PC-12 volt

The three red marked diodes in upper right corner should handle about 1-2A each.
They are for HD & CD 12v power.
You can also remove them completely and use one 7812 for each drive instead.
I use 7812's myself.

The 3 coils in the upper half should be wound on "doughnuts" around 10-20 turns.
The rest of the coils i ripped from an existing ps.

Redmarked resistor you might have to adjust, they set the 5v out.

You can also leave out some parts around the MAX circuit depending on if you want another 12v 150mA output.

LT 1074 should have a rather big coolingfin about 5x3cm and also a small fan to cool it further. LT 1070 does not need any cooling.

The relay is a 12v and needs only to handle a few mA. A micro relay is perfect.
The 3 transistors work as a zener?!, to get a delayed "power good" on.

This circuit can handle:

5V 5-6A
12V 1A
-5V 125mA
-12v 125mA

Observe that the 12v is converted from 5V so the 5V part should not draw more than 4A to be on the safe side.

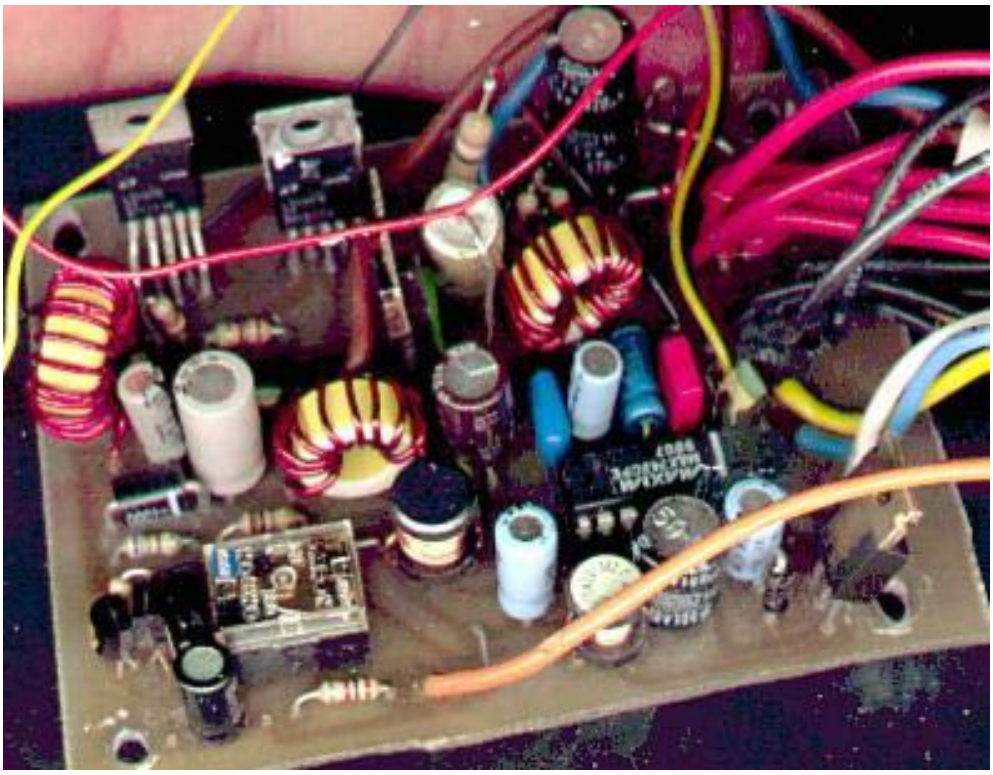
I am using this construction with a P133 classic downclocked to 75Mhz, an old VGA card, Soundblaster 16, 340Mb HD and a Pioneer 36x slot in cd-rom. And it works perfect.

