

Honda Ima mainboard

Investigation by Tom de Bree

October 2015



Igbt and driver connections



					6	7			
1			4						10
2	3		5						11
					8	9			

Picture

Pin numbering

Pin	Function		Signal in
1	0.45MΩ to HV+		
2			
3			
4	HV negative direct		
5	+16.5v to pin 4		
6	Bottom Gate	9.9KΩ to GND (pin7)	Works on 3.3 V and 5v
7	GND directly		
8	Top Gate	9.9KΩ to GND (pin7)	Works on 3.3 V and 5v
9	5.09v at ign on (VCC)	2.7KΩ to GND (pin7)	
10	+16.5v to motorphase		
11	Motor phase directly		

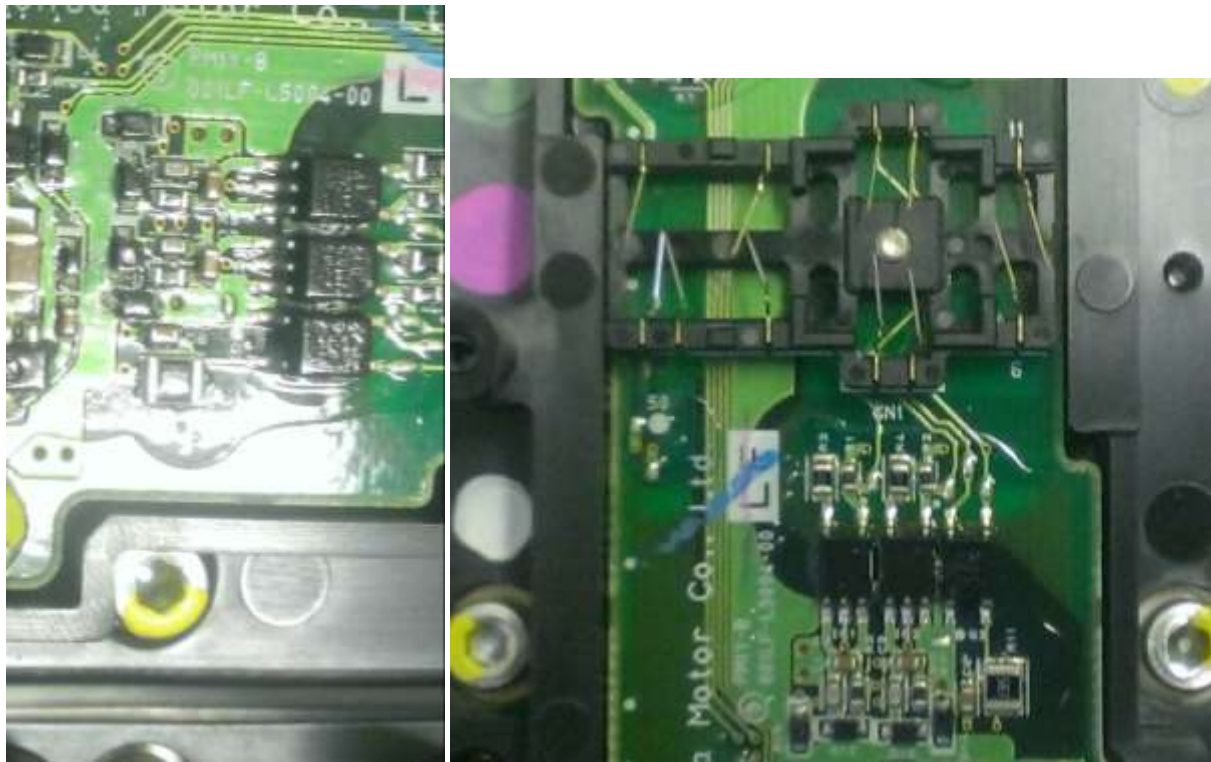
IGN on, 16 volts between HV- and motor phase

Gate driver board



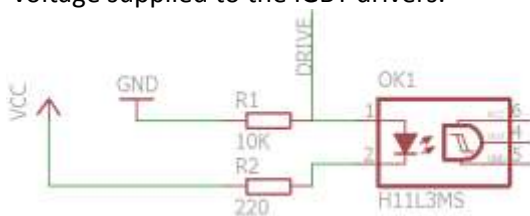
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Input section gate driver



Based on the resistor values the following can be determined to be the driving circuit for the two signals on pin 6 and 8.

This would mean GND for the gate logic is Pin 7 and VCC most likely pin 9, which looks to only be switched on when there is proper voltage supplied to the IGBT drivers.



Current sensor connection



1	2	3
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Pin	Function
1	5 volt
2	GND directly
3	2.48V at 0 amps