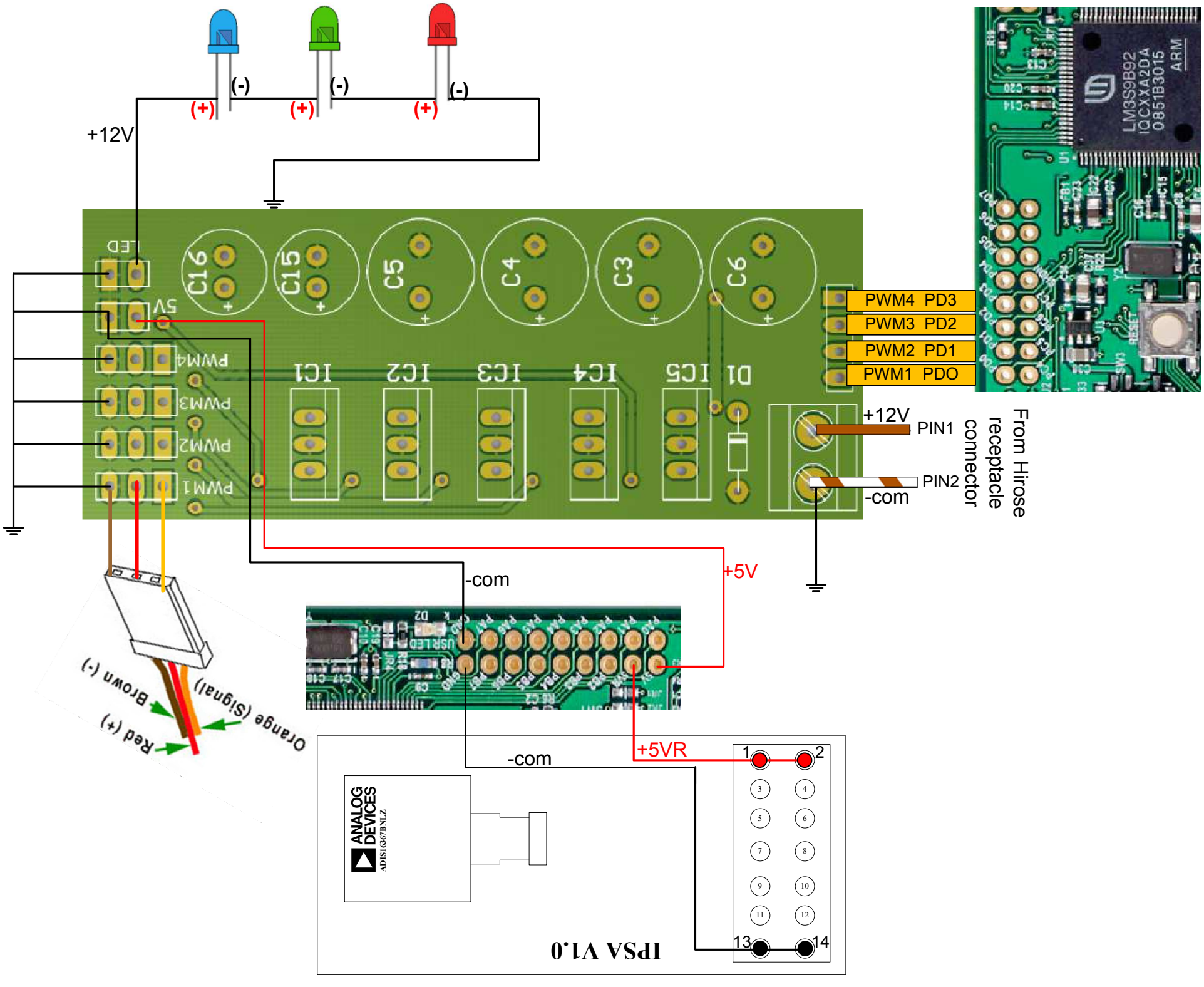