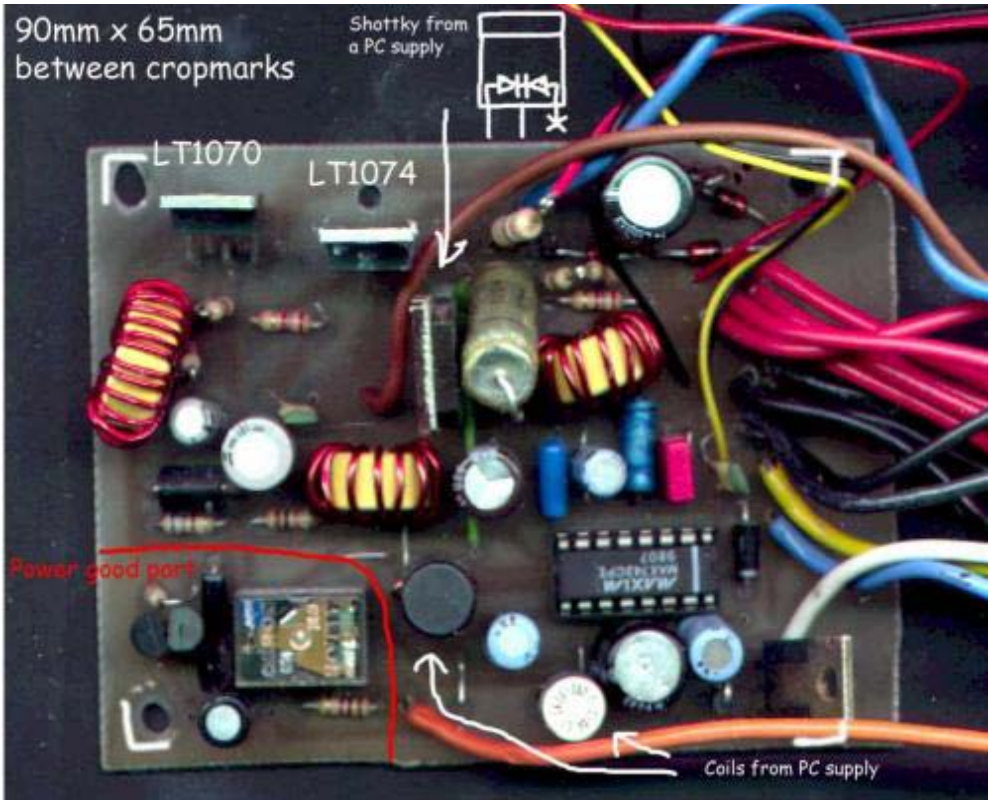
PS: Some HD's,Cd-rom's , VGA-cards might draw less current.
Check the ratings on the equipment, and choose the one that draws least.

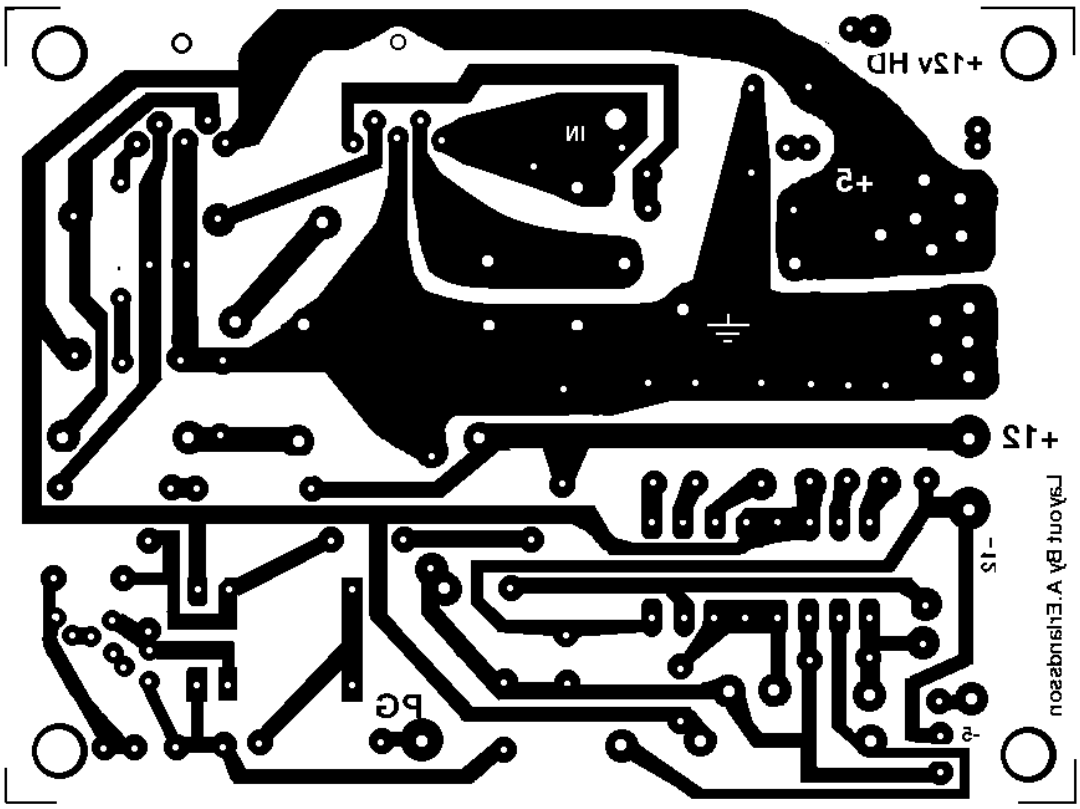
For example: my vga is very old and probably draws more current than a new vga card.

