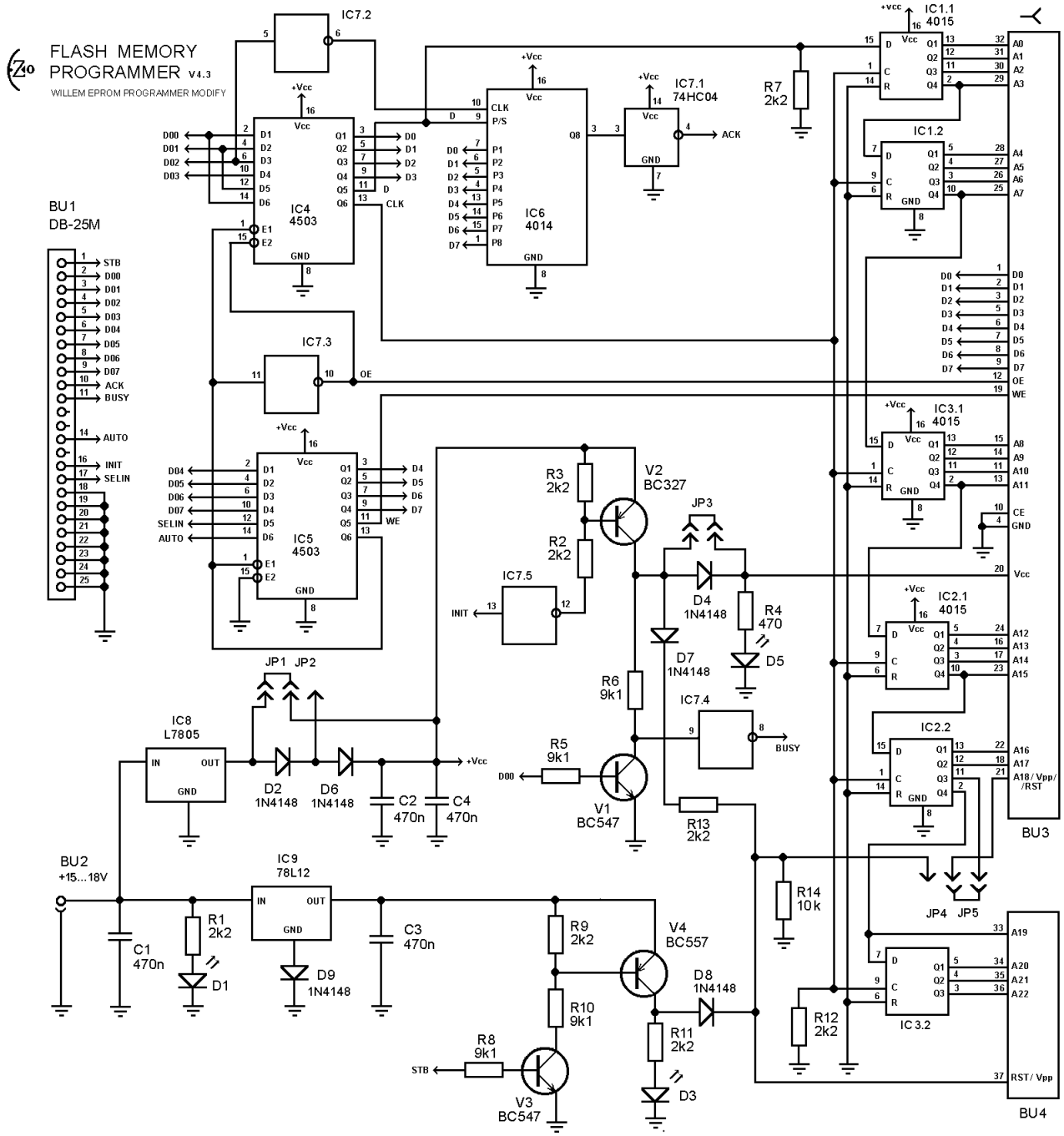
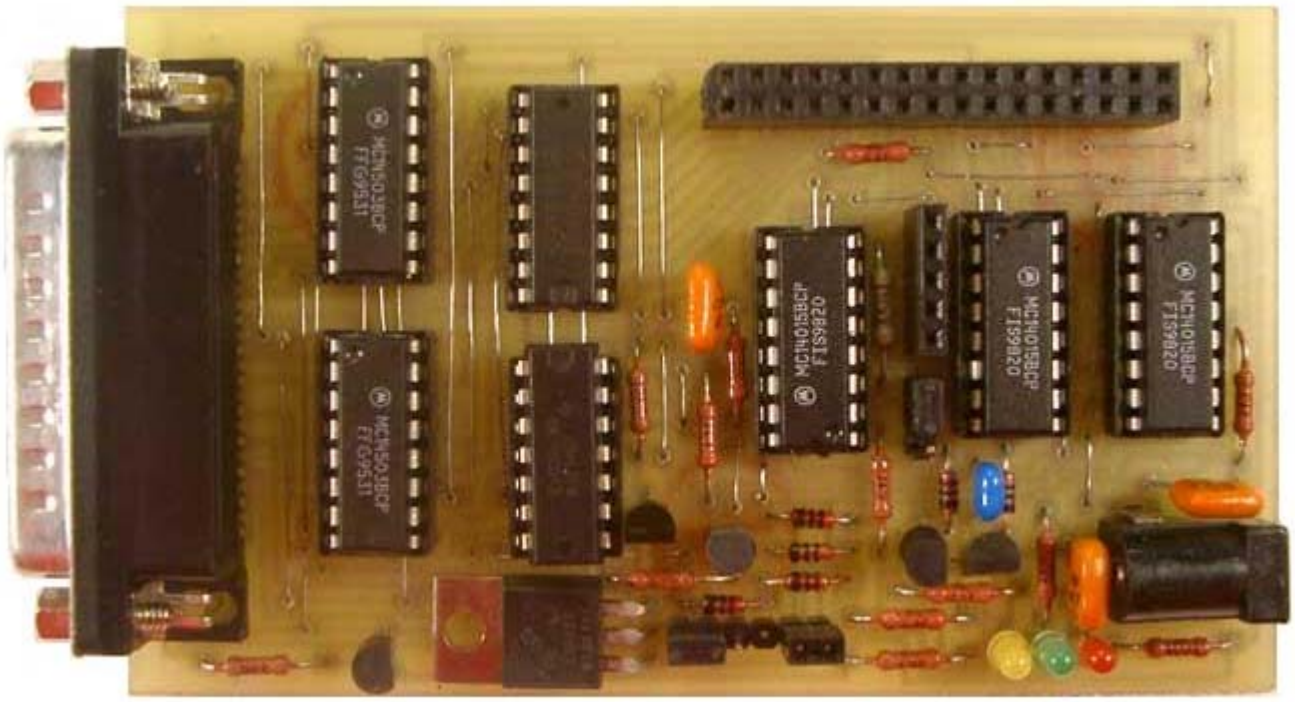
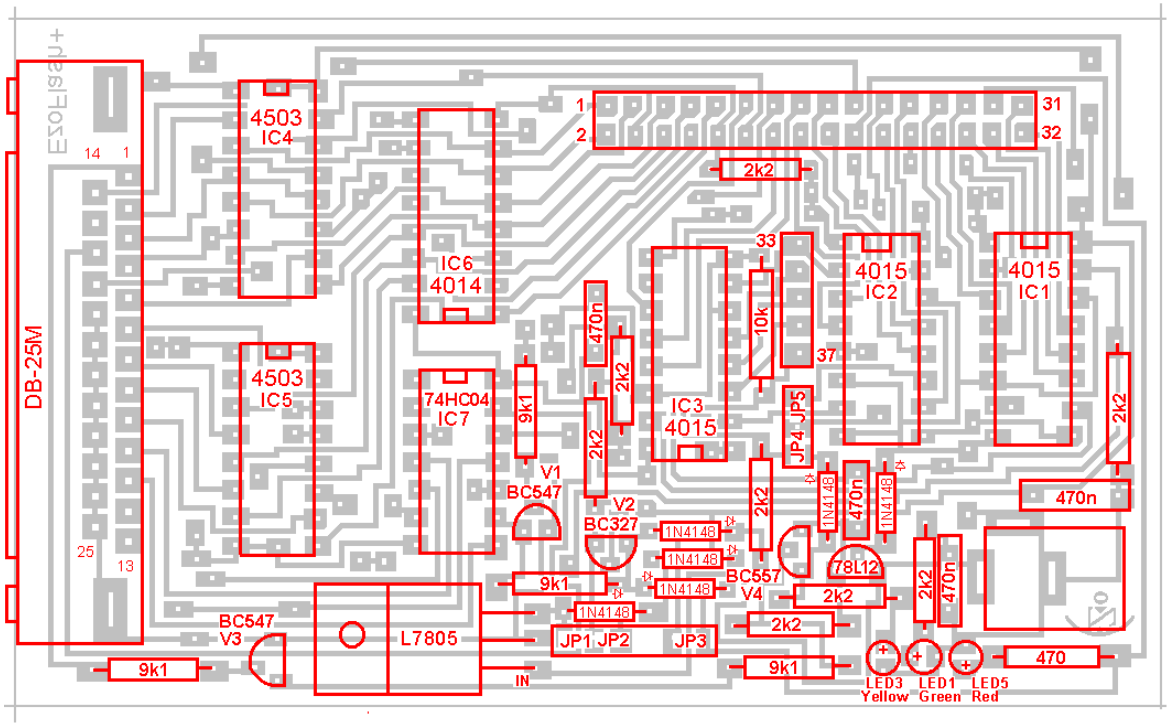
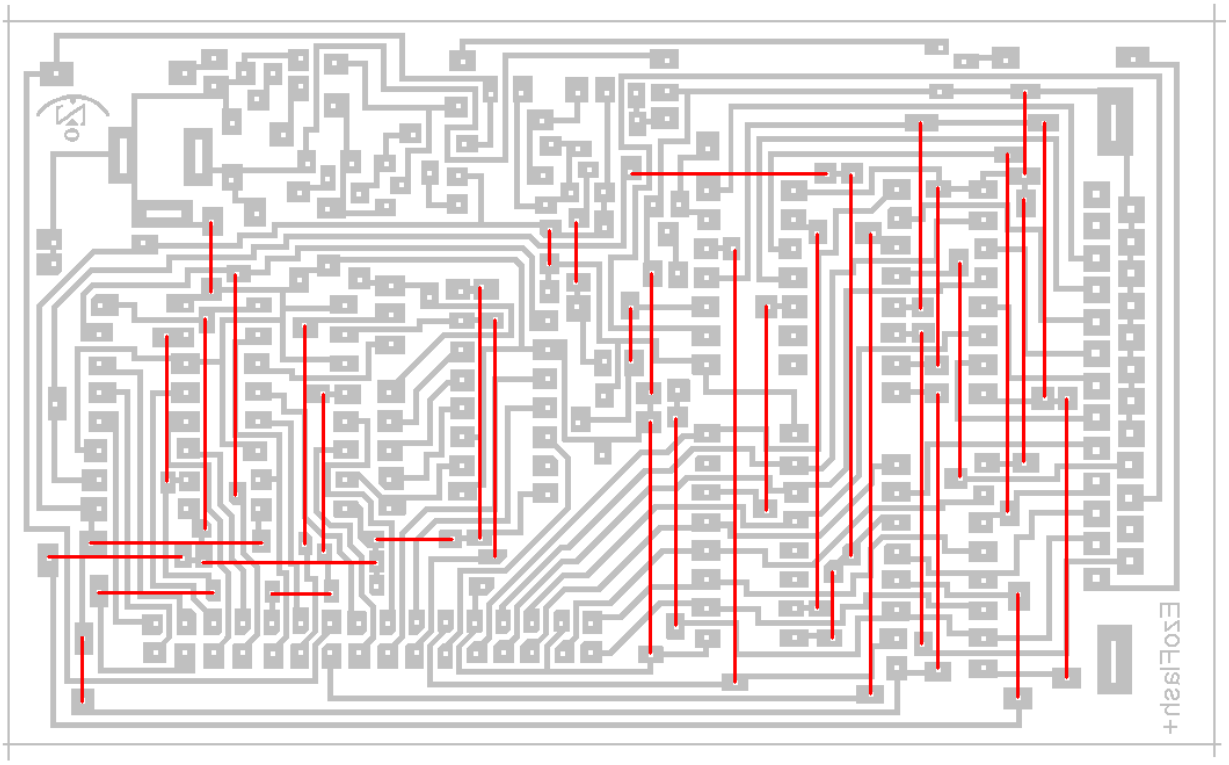
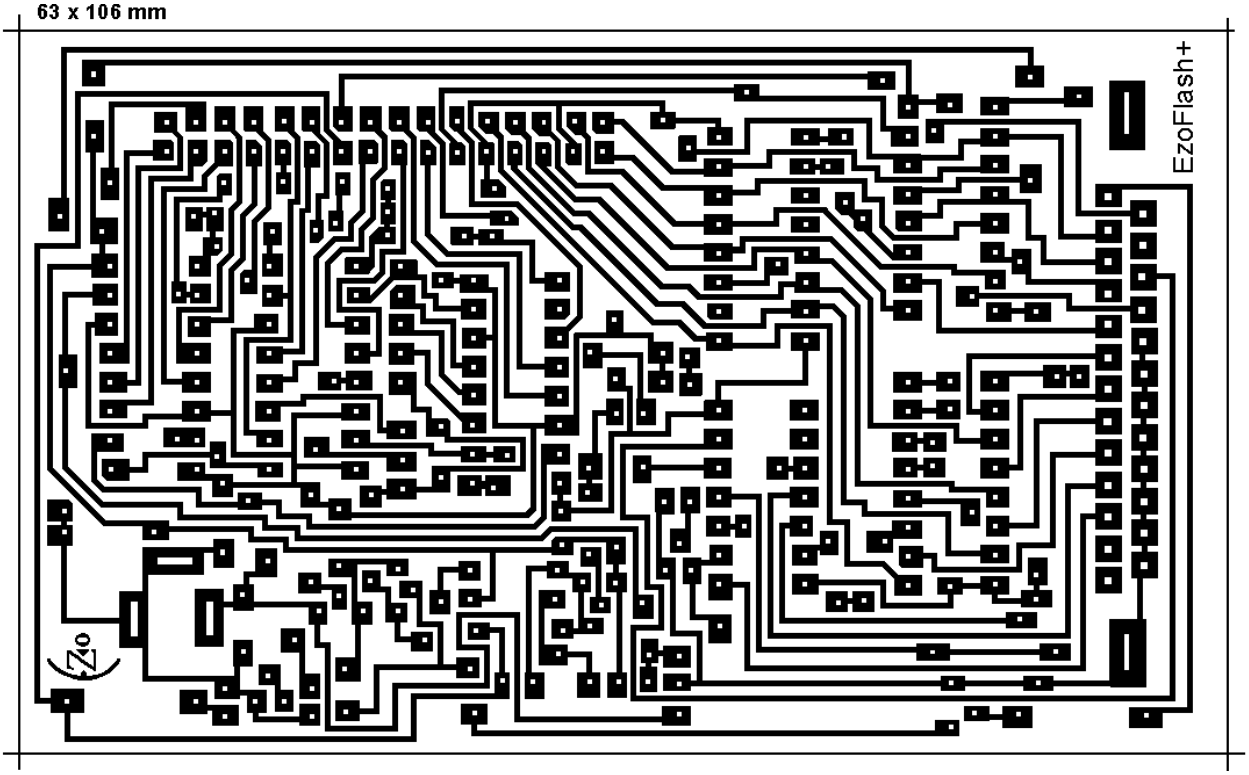

FLASH MEMORY
