 4 Gimbal connection diagram
- 5 Connection diagram ADXL345 & BMP085 option 1
- 6 Connection diagram ADXL345 & BMP085 option 2
- 6B Connection diagram WMP NK LLC & BMP085
- 7 Connection diagram flying wing
- 8 Connection diagram Seeeduino Mega
- 9 Connection diagram Seeeduino Mega FFIMU
- 10 Connection diagram Arduino FFIMU
- 11 Individual sensor connections
- 12 Connection diagram Flyduino

Circuit Diagram		Drawing - number		Drawn by	
MultiWiiCopter www.multiwii.com		MultiWii Tri/Quadcopter		Berkely	
Date		Revision		Sheet	
14-09-11		Introduction		1.8	
				0	



Note: ESC connection for Quad X config is different:

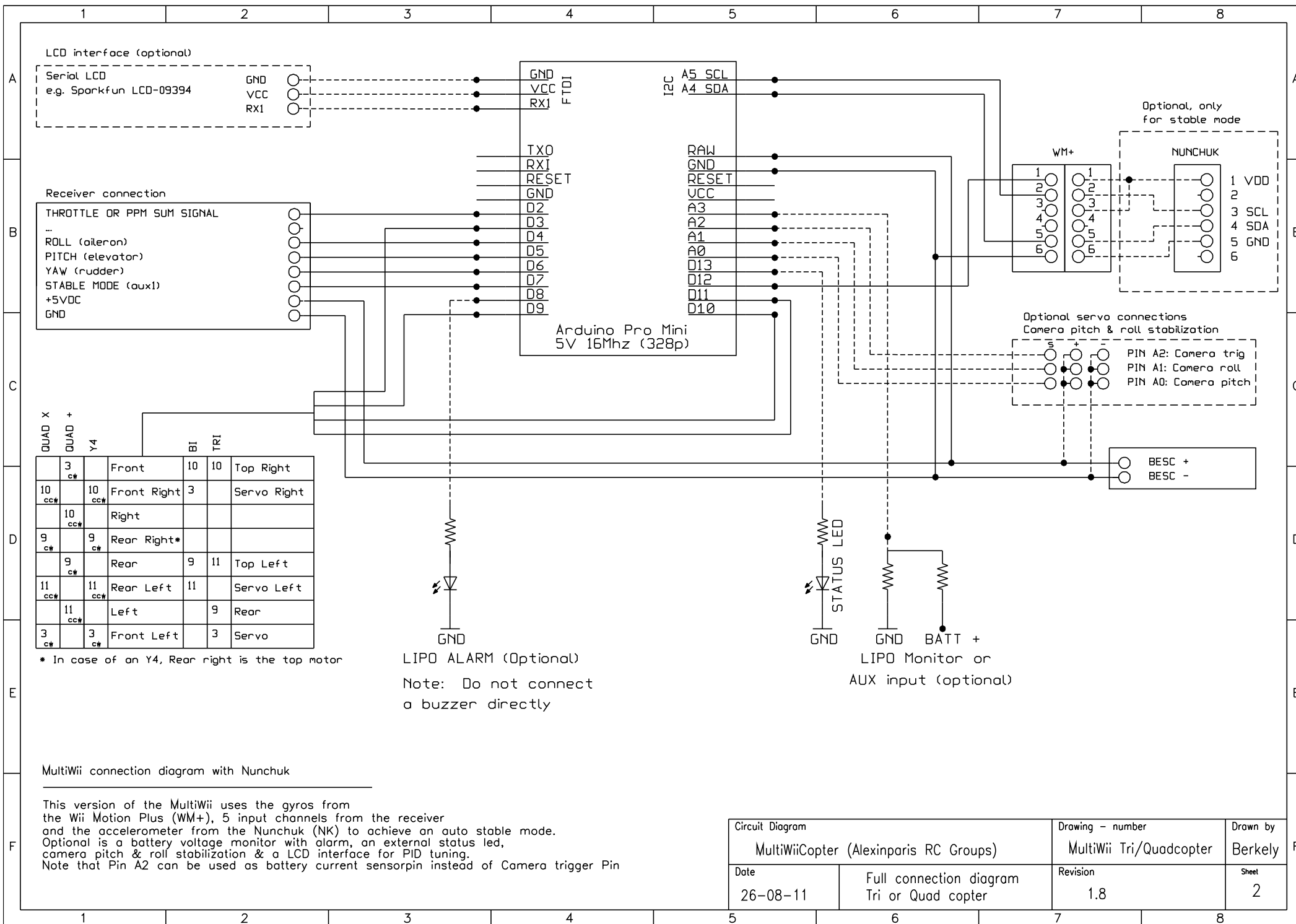
PIN 3: Front left motor (cw)
 PIN 9: Rear right motor (cw)
 PIN 10: Front right motor (ccw)
 PIN 11: Rear left motor (ccw)

