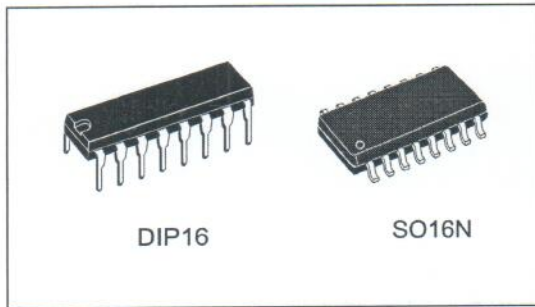


High voltage resonant controller

Datasheet - production data



- Sense op amp for closed loop control or protection features
- High accuracy current controlled oscillator
- Integrated bootstrap diode
- Clamping on V_s
- Available in DIP16 and SO16 packages

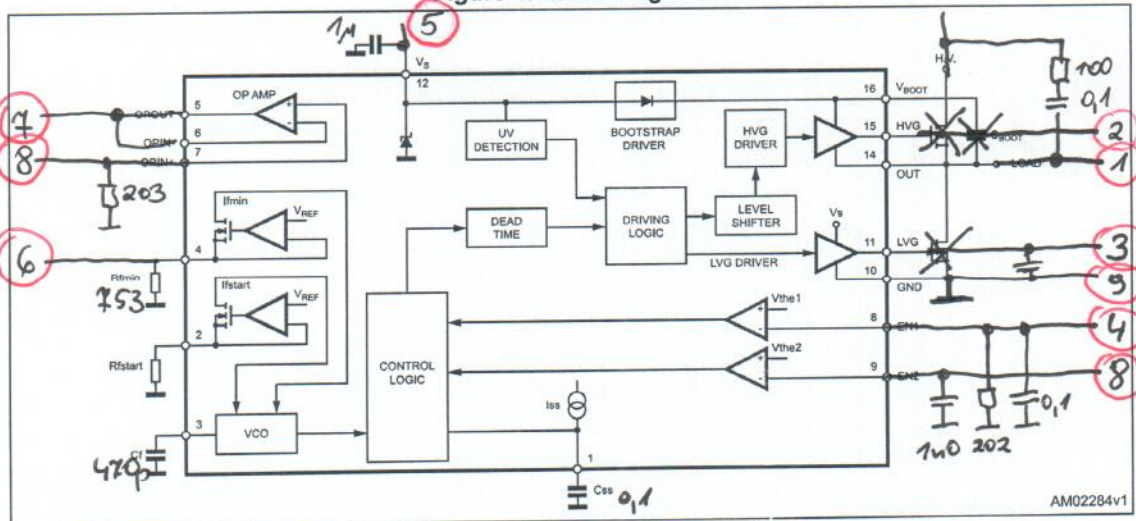
Description

The L6598 device is manufactured with the BCD™ offline technology, able to ensure voltage ratings up to 600 V, making it perfectly suited for AC/DC adapters and wherever a resonant topology can be beneficial. The device is intended to drive two power MOSFETs, in the classical half bridge topology. A dedicated timing section allows the designer to set soft-start time, soft-start and minimum frequency. An error amplifier, together with the two enable inputs, are made available. In addition, the integrated bootstrap diode and the Zener clamping on low voltage supply, reduces to a minimum the external parts needed in the applications.

Features

- High voltage rail up to 600 V
- dV/dt immunity ± 50 V/ns in full temperature range
- Driver current capability: 250 mA source 450 mA sink
- Switching times 80/40 ns rise/fall with 1 nF load
- CMOS shutdown input
- Undervoltage lockout
- Soft-start frequency shifting timing

Figure 1. Block diagram



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This is information on a product in full production.

