Adapter DIP-40_B1

EzoFlash+ adapter for 16 bit EPROM in DIP-40W and DIP-40 packages.

1. Part list.

R1, R2 – 2k2
R-PACK – 9x6.8k (2pcs)
V1 – BC547
IC1, IC2 – 74HC245
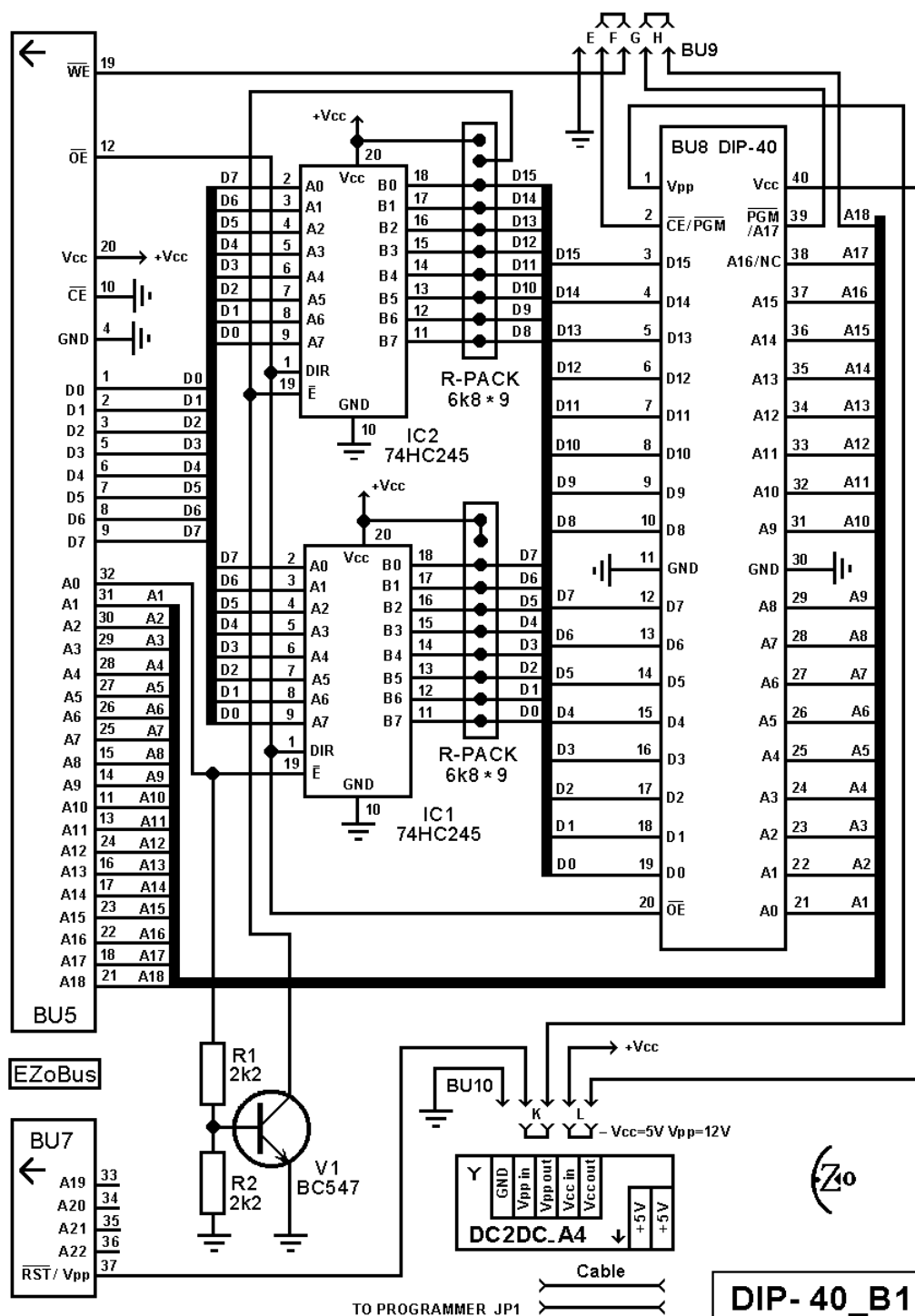BU5 – Straight pin-header 2x16, division 2.54