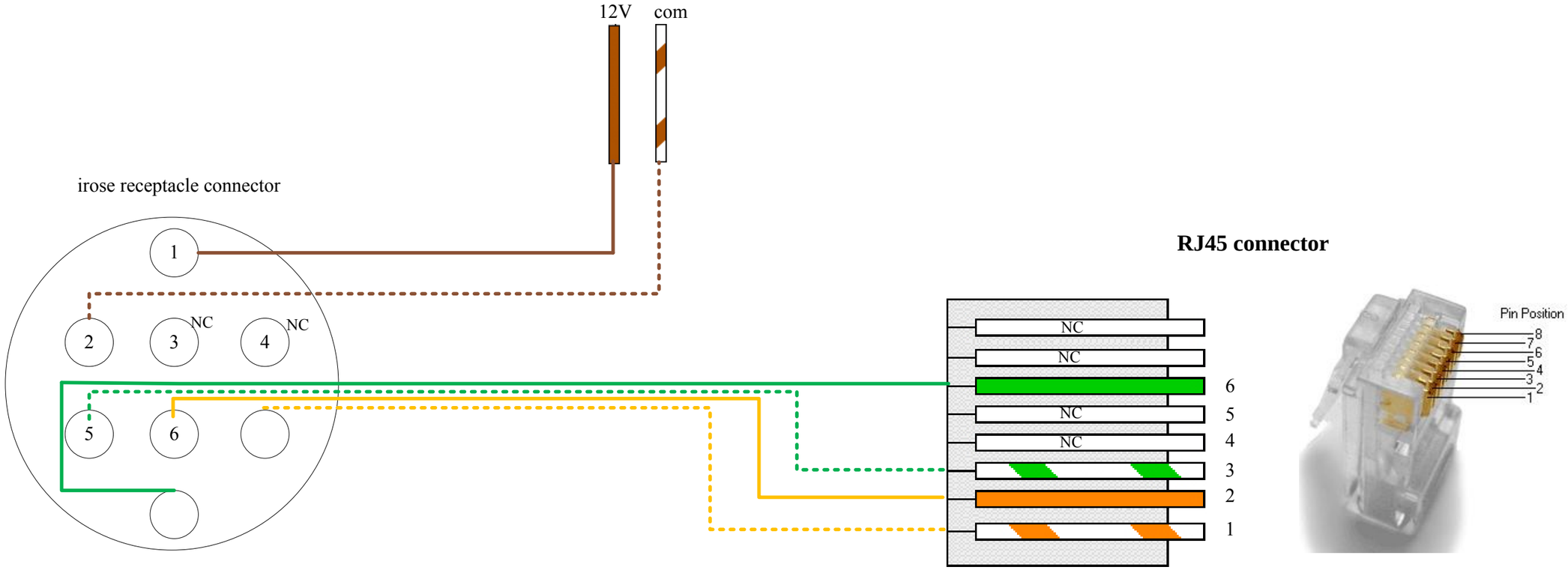
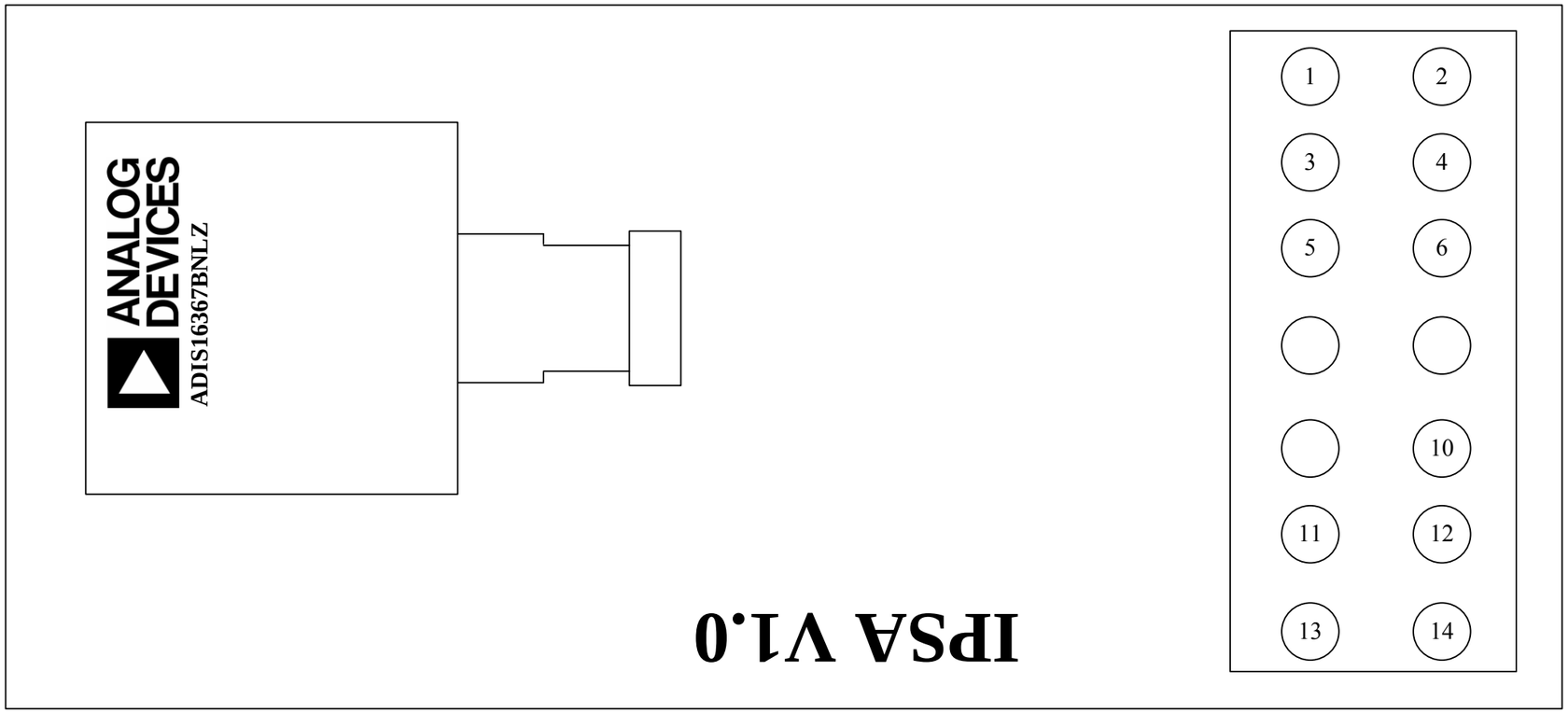