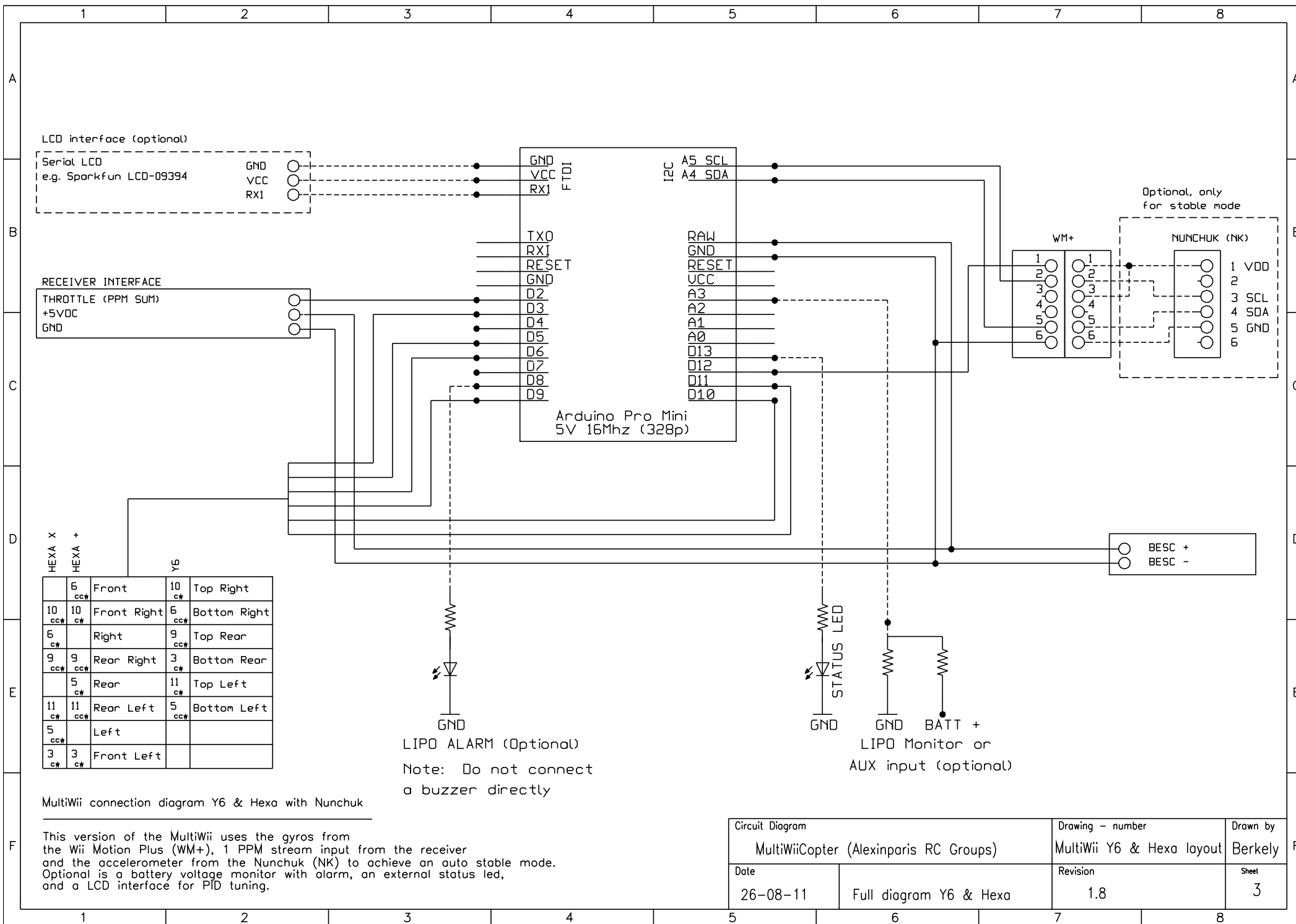
(*) BESC GND & + wires should not be connected in parallel.
 The dashed line is for the supply of the servo only.
 In a quad config it must not be connected.

Basic MultiWii connection diagram:

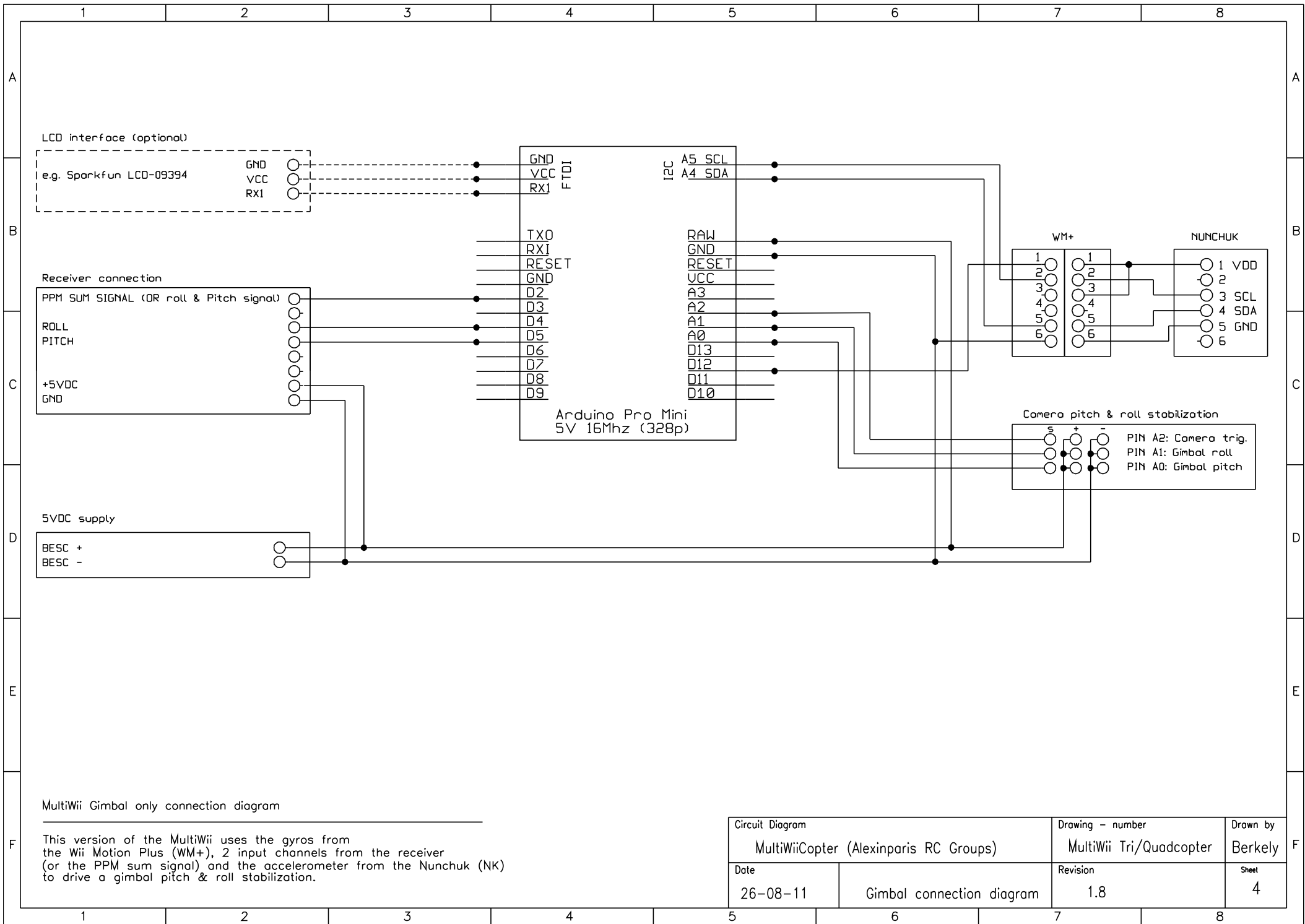
This is the most basic version of the MultiWii, it uses only the gyros from the Wii Motion Plus (WM+) and 4 input channels from the receiver.