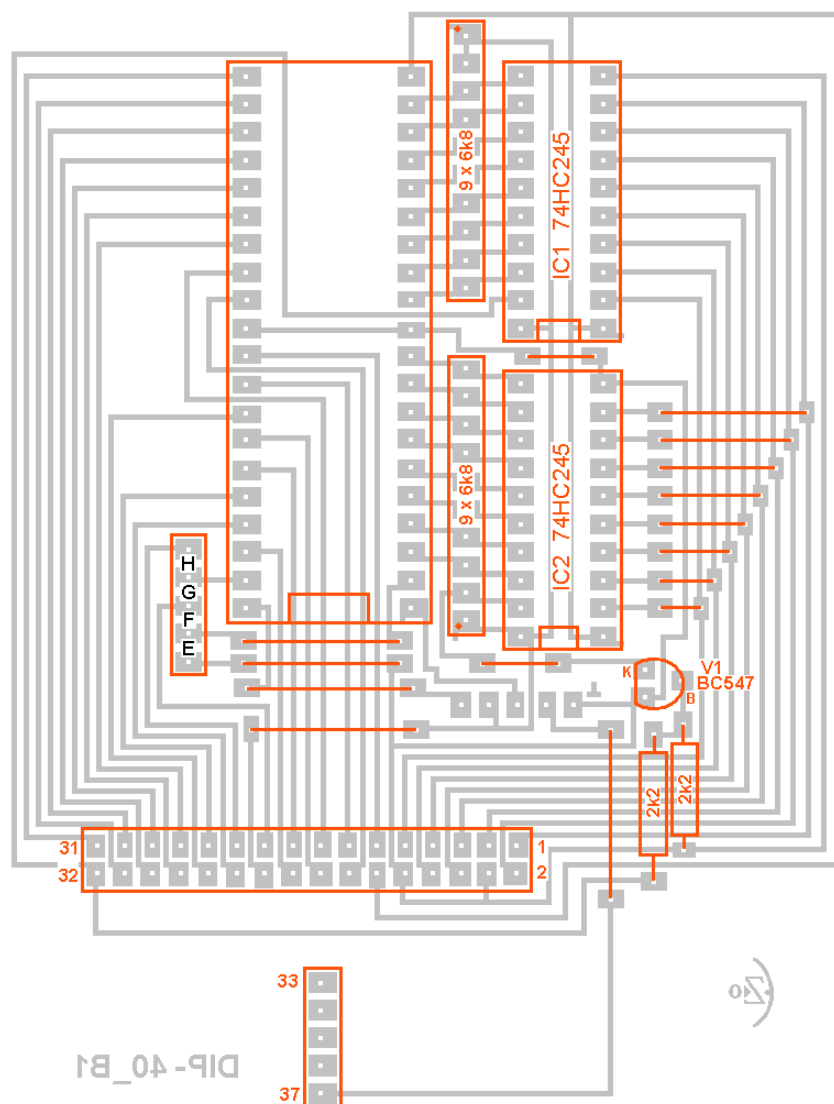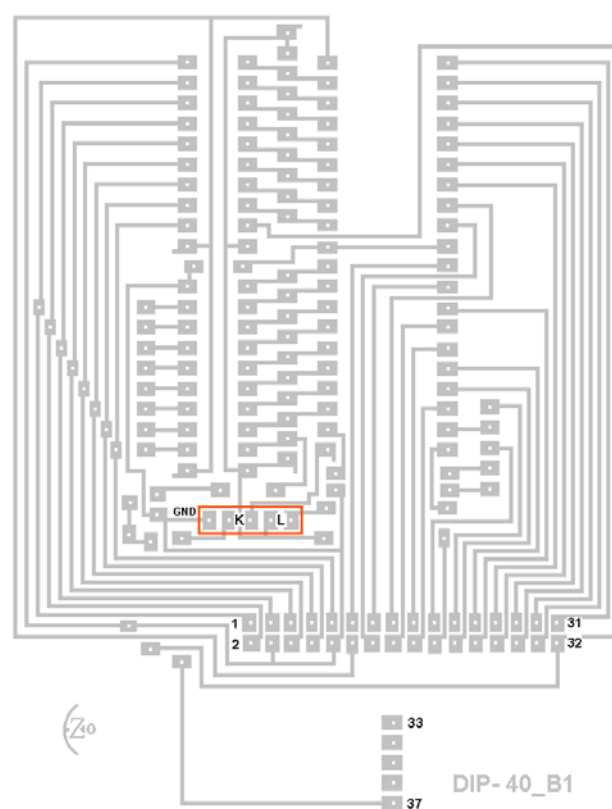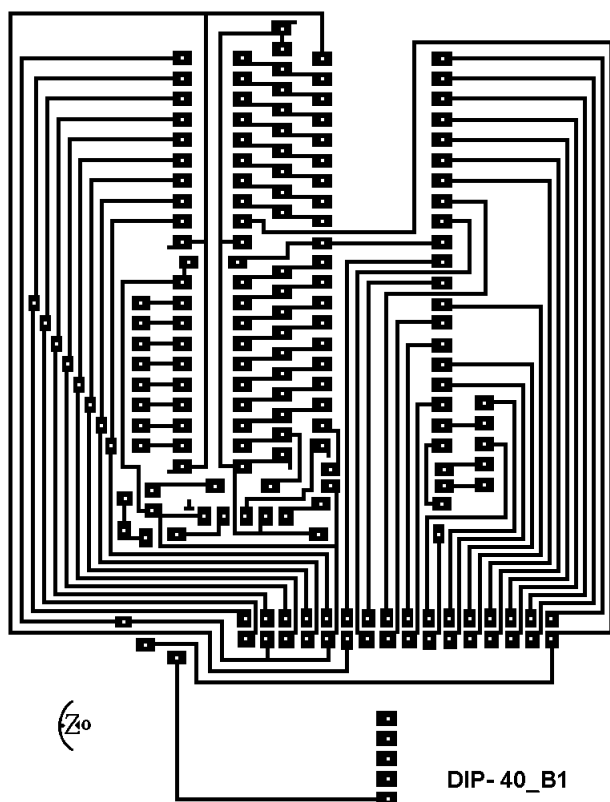BU7 – Straight pin-header 1x5, division 2.54
BU8 – IC Socket DIL-40
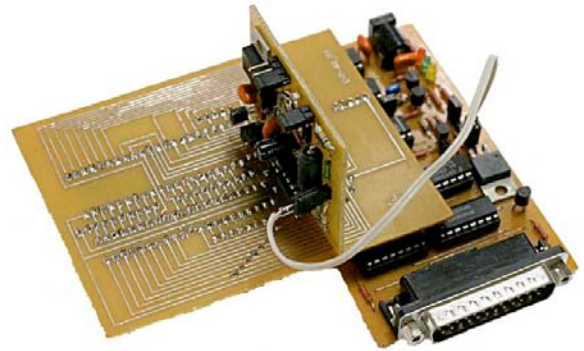