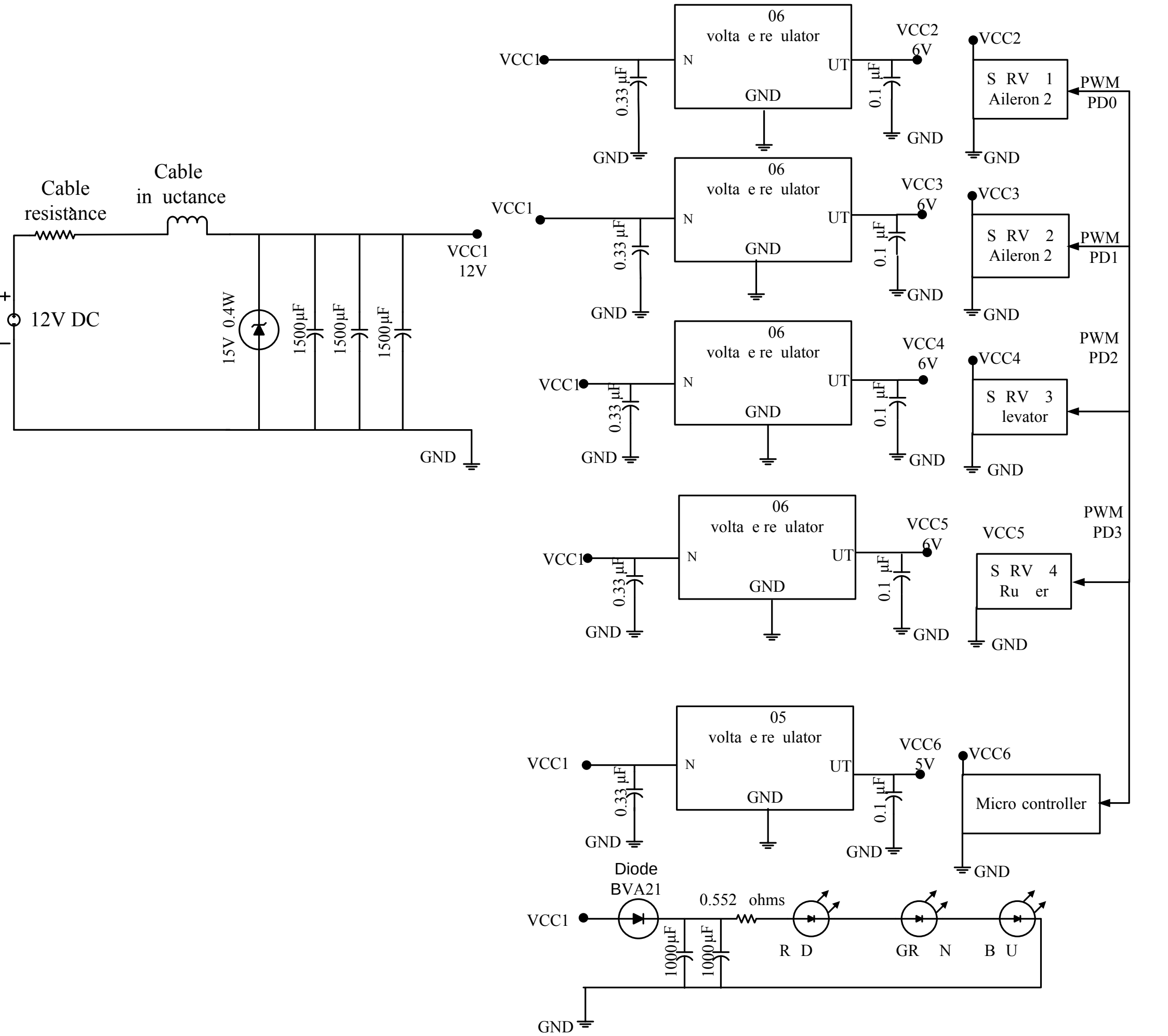