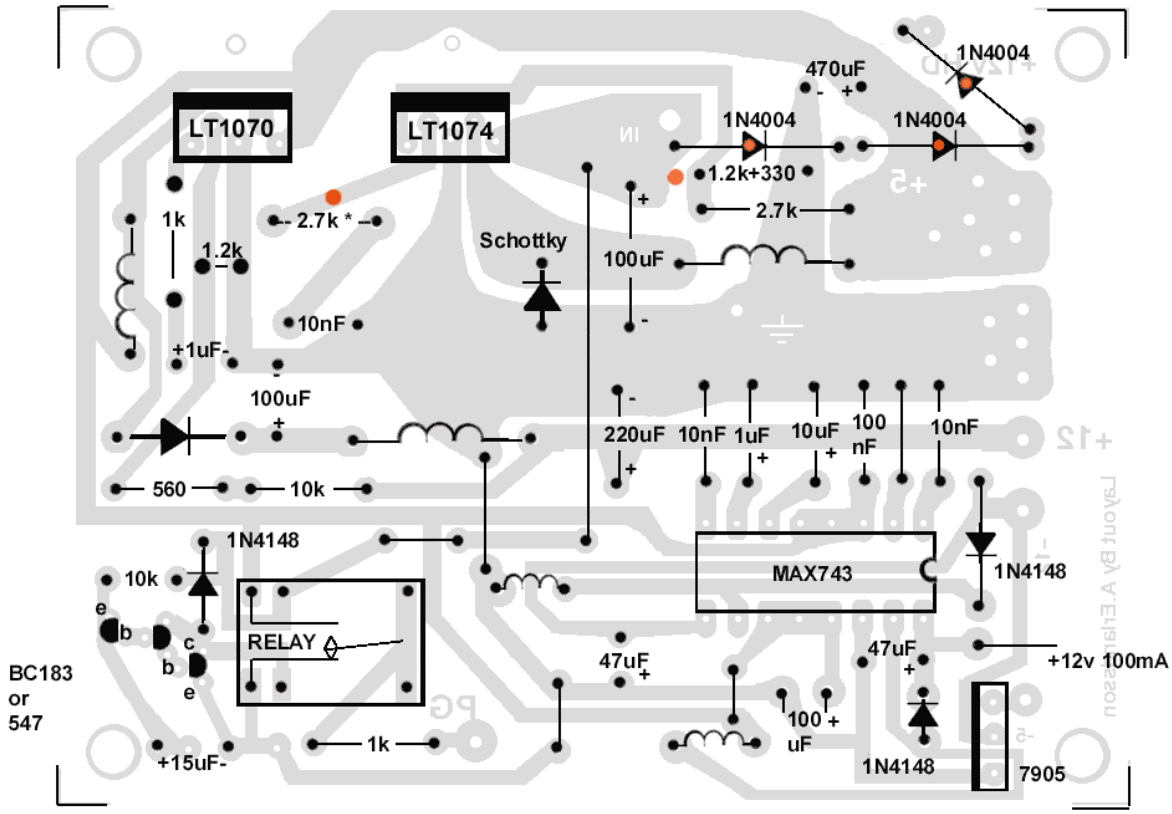
If you have any questions or better solutions please mail me:

