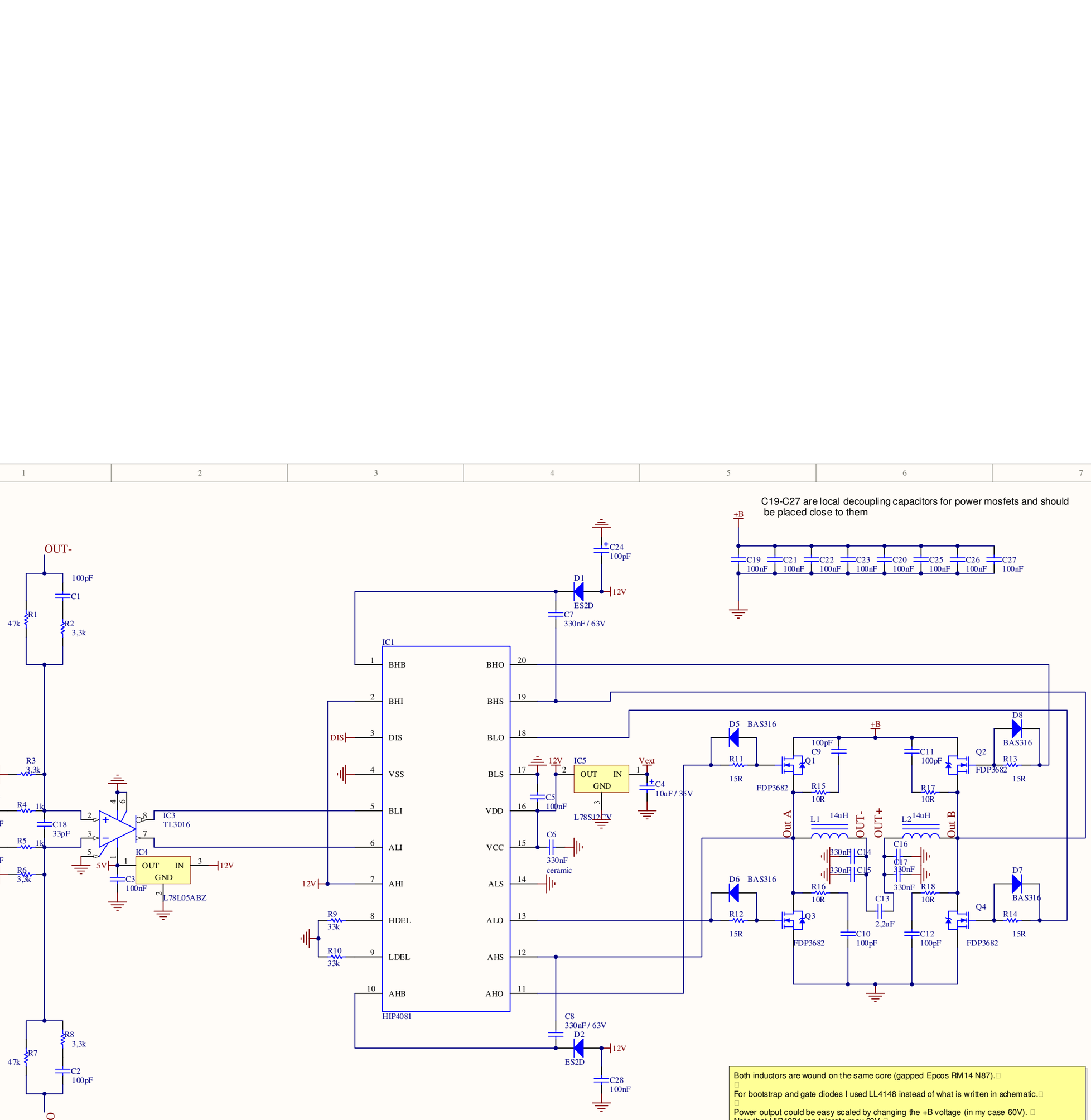
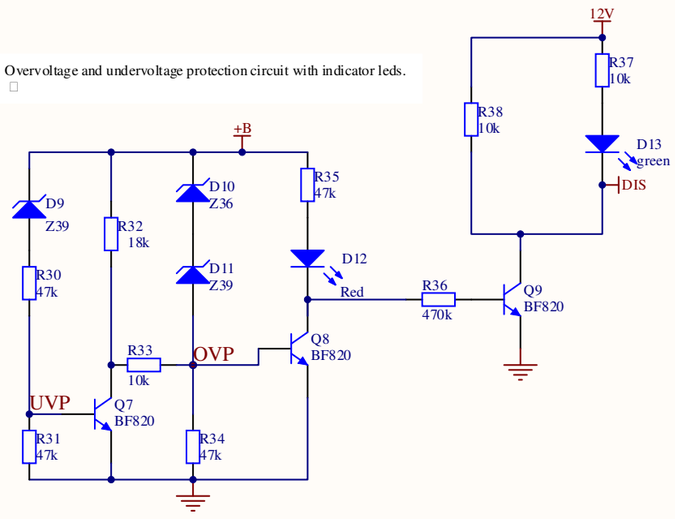
C19-C27 are local decoupling capacitors for power mosfets and should be placed close to them



Overvoltage and undervoltage protection circuit with indicator leds.



Both inductors are wound on the same core (gapped Epcos RM14 N87).

For bootstrap and gate diodes I used LL4148 instead of what is written in schematic.

Power output could be easy scaled by changing the +B voltage (in my case 60V).
Note that HIP4081 can tolerate max 80V.
For use with different supply voltage which is a lot different than mine it might be necessary to change the value
of D9 which sets the undervoltage shutdown threshold to 40V and D10,D11 which set overvoltage threshold to 76V.
One can easily omit OVP and UVP protections and connect pin 3 of HIP4081 to system GND for correct operation.

This circuit does not have any kind of overcurrent protection for simplicity of the circuit because this is intended for diy.

When using different mosfets, one might need to adjust the dead time resistors R9 and R10 and gate resistors values for proper operation.

Title: 400W single supply BTL UcD amplifier		
Size: A3	Number:	Revision: 2.0
Date: 2.3.2009		Sheet of
File: D:\Elektronika\..\Amp 2.SCHDOC		Drawn By: Dubravko Mrakuzic