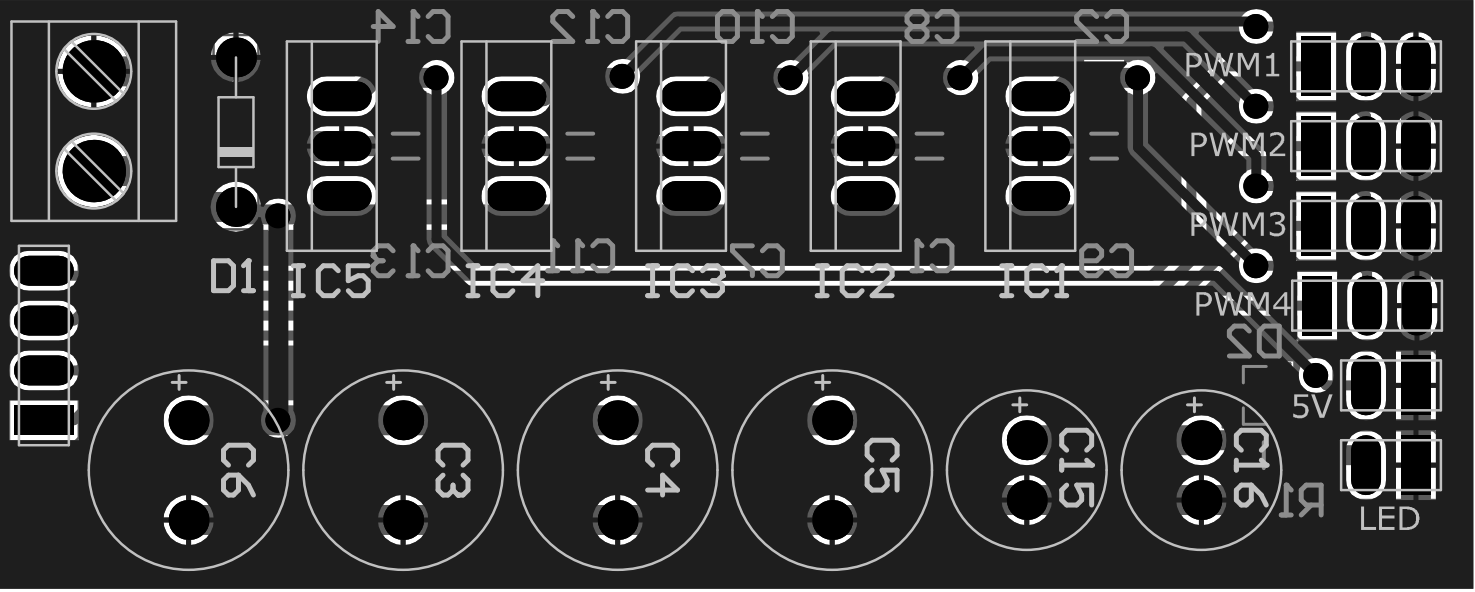