ncc1701d@algonet.se

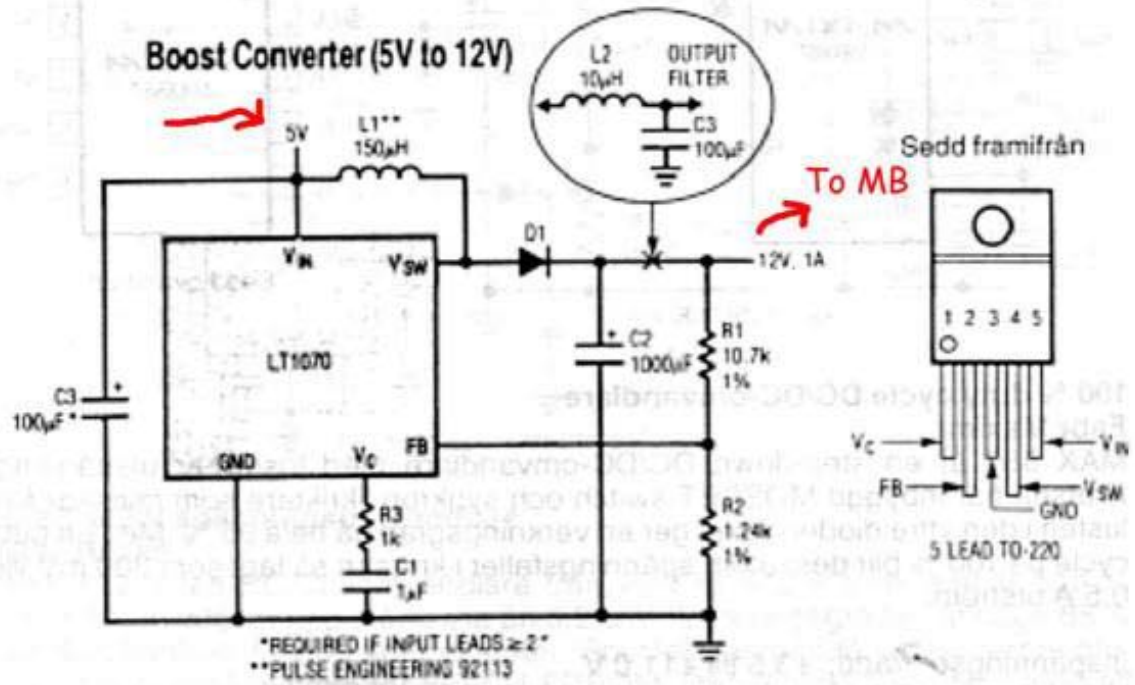



90mm x 65mm
between cropmarks
Shottky from
a PC supply
LT1070
LT1074
Power good part
Coils from PC supply


+12v HD
IN
+5
+12
-12
-5
PG
Layout By A.Efraimsson


LT1070
LT1074
1N4004
470uF
1N4004
1N4004
1.2k+330
2.7k
2.7k *
1k
1.2k
Schottky
100uF
10nF
+1uF-
100uF
220uF
10nF
1uF
10uF
100 nF
10nF
560
10k
1N4148
10k
MAX743
1N4148
RELAY
47uF
47uF
+12v 100mA
BC183
or
547
+15uF-
1k
100 uF
1N4148
7905

