

List of electronic components needed to upgrade to DVI output.

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"Anthony" for his helpful hints in programming.

"Oscar" for his helpful hints.

"Chosen-One" for providing BIOS and helps

Voodooalert "Backfire"

RED means: Equip with corresponding component.

Note: Please never start this work unless you have at least semi-professional knowledge and skills in microelectronics. The traces and pads are highly sensitive and easily ruined.

Recommended tools:

- Stereo working microscope or a damn good magnifier
- Preheating device
- Soldering station with very fast control and depot soldering tip
- High quality flux
- High quality SMD solder
- High quality SMD tweezers
- PCB aids

The ferrite beads are recommended to be used. You can try 0,22μH SMD coils instead. I did it on a V4 4500 and it works properly.

All capacitors except C7 are MLCC types. We prefer high quality parts like MuRata or KEMET.

First please **remove** following components:

R48 - To be found L/H side U5

R66 - To be found R/H side U5

CONNECTOR

P1 Molex 743204004

INTEGRATED CIRCUITRY

U2 Sil 164 CT 64

U5 74 HCT 4052 M

VR1 PQ1R33

DIODES

CR5 BAV99

CR6 BAV99

CR7 BAV99

CAPACITORS

C1 100nF / 0603 / MLCC

C2 100nF / 0603 / MLCC

C3 100nF / 0603 / MLCC

C6 1 μ F / 1206 / MLCC

C7 10 μ F / 16V / Elko or Tantal

C8 220pF / 0603 / MLCC

C9 220pF / 0603 / MLCC

C17 10 μ F / 1206 / MLCC

C18 100pF / 0603 / MLCC

C19 100pF / 0603 / MLCC

C20 100pF / 0603 / MLCC

C21 10 μ F / 1206 / MLCC

C31 100pF / 0603 / MLCC

C32 100pF / 0603 / MLCC

C40 100pF / 0603 / MLCC

C43 100pF / 0603 / MLCC

C47 100pF / 0603 / MLCC

C50 10 μ F / 1206 / MLCC

C51 100nF / 0603 / MLCC

RESISTORS

R1 2,2 k Ω / 1206
R6 10 k Ω / 0603
R8 100 Ω / 0603
R9 510 Ω / 0603

R17 100 Ω / 0603
R22 10 k Ω / 0603
R23 10 k Ω / 0603
R26 100 Ω / 0603

R29 100 Ω / 0603
R31 10 k Ω / 0603
R32 100 Ω / 0603
R36 10 k Ω / 0603

R41 10 k Ω / 0603
R46 100 Ω / 0603
R47 100 Ω / 0603
R51 22 Ω / 0603

INDUCTIVITIES

L1 Ferrit Bead 0805 220 Ω
L2 Ferrit Bead 0805 220 Ω
L3 Ferrit Bead 0805 220 Ω

L8 Ferrit Bead 0805 220 Ω
L9 Ferrit Bead 0805 220 Ω
L10 Ferrit Bead 0805 220 Ω
L16 Ferrit Bead 0805 220 Ω

FUSE

F1 1210 500mA Fuse