(-)
(-)
(-)
(+)
(+)
(+)
+12V
LED
5V
PWM4
PWM3
PWM2
PWM1
C16
C15
C5
C4
C3
C6
IC1
IC2
IC3
IC4
IC5
D1
PWM4 PD3
PWM3 PD2
PWM2 PD1
PWM1 PDO
+12V
PIN1
PIN2
-com
From Hirose receptacle connector
-com
+5V
Brown (-)
Orange (Signal)
Red (+)
-com
+5VR
ANALOG DEVICES
ADIS16367BNLZ
1
2
3
4
5
6
7
8
9
10
11
12
13
14
IPSA V1.0

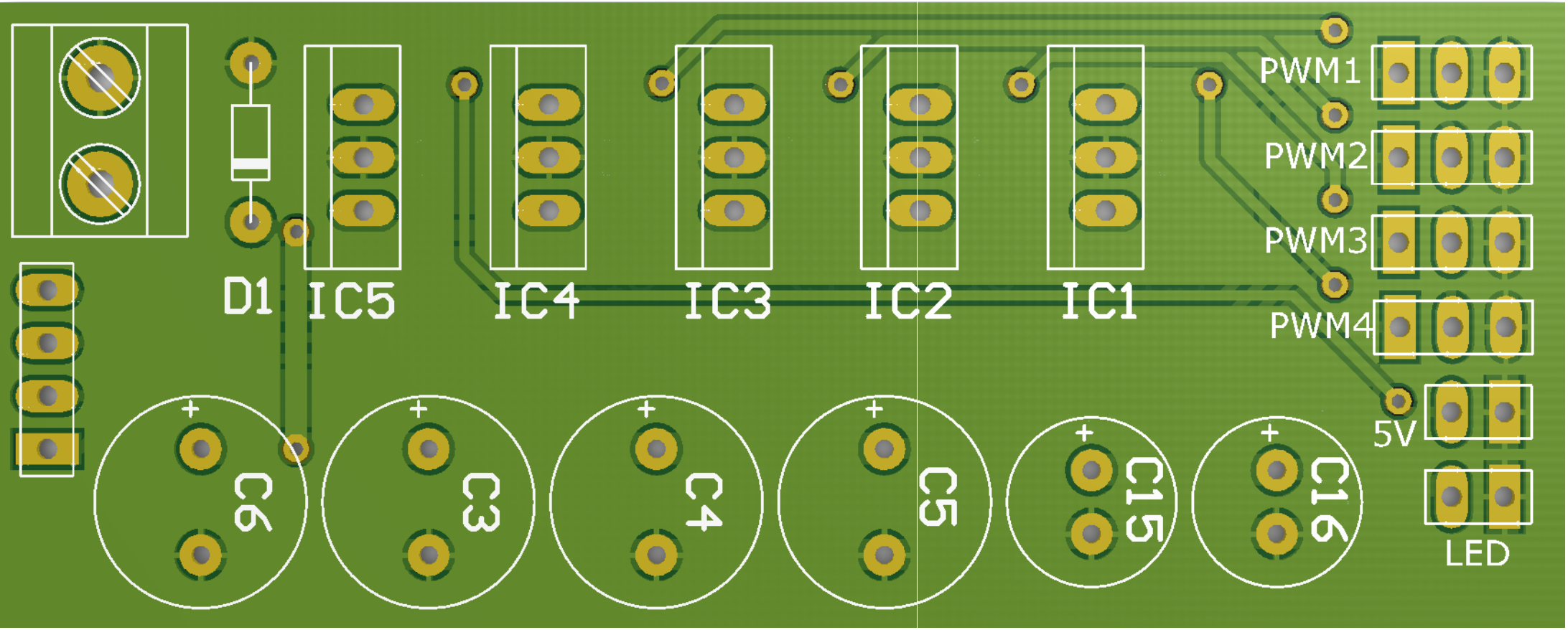

12V
com
irose receptacle connector
1
2
3
NC
4
NC
5
6
NC
NC
NC
6
5
4
3
2
1
RJ45 connector
Pin Position
8
7
6
5
4
3
2
1

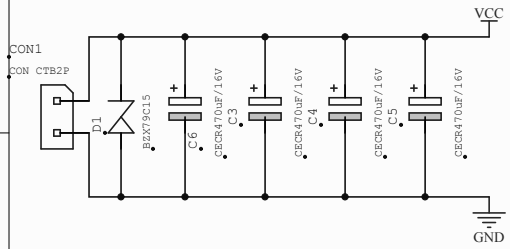


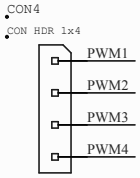
PIN	IMU break out	Microcontroller board connection	Colors
1	VCC	VCC + 5VR	Orange yellow
2	VCC	VCC + 5VR	Orange yellow
3	SCLK	PA2	blue
4	DOUT	PA4	green
5	DIN	PA5	grey
6	CS	PA3	purple
7	DIO1	PA6	black
8	RST	PA7	white
9	NC	NC	
10	NC	NC	
11	NC	NC	
12	NC	NC	
13	GND	GND	Green blue
14	GND	GND	Green blue

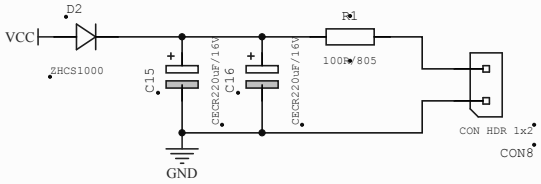

Cable
resistance
Cable
in uctance
12V DC
15V 0.4W
1500µF
1500µF
1500µF
VCC1
12V
GND
06
volta e re ulator
N
UT
GND
VCC1
0.33 µF
GND
VCC2
6V
0.1 µF
GND
VCC2
S RV 1
Aileron 2
PWM
PD0
GND
VCC3
6V
S RV 2
Aileron 2
PWM
PD1
VCC4
6V
S RV 3
levator
PWM
PD2
VCC5
6V
S RV 4
Ru er
PWM
PD3
05
VCC6
5V
Micro controller
Diode
BVA21
0.552 ohms
1000µF
R D
GR N
B U