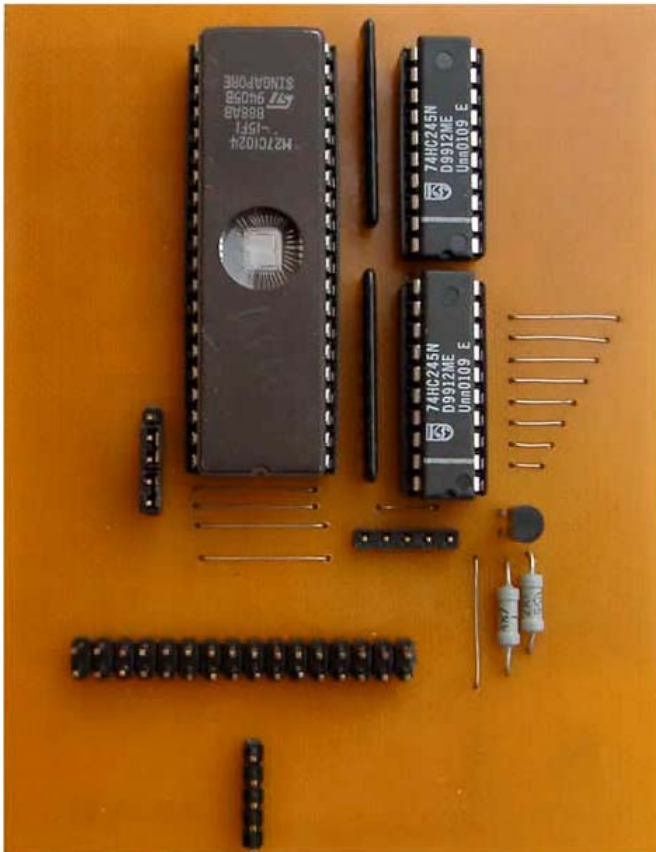BU9 – Straight pin-header 1x5, division 2.54 / Jumper, division 2.54 (2pcs)
BU10 – Straight pin-header 1x5, division 2.54 (modified, move plastic to end) /
        Jumper, division 2.54 (2pcs) / DC2DC_A4

