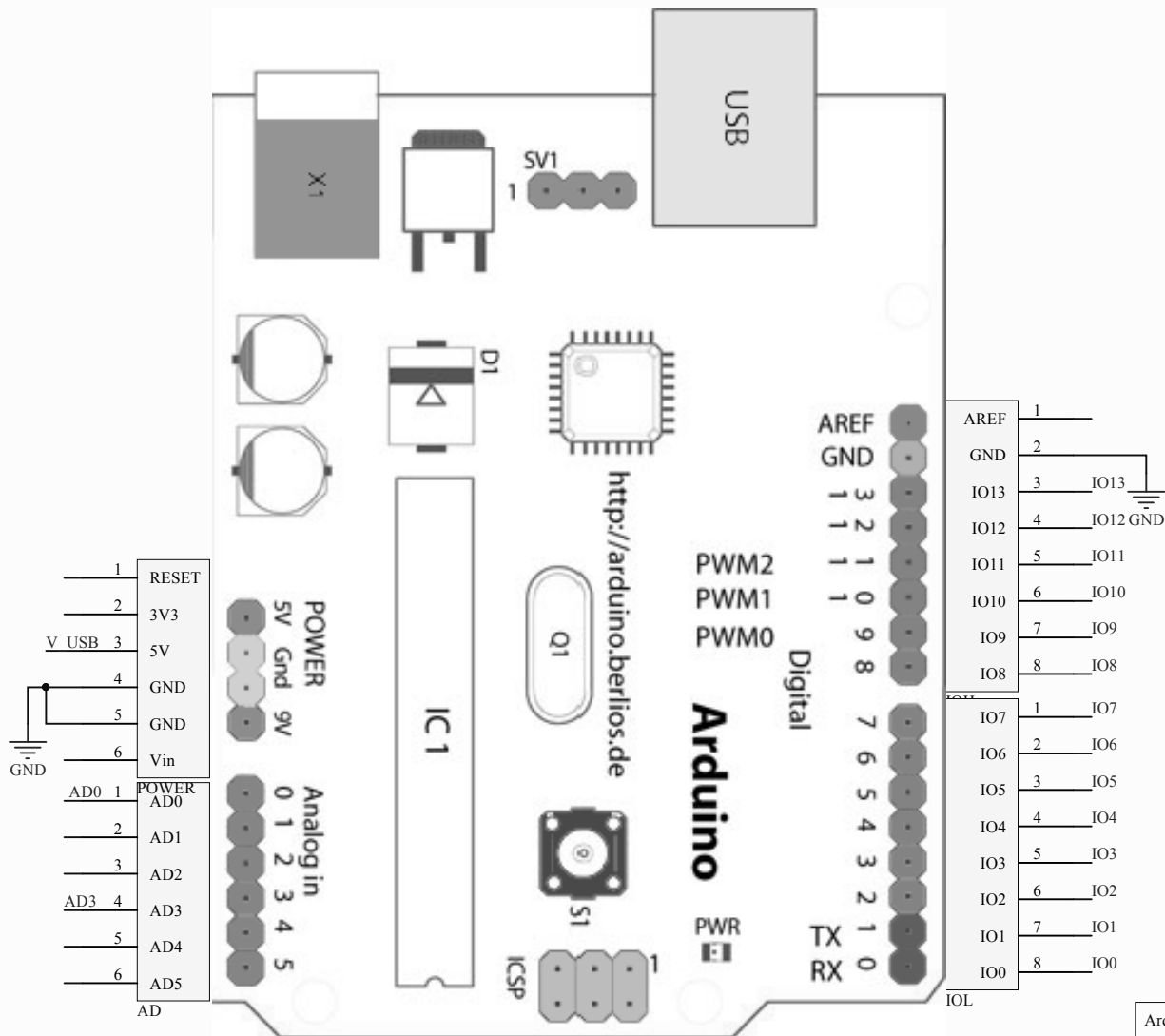


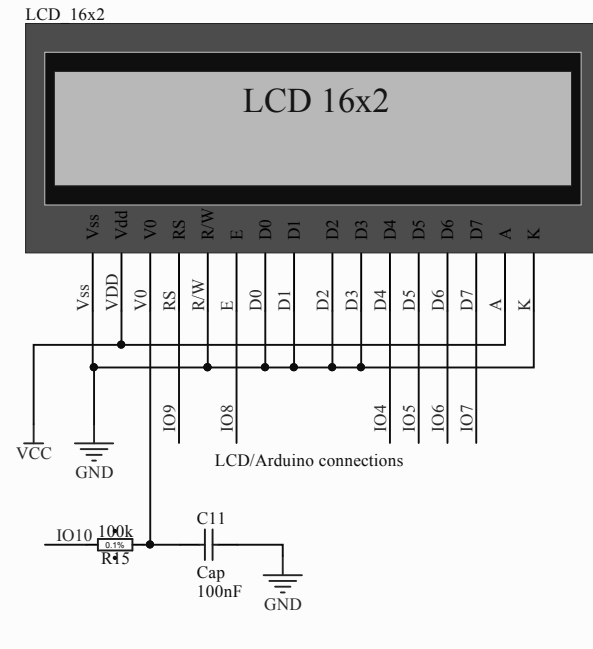
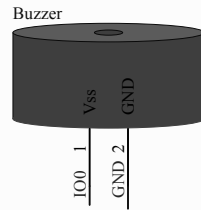
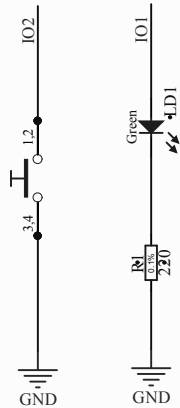
# ARDUINO CONNECTORS



PIN	FUNCTION	TYPE (I/O)
AD0	Input voltage force sensor	I
AD3	Battery level monitoring	O
USB	Battery charger Data transfer	I/O
IO0	Buzzer control	O
IO1	LED user interface	O
IO2	Push button	I
IO4	LCD interface	O
IO5		