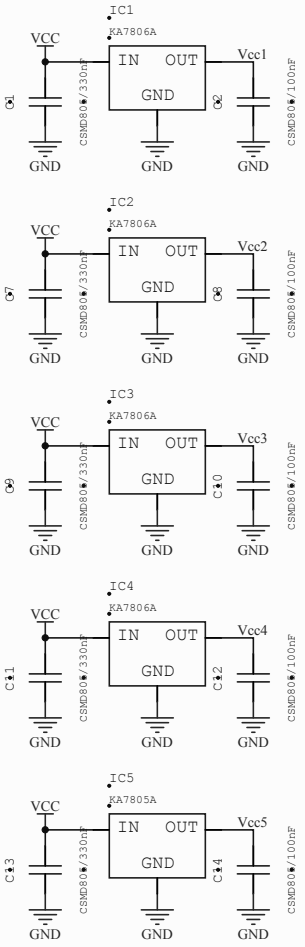

PWM1
PWM2
PWM3
PWM4
5V
LED
D1
D2
R1
IC1
IC2
IC3
IC4
IC5
C1
C2
C3
C4
C5
C6
C8
C10
C12
C13
C15
C16

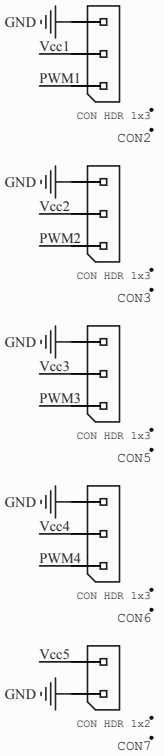

D1
IC5
IC4
IC3
IC2
IC1
PWM1
PWM2
PWM3
PWM4
5V
LED
C6
C3
C4
C5
C15
C16