2. Schematic, PCB and pictures

DIP-40_B1

104 x 81mm

DIP- 40_B1

DIP- 40_B1

GND K L

1
2

31
32

33

37

9 x 6k8

IC1 74HC245

9 x 6k8

IC2 74HC245

H
G
F
E

V1
BC547
K
B

2k2
2k2

31
32

1
2

33

37

DIP-40_B1

3. Settings, verified chip list and info.

Willem programmer software version 0.97ja

Programmer jumpers -   W/Jp1- wire cable to dc2dc_a4, Jp3 (+5V), Jp5 (A18)
DIP-40_B1 jumpers E…H according to density – E,G (1Mb, 2Mb); F,H (4Mb)

27C1024, 27C2048, 27C4096, 27C210, 27C220, 27C240, 27C202, 27C4002
Selected device EPROM > 27Cxxx > …, twp=140mks
dc2dc_a4 jumpers –
JpR (Vcc from LM317), JpM (Vcc=5.8V) , JpP (Vpp=11..14V)
Adjust R5 - Vpp=12.8V
Verified chips :
AM27C1024, NM27C210Q, TMS27C210A, ST Micro M27C1024, M27C4002

Chip test results find in chip_test.xls file.
Note.
Chips are tested in long period, different dc2dc adapters and voltages used, SW 0.97g and 0.97ja .
dc2dca4 is functionally equal to previous versions (a2, a3; same jumpers).
Adjust other Vpp value or change Vcc=6.2V (jumper N), change twp, if required from EPROM
datasheets or programming fail.
Chip read available without dc2dc_a4, some can be programmed. Set jumpers JpK, JpL. (Vcc=5V,
Vpp=12V).

How to adjust Vpp ?
Install dc2dc_a4 and eprom adapter without target chip on ezoflash+.
Connect power supply, PC and run SW. Adjust Vpp on LM317- IN with R5

Only erased EPROM can be programmed. Initially, and after each erasure, all bits of the EPROM are in
the logic high state. Run SW command Blank check to assure all bytes are 0xFF.
Logic lows are programmed into desired locations. Repeat programming (check voltage, increase twp)
on logic low programming failure.
Programmed logic low can be erased only by ultraviolet light (UV lamp , wavelenght 2537 Angstroms,
intensity 12mW/cm2, chip window 1..2cm from UV source, exposure time 12…20 minutes).
Chips without window are OTP (one time programmable) and cannot be erased.

Report problems and share your experience on Willem and EZoFlash forums.