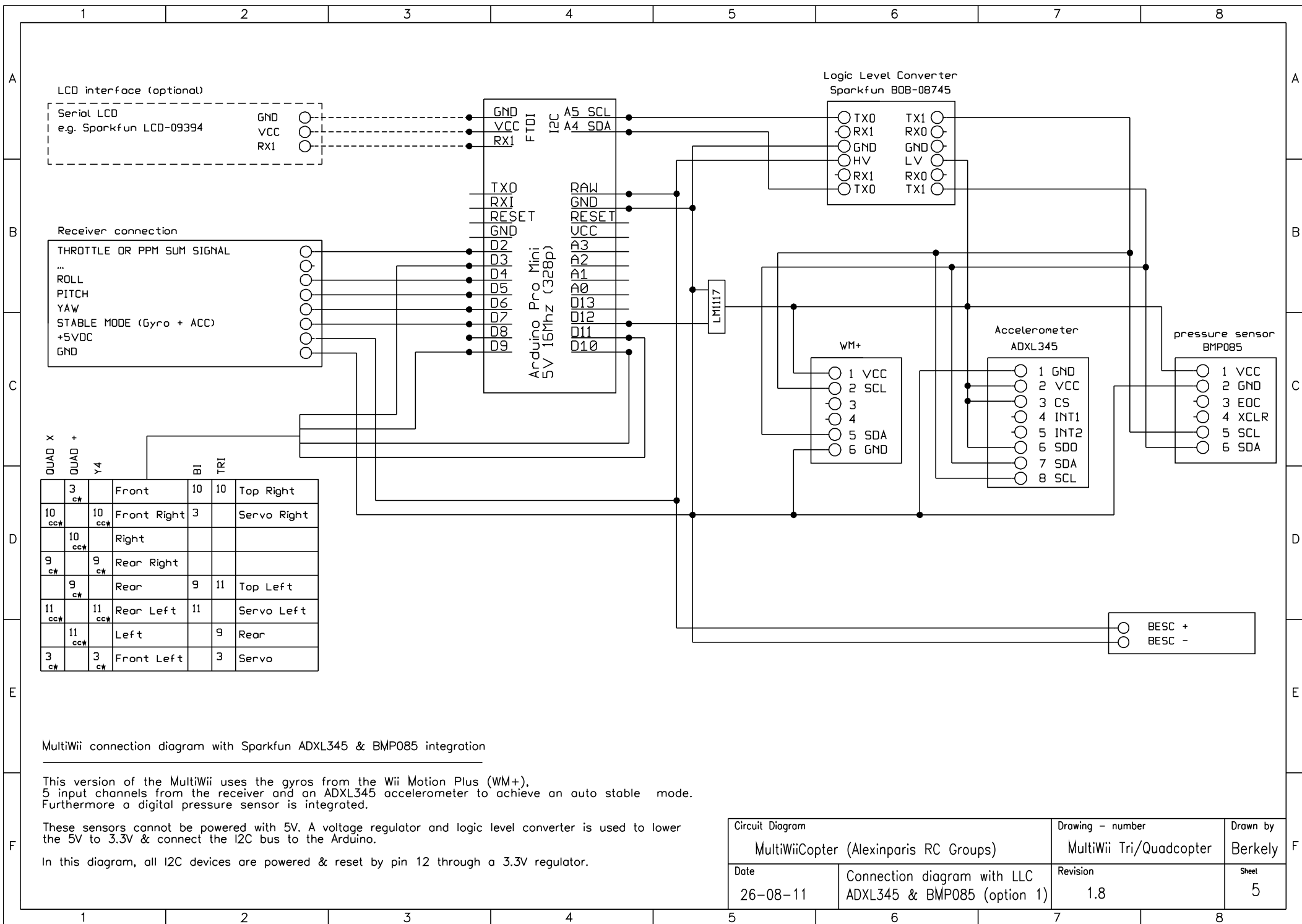
Circuit Diagram		Drawing - number		Drawn by	
MultiWiiCopter (Alexinparis RC Groups)		MultiWii Tri/Quadcopter		Berkely	
Date	BASIC connection diagram	Revision	Sheet		
26-08-11	Tri or Quad copter	1.8	1		





Circuit Diagram		Drawing - number		Drawn by	
MultiWiiCopter (Alexinparis RC Groups)		MultiWii Y6 & Hexa layout		Berkely	
Date		Revision		Sheet	
26-08-11	Full diagram Y6 & Hexa	1.8		3	





