

MC34063A development aid

This is a simple-minded design tool that allows you to calculate component values [MC34063A](#) simple switcher chip. It displays the appropriate schematic diagram (step-up, step-down, or inverting) and checks for current and voltage limits. Feedback resistors are chosen from standard component values so that the output is as close to desired value as possible.

Typical input capacitor value is about 100uF, all electrolytics need to be low ESR types. The fast schottky diode should be sufficient for a current needed, 1N5818, 1N5819, 1N5820 and alike will do just fine.

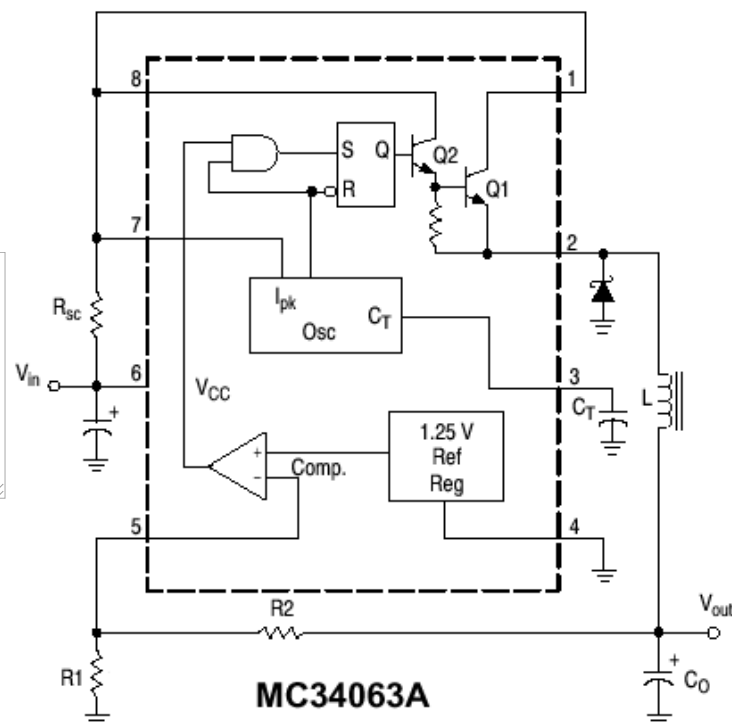
Higher output currents are possible with external switching element, but going to different device is probably more effective these days. See my [LM2576](#) simple switcher component calculator, for example.

I also have [transformerless power supply calculator](#), [audio power amplifier calculator](#) and [LM3404 constant current LED driver calculator](#).

For real-life example how to make the output voltage switchable see my [EPROM programmer](#) project.

Vin	12	V
Vout	5	V
Iout	750	mA
Vripple	10	mV(pp)
Fmin	625	kHz
<input type="button" value="Calculate"/>		

Ct=30 pF
 Ipk=1500 mA
 Rsc=0.2 Ohm
 Lmin=3 uH
 Co=30 uF
 R1=1k R2=3k (5V)



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