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IC2

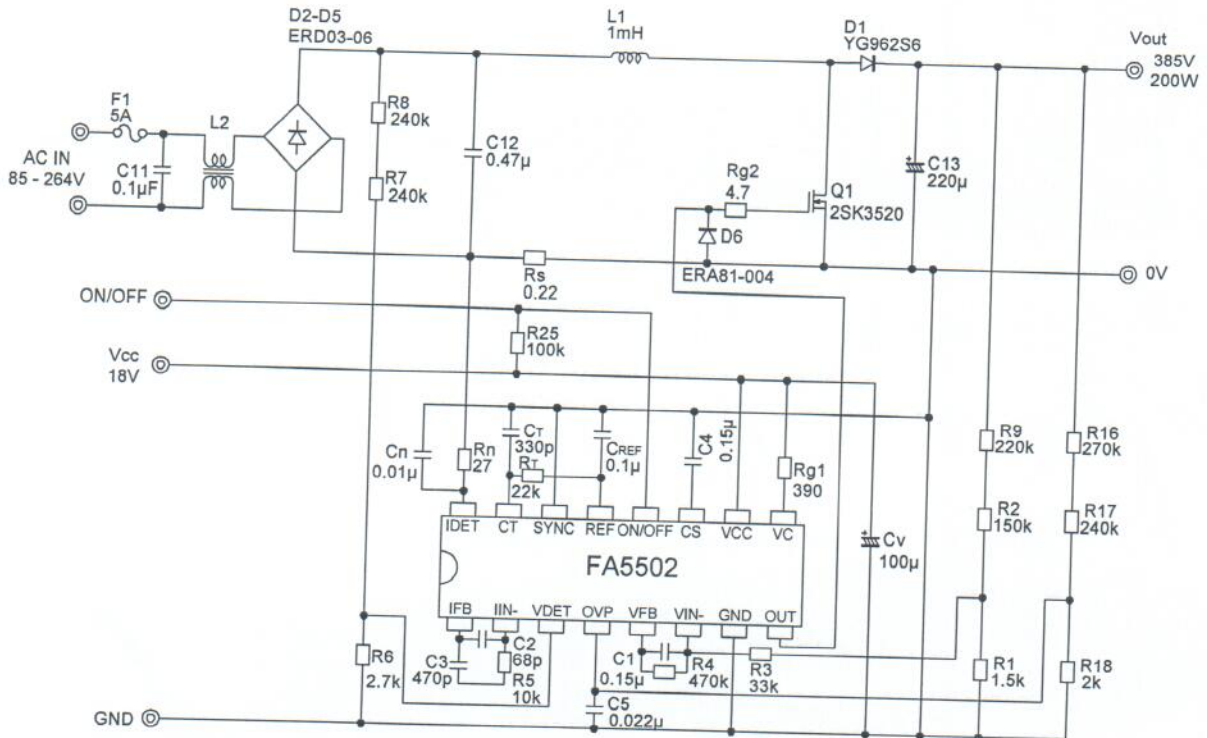
1 + 195V
2 + 195V
3 + 5.6V
4 0
5 + 12V
6 0
7 0
8 0
9 0

IC3

1 + 330V
2 + 255V
3 + 4.3V
4 0
5 + 10V
6 0
7 0
8 0
9 0

[14A - 0]
1nF 203 Q1 202
Q1 ic 470p 753
100 Q1 1n
1 1 1 1 1 1 1 1
1 2 3 4 5 6 7 8 9

10. Example of application circuit



Note

This application circuit exemplifies the use of IC for your reference only. Parts tolerance, parts characteristics, influence of noise, etc. are not defined in this application circuit. When design an actual circuit for a product, you must determine parts tolerance, parts characteristics, influence of noise, etc. for safe and economical operation. Neither Fuji nor its agents shall be liable for any injury caused by any use of this circuit.

Voltage capacitors + 388 V dc !

DC IC

1	0	16	0
2	+1.3V	15	+2.2V
3	+1.8V	14	0
4	+1.48V	13	+5V
5	+1.48V	12	+2.5V
6	+1.55V	11	+1.5
7	0	10	+2.5V
8	0	9	+2.5V