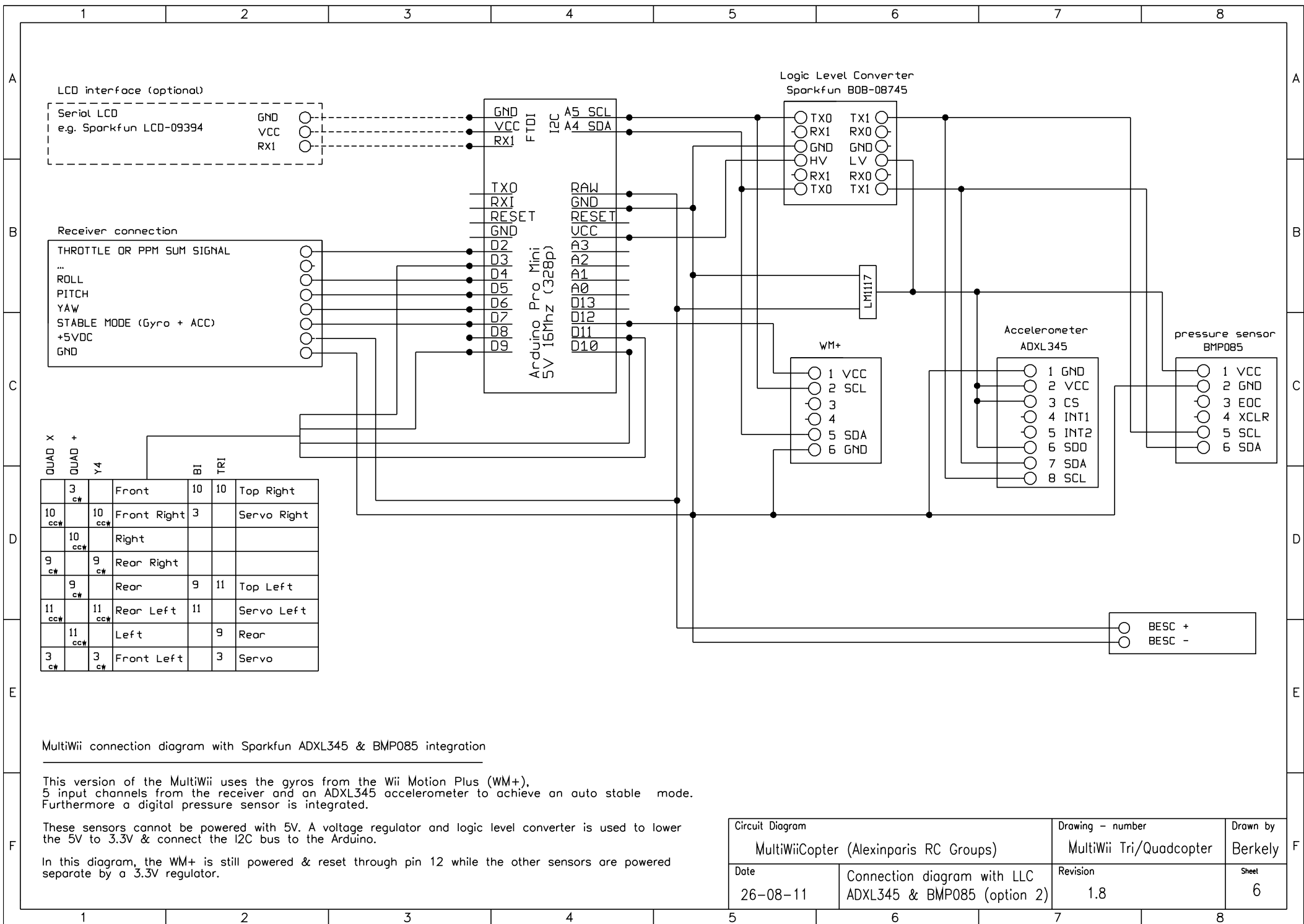
MultiWii connection diagram with Sparkfun ADXL345 & BMP085 integration

This version of the MultiWii uses the gyros from the Wii Motion Plus (WM+), 5 input channels from the receiver and an ADXL345 accelerometer to achieve an auto stable mode. Furthermore a digital pressure sensor is integrated.

These sensors cannot be powered with 5V. A voltage regulator and logic level converter is used to lower the 5V to 3.3V & connect the I2C bus to the Arduino.

In this diagram, all I2C devices are powered & reset by pin 12 through a 3.3V regulator.

Circuit Diagram		Drawing - number	Drawn by
MultiWiiCopter (Alexinparis RC Groups)		MultiWii Tri/Quadcopter	Berkely
Date	Connection diagram with LLC	Revision	Sheet
26-08-11	ADXL345 & BMP085 (option 1)	1.8	5



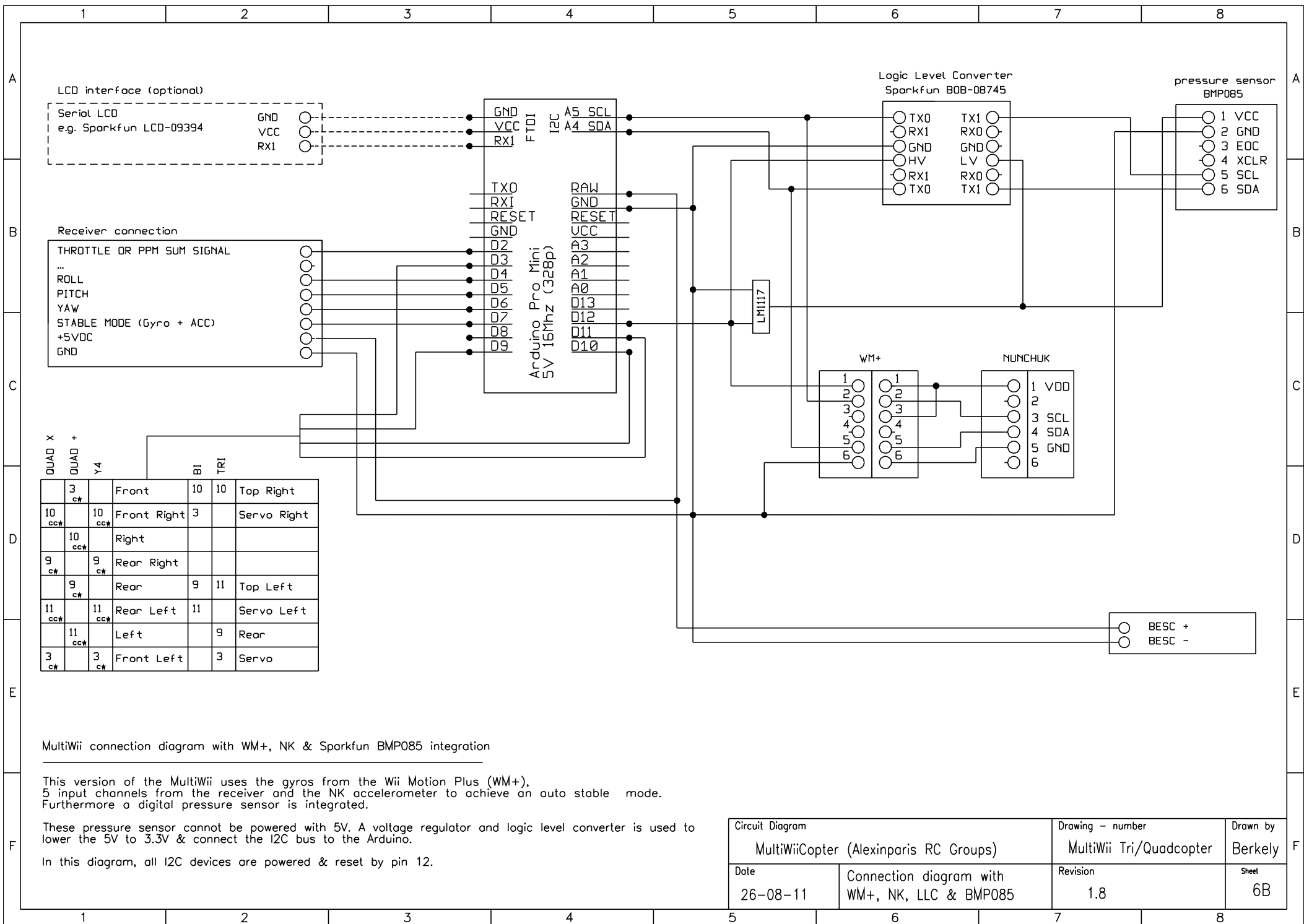
MultiWii connection diagram with Sparkfun ADXL345 & BMP085 integration