IO7		
IO8		
IO9		
IO10	Ignition control	O
IO11		
IO12	Ignition monitoring	I

Arduino Connections			
Size: A4	Revision: v01		
Date: 12/02/2016	Time: 17:46:23		Sheet: 1 of 4
VÍCTOR MARTÍNEZ			
FRANCISCO J. ROMERO			
Size: C:\Users\x\Desktop\AltiumArduinoR3 UNOSheild v01 1\Schematics\ArduinoHeader.SchDoc			

# USER INTERFACE

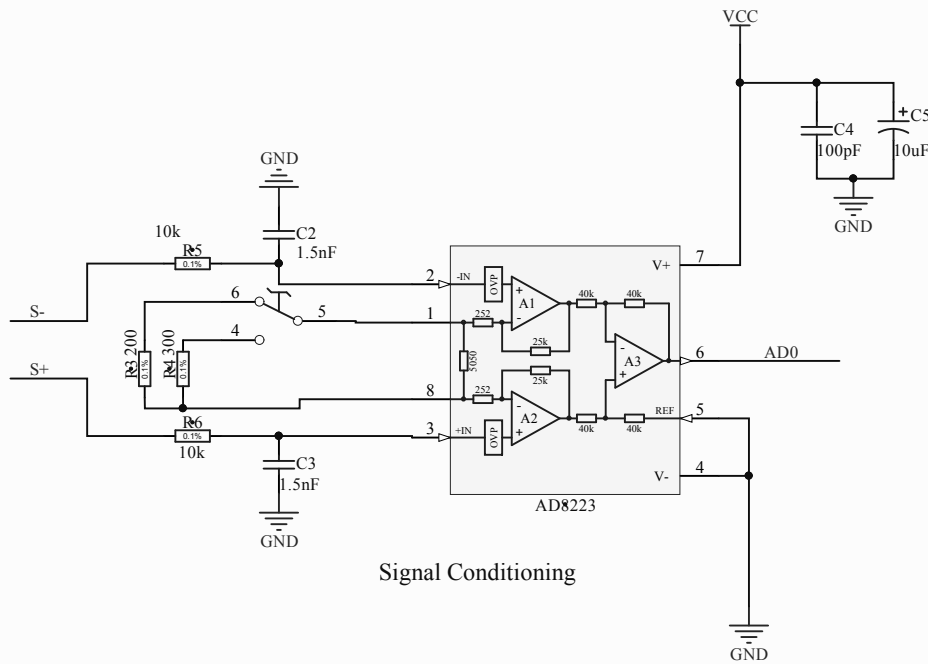
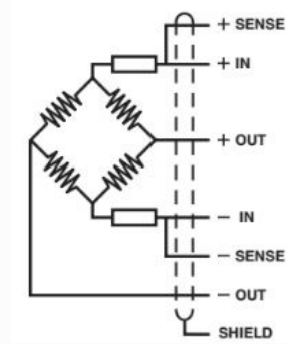