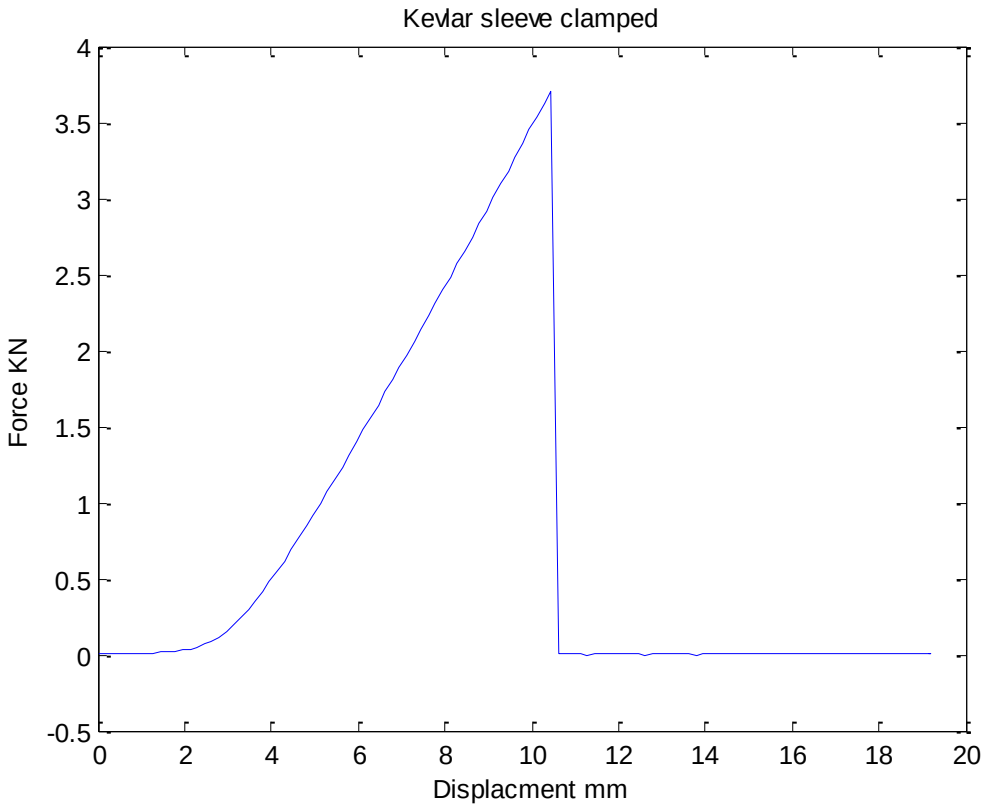




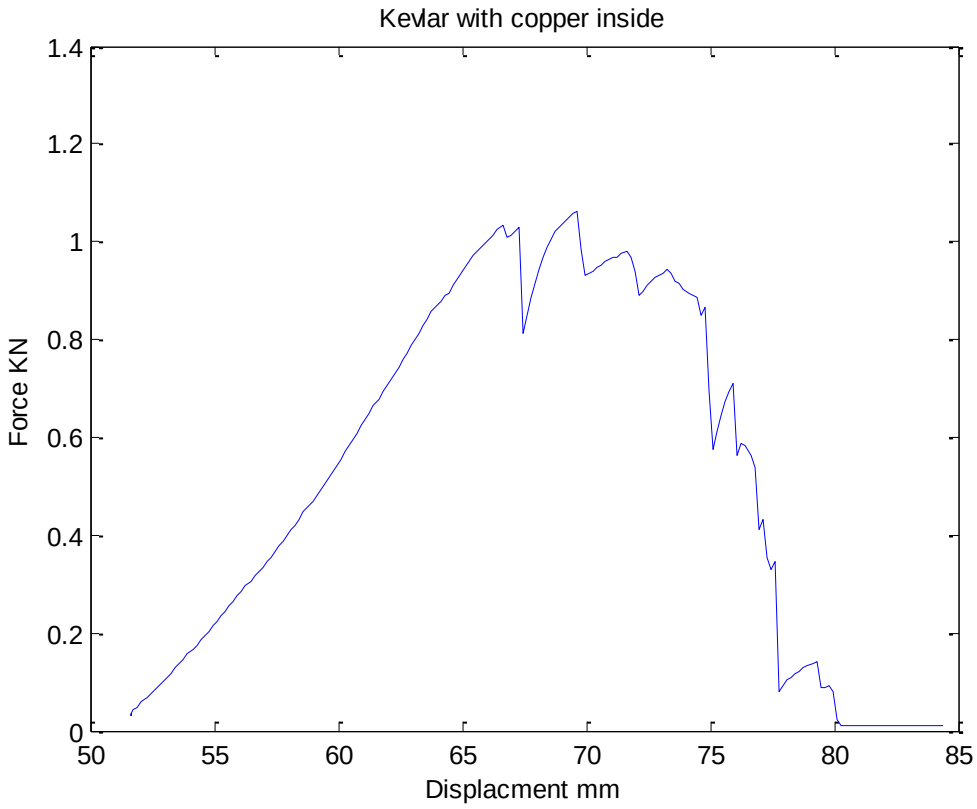


Title		
Size A4	Number	Revision
Date: 6/6/2012		Sheet of
File: C:\Users\..\PowerSupply.SchDoc		Drawn By:

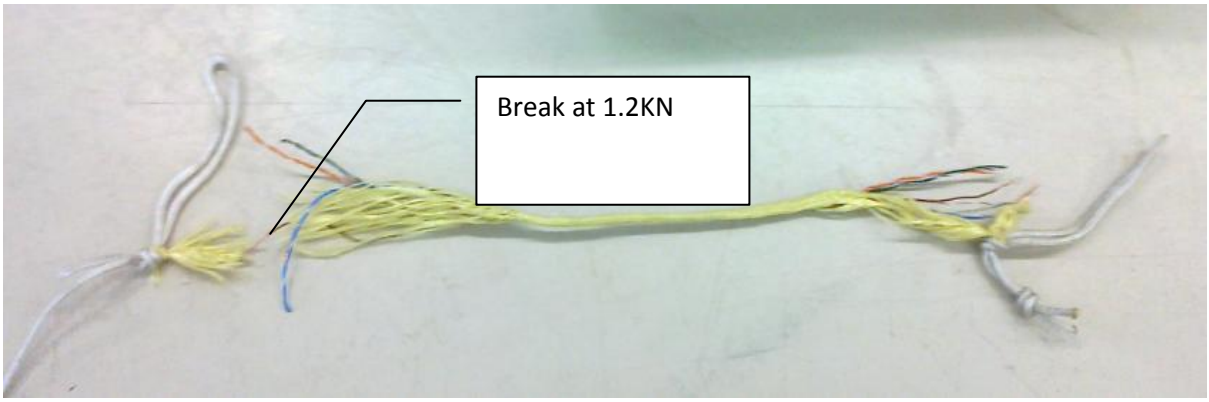
1.1 Kevlar Sleeve directly clamped to the gripper