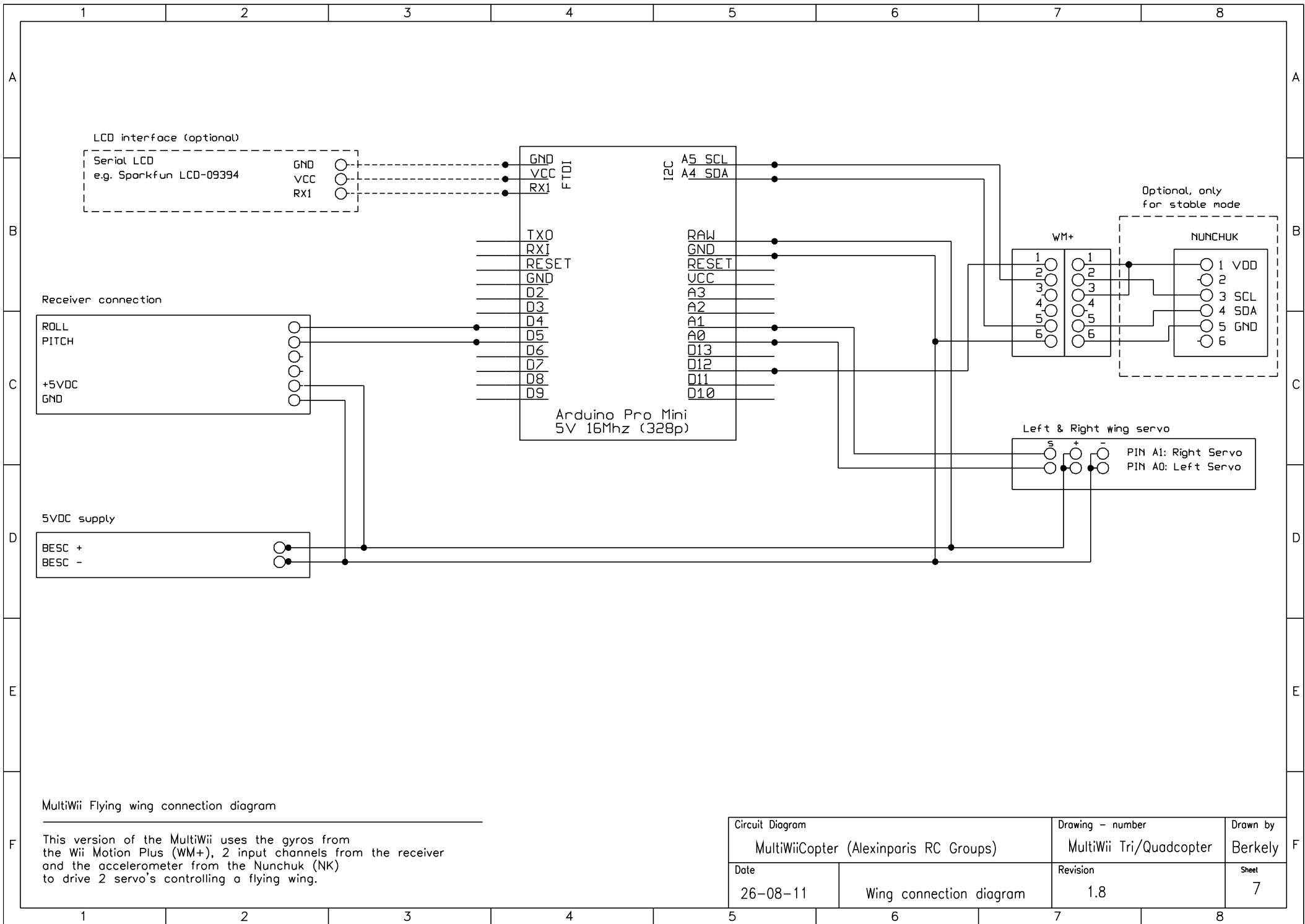
This version of the MultiWii uses the gyros from the Wii Motion Plus (WM+), 5 input channels from the receiver and an ADXL345 accelerometer to achieve an auto stable mode. Furthermore a digital pressure sensor is integrated.