PIN	SIGNAL
1	VSS
2	VDD
3	V0
4	RS
5	R/W
6	E
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7
15	LED+
16	LED-

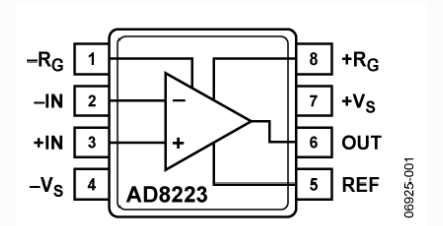
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Sheet: 2 of 4	
Victor Martinez Velasco	
Francisco Javier Romero	
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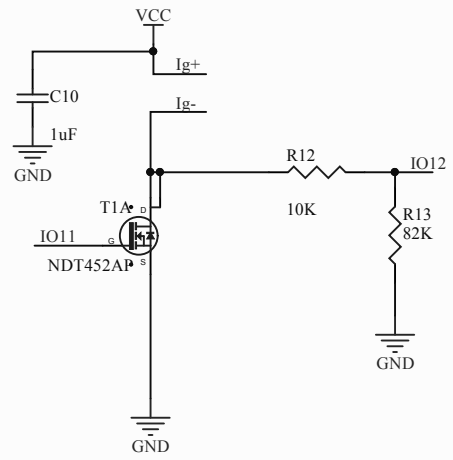
# FORCE SENSOR CONDITIONING AND IGNITION CONTROL



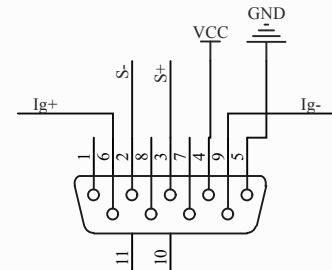
Signal Conditioning



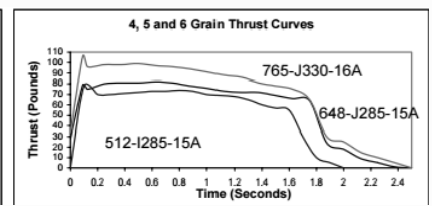
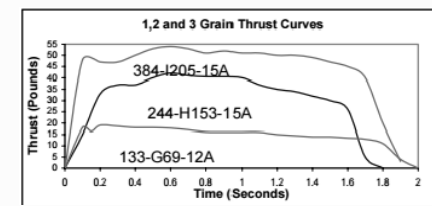
08925-001



