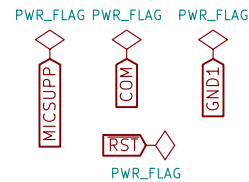


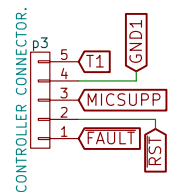
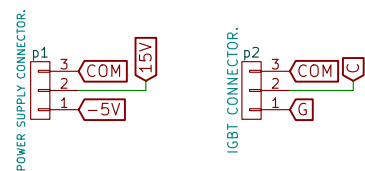
IGBT GATE DRIVER CIRCUIT BASED ON IXDD614PI AND HCPL-316J.

the circuit drives a single IGBT and works as low side and high side drive with undervoltage lockout and DESAT protection.

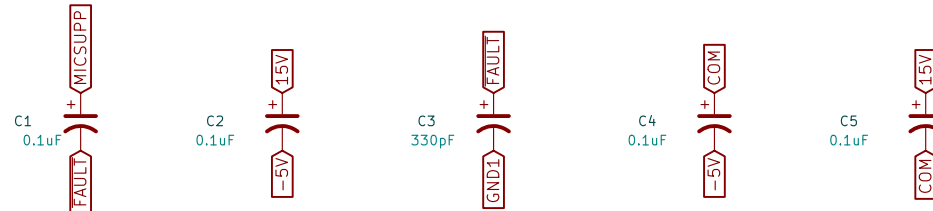
power flags are used to tell the Eeschema program which pins are driven by power sources, they have no physical existence.



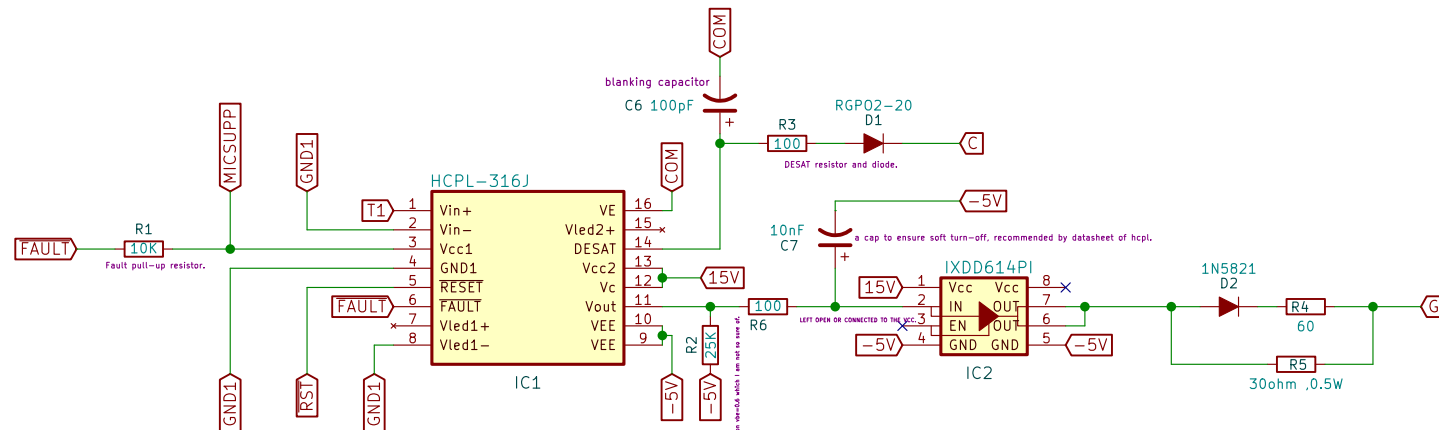
Output and Input ports grouped together.



T1 is the PWM control signal from the microcontroller.
MICSUPP is 5 volt from the vcc of the microcontroller.
COM is the auxiliary emitter of the IGBT.
G is the Gate of the IGBT.
C is the collector of the IGBT.
GND1 is the ground of the microcontroller.



0.1 uF are bypass caps, the 330 pF is the fault filter cap.



7,15 must be left unconnected.

Pin-Down resistor recommended by the data sheet, based on vccdd which I am not to use it.

I'M USING GLOBAL LABELS INSTEAD OF LOCAL LABELS AS THEY LOOK NEATER, LOL.

ALL SMD PACKAGES USED SHOULD BE 1206.
THIS CIRCUIT IS A PROTOTYPE VERSION.

VSD GRADUATION PROJECT.

Sheet: /

File: gatedrive.sch

Title: IGBT GATE DRIVE SCHEMATIC.

Size: A4 Date: 2016-02-21

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Rev: 1

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