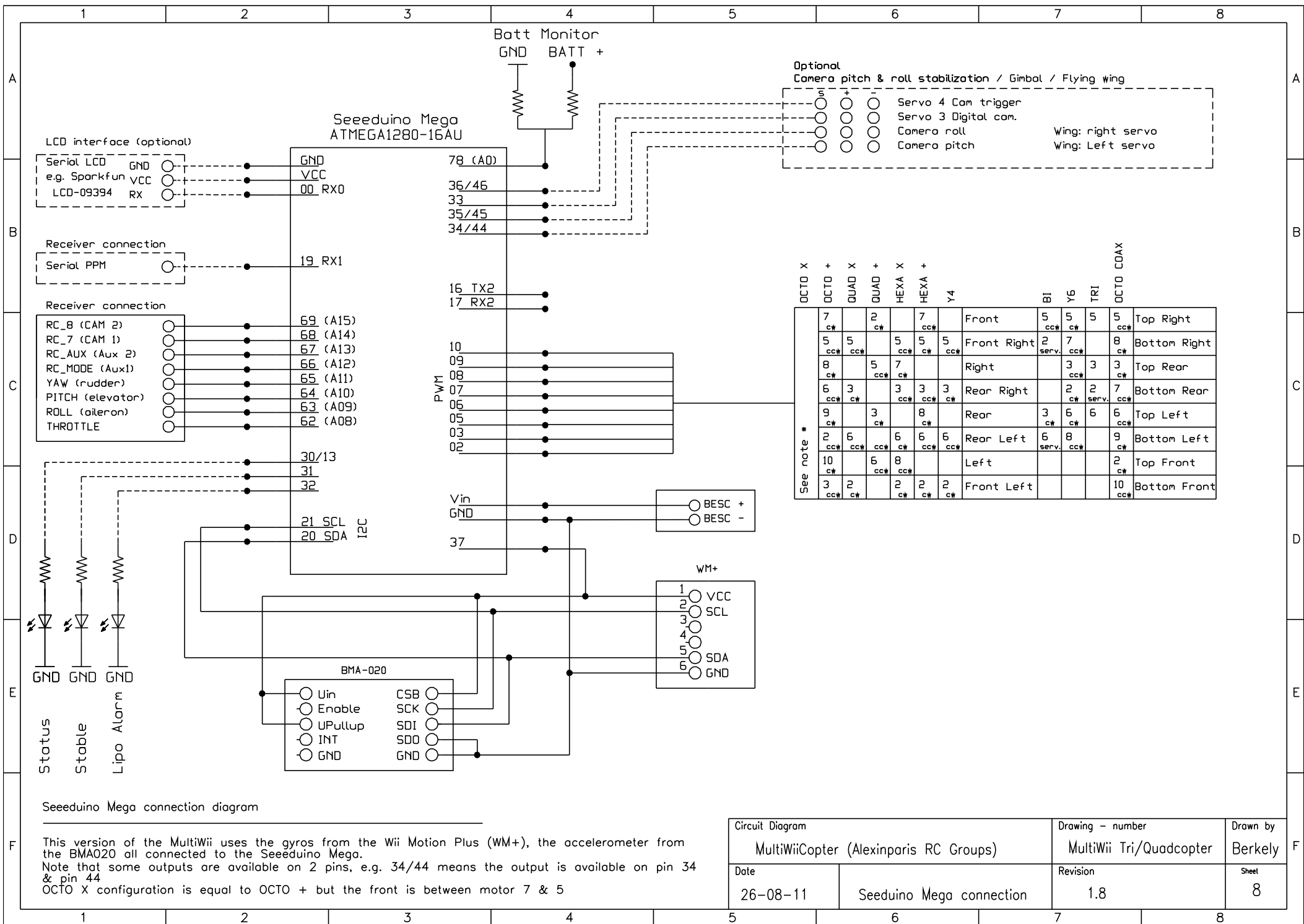
These sensors cannot be powered with 5V. A voltage regulator and logic level converter is used to lower the 5V to 3.3V & connect the I2C bus to the Arduino.

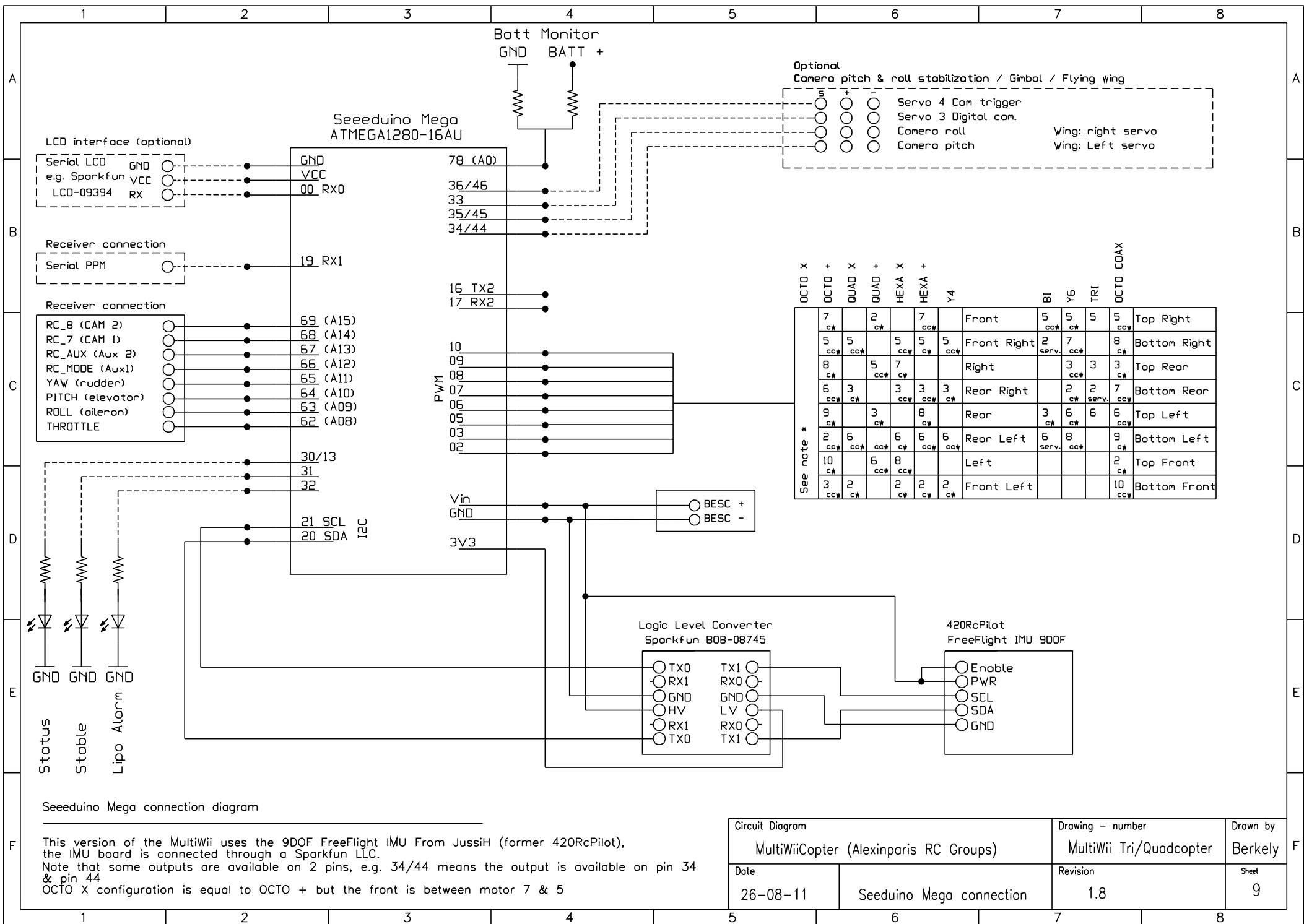
In this diagram, the WM+ is still powered & reset through pin 12 while the other sensors are powered separate by a 3.3V regulator.