Ignition Control

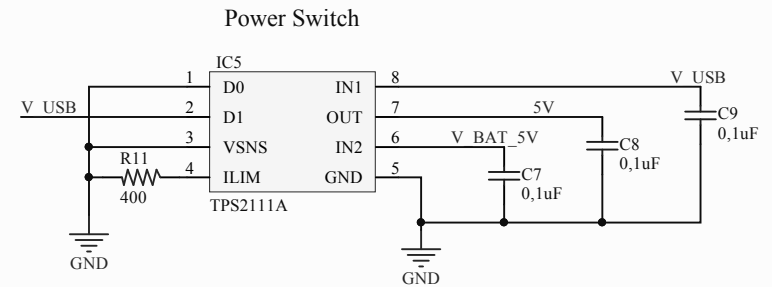
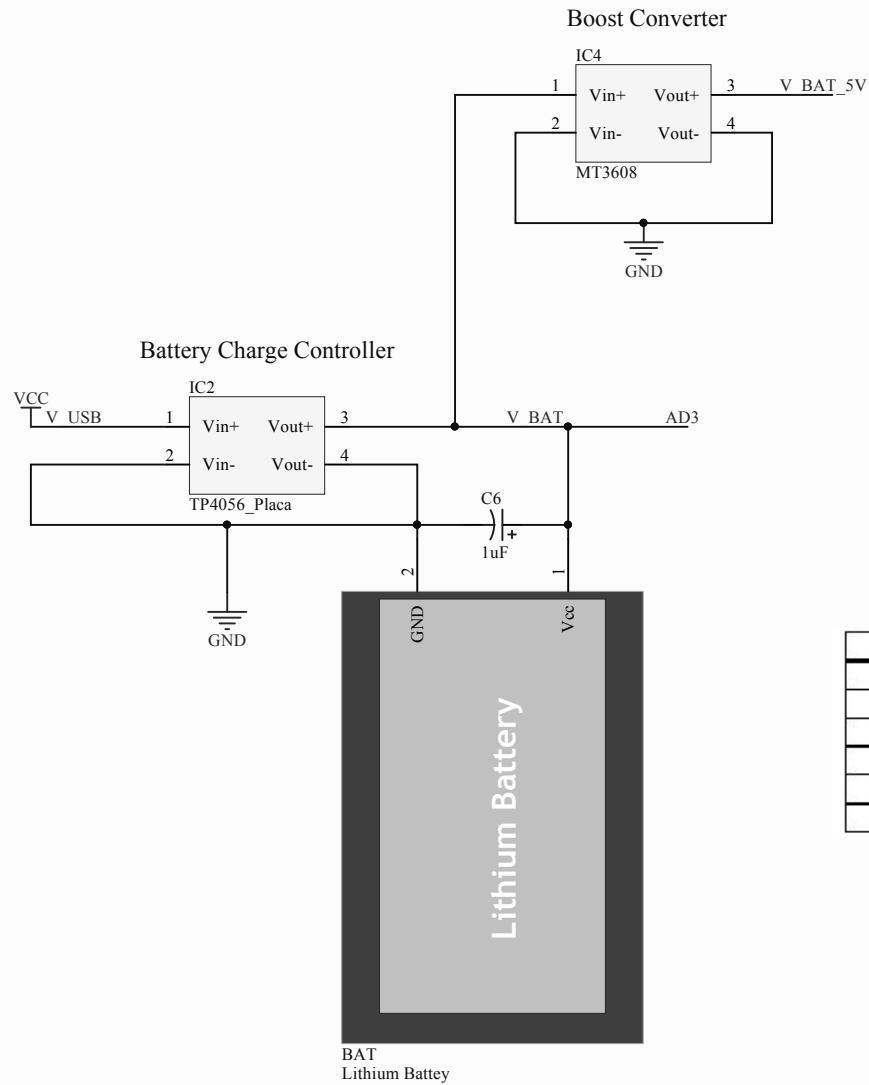


Testing Bench Connections



Force Sensor Conditioning, Ignition Control and Testing Bench Connection			
Size: A4	Revision: v01		
Date: 12/02/2016	Time: 17:46:27		Sheet: 3 of 4
Victor Martinez Velasco			
Francisco Javier Romero			
Size: C:\Users\x\Desktop\Altium\ArduinoR3 UNOSheild v01 1\Schematics\Analógica v02.SchDoc			

# POWER SUPPLY CIRCUIT



D1	D0	$V_I(VSNS) > 0.8 V^{(1)}$	$V_I(IN2) > V_I(IN1)$	OUT <sup>(2)</sup>
0	0	X	X	IN2
0	1	Yes	X	IN1
0	1	No	No	IN1
0	1	No	Yes	IN2
1	0	X	X	IN1
1	1	X	X	Hi-Z

Power Supply Circuit			
Size: A4	Revision: v01		
Date: 12/02/2016	Time: 17:46:28		Sheet: 4 of 4
VÍCTOR MARTÍNEZ			
FRANCISCO J. ROMERO			
Size: C:\Users\x\Desktop\AltiumArduinoR3 UNOSheild v01 1\Schematics\Alimentacion v02.SchDoc			