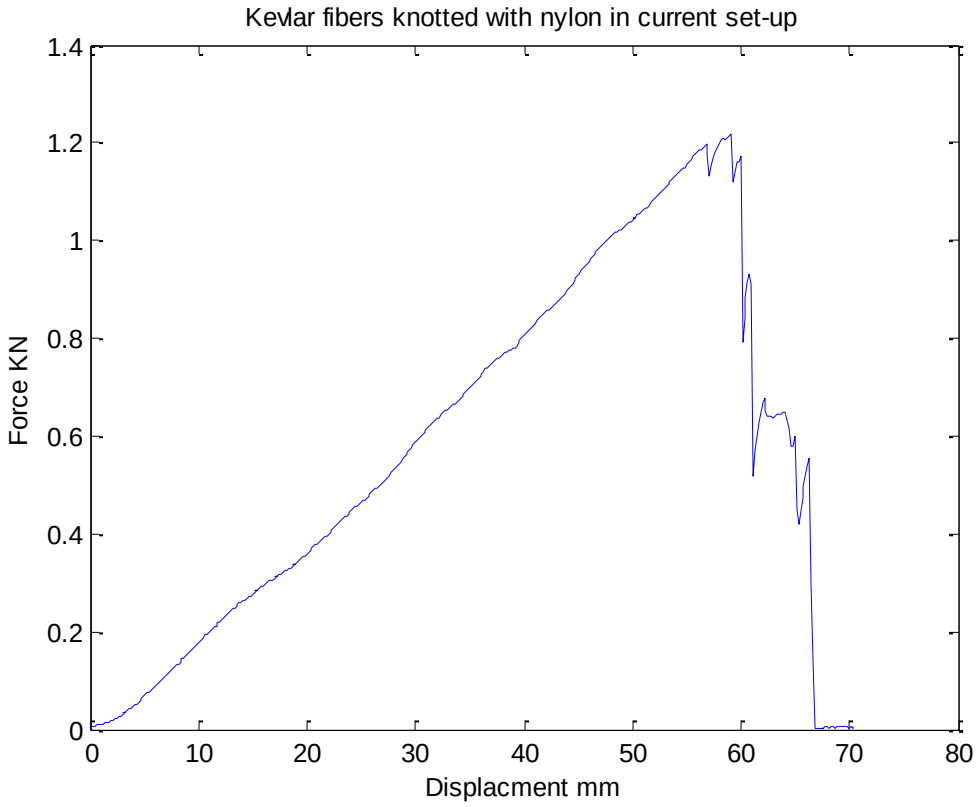


1.2 Kevlar Sleeve strands directly clamped to the gripper with copper inside

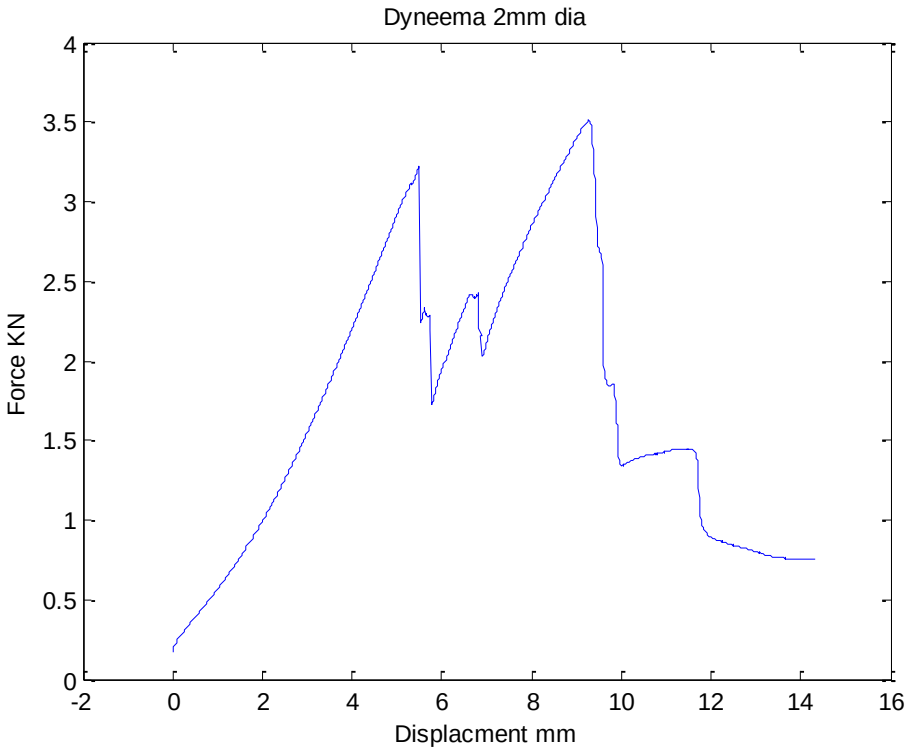
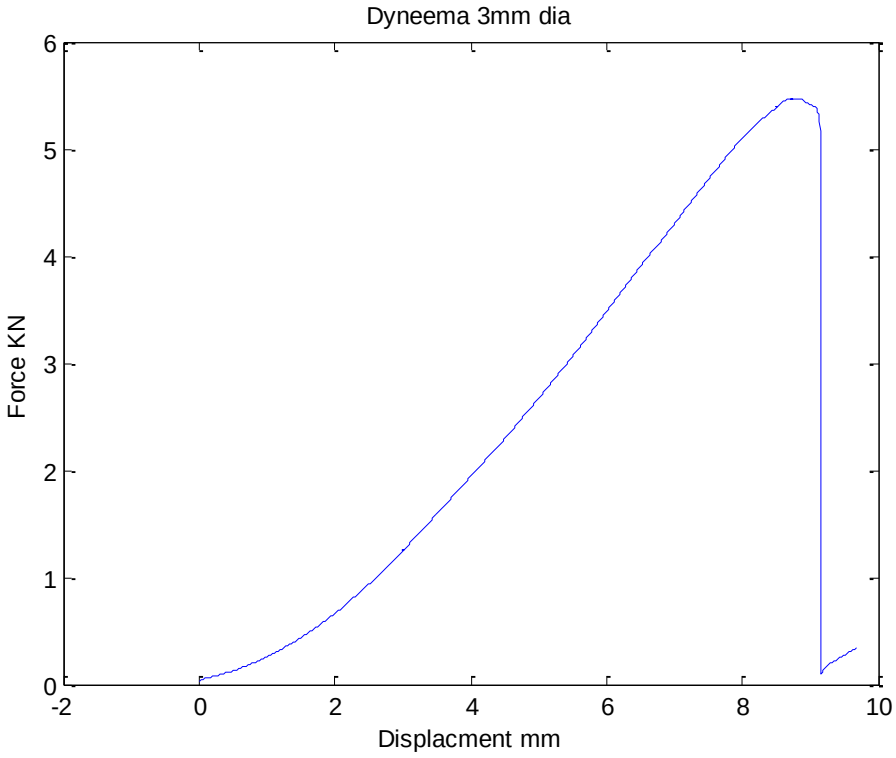


1.3 Kevlar Sleeve with larks head knot to nylon line directly attached to the aircraft (Current working set-up)





2.1 Dyneema LIROS D-Pro with 2mm diameter (Current tether made from LIROS Gmbh)



2.2 Dyneema with 3mm diameter