LT 1070

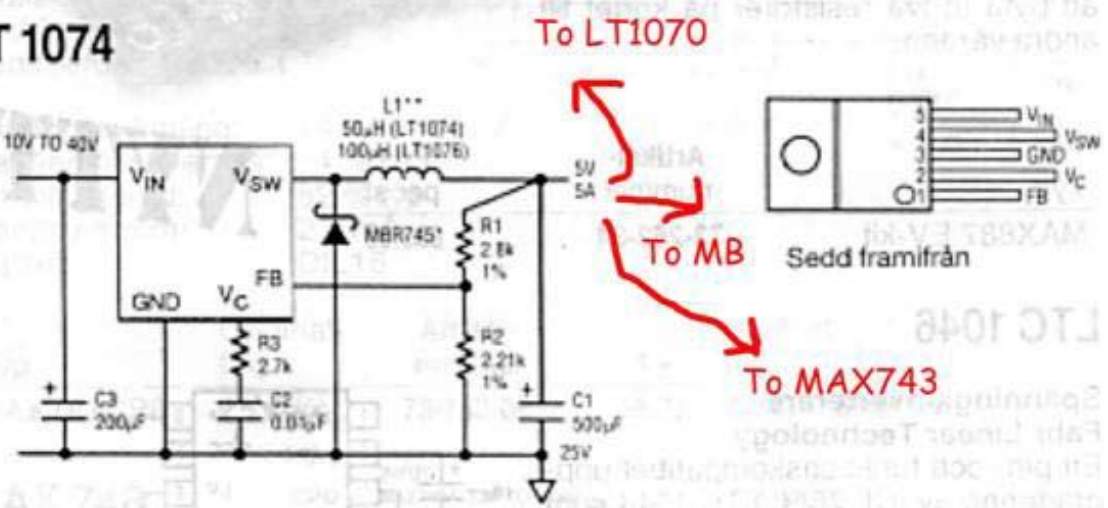


Inspänning:	+3 till +40 V
Strömförbrukning:	6 mA typ (50 µA standby)
Verkningsgrad:	90 % typ
Switchfrekvens:	40 kHz typ
Temperaturområde:	0 till +100 °C
Kapsel:	TO220-5

Typ	Original-förp	Artikel-nummer	Pris per st 1 –	10 –	50 –
LT1070CT	50 st/rör	73-099-90♦	94:60	77:50	61:00

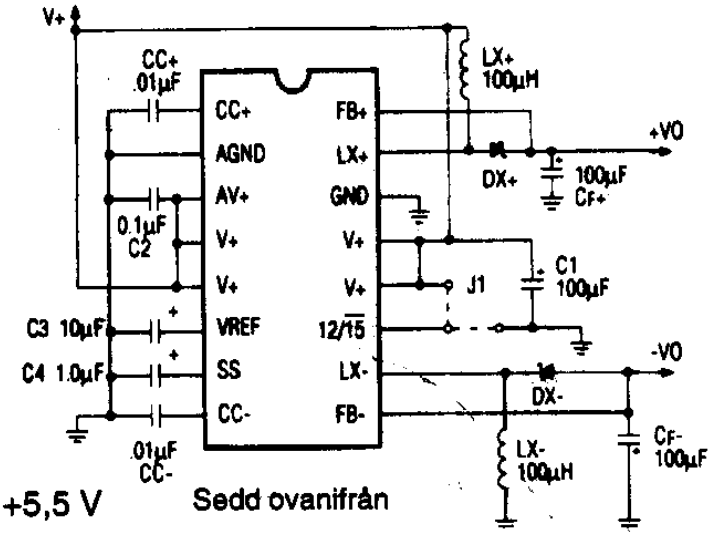
LITT Utförliga data och applikationsexempel finns i boken Linear Technology Linear vol 1 artikelnr 84-090-39, se sidan 2016.

LT 1074



Inspänning:	+8 till +40 V
Strömförbrukning:	8,5 mA typ
Switchfrekvens:	100 kHz typ
Temperaturområde:	0 till +125 °C
Kapsel:	TO220-5

MAX 743



Sedd ovanifrån

Matningsspänning:	+4,5 till +5,5 V
Utspänningstolerans:	±4 %
Verkningsgrad:	82 % typ
Standby-ström:	2,2 mA
Kapsel:	DIL16