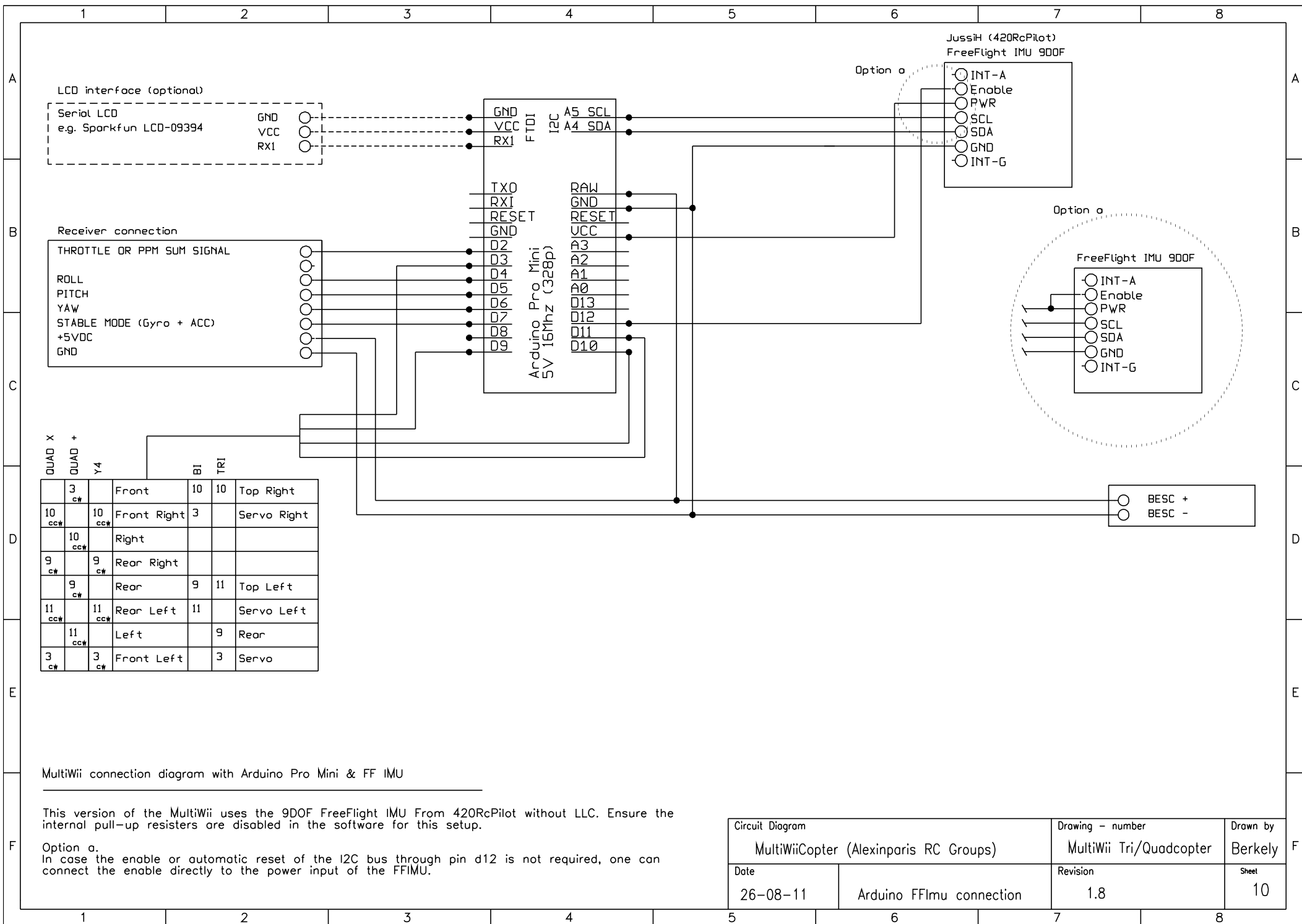
Circuit Diagram		Drawing – number	Drawn by
MultiWiiCopter (Alexinparis RC Groups)		MultiWii Tri/Quadcopter	Berkely
Date	Connection diagram with LLC	Revision	Sheet
26–08–11	ADXL345 & BMP085 (option 2)	1.8	6

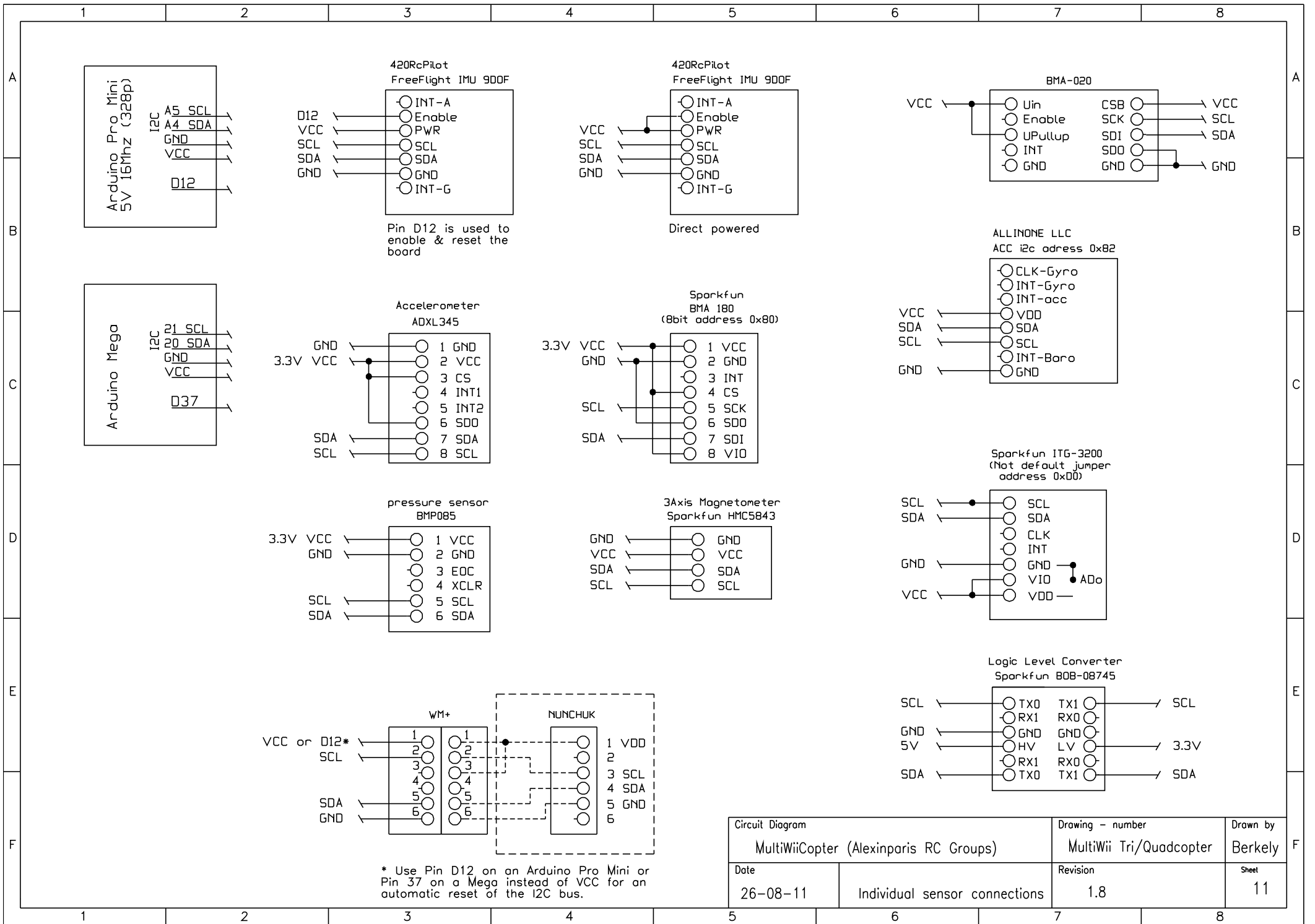




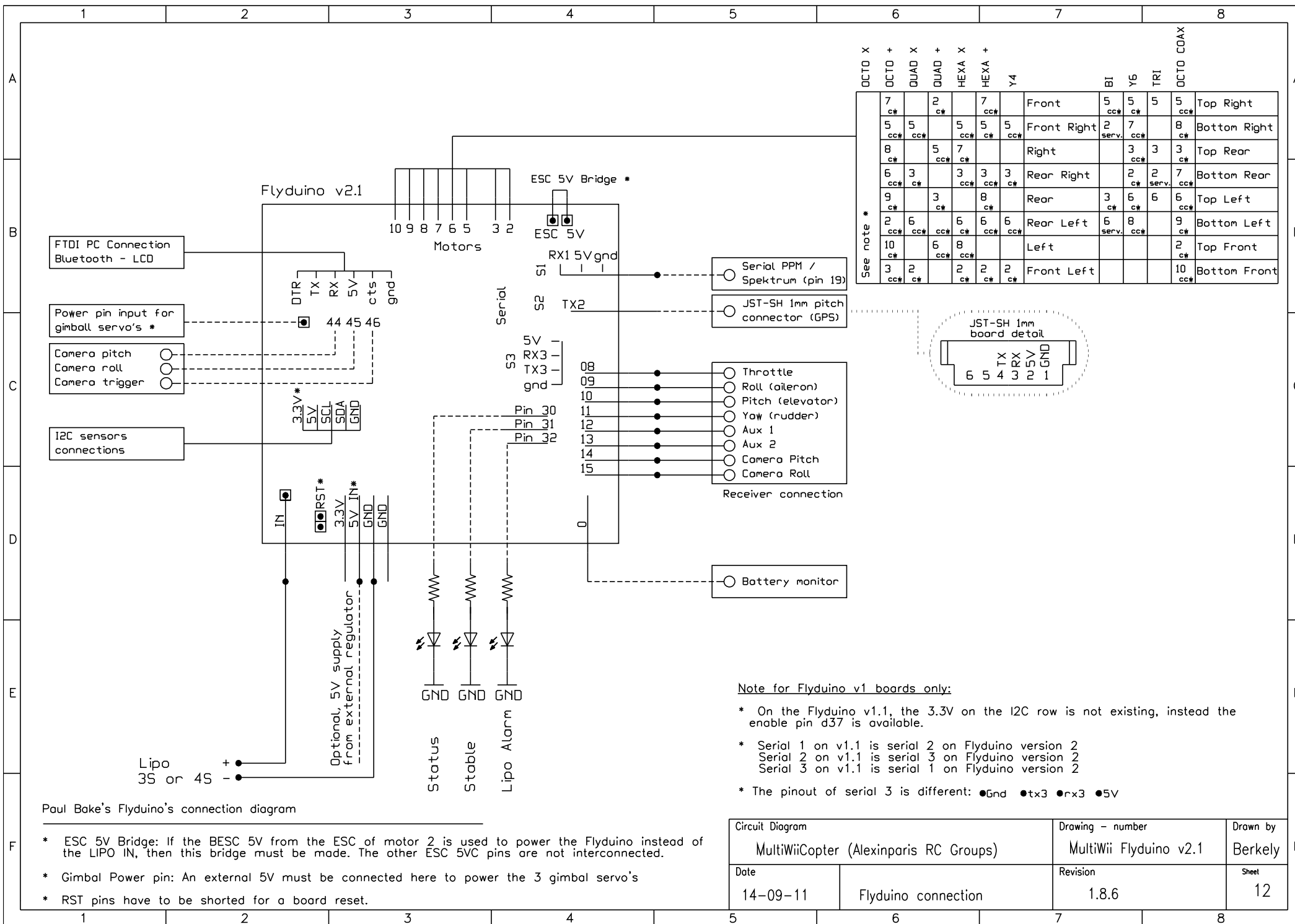








Circuit Diagram		Drawing - number		Drawn by	
MultiWiiCopter (Alexinparis RC Groups)		MultiWii Tri/Quadcopter		Berkely	
Date		Revision		Sheet	
26-08-11		Individual sensor connections	1.8	11	



Circuit Diagram		Drawing - number		Drawn by	
MultiWiiCopter (Alexinparis RC Groups)		MultiWii Flyduino v2.1		Berkely	
Date		Revision		Sheet	
14-09-11		Flyduino connection		1.8.6	
				12	