PROGRAMMER v4.3
WILLEM EPROM PROGRAMMER MODIFY
BU1
DB-25M
STB
D00
D01
D02
D03
D04
D05
D06
D07
ACK
BUSY
AUTO
INIT
SELIN
IC4
4503
IC5
4503
IC6
4014
IC7.1
74HC04
IC7.2
IC7.3
IC7.4
IC7.5
IC8
L7805
IC9
78L12
IC1.1
4015
IC1.2
IC2.1
4015
IC2.2
IC3.1
4015
IC3.2
R1
2k2
R2
2k2
R3
2k2
R4
470
R5
9k1
R6
9k1
R7
2k2
R8
9k1
R9
2k2
R10
9k1
R11
2k2
R12
2k2
R13
2k2
R14
10k
C1
470n
C2
470n
C3
470n
C4
470n
D1
D2
1N4148
D3
D4
1N4148
D5
D6
1N4148
D7
1N4148
D8
1N4148
D9
1N4148
V1
BC547
V2
BC327
V3
BC547
V4
BC557
JP1
JP2
JP3
JP4
JP5
BU2
+15...18V
BU3
BU4
+Vcc
OE
WE
CLK
BUSY
ACK
AUTO
INIT
SELIN
RST/ Vpp




DB-25M
14
1
25
13
4503
IC4
4503
IC5
IC6
4014
74HC04
IC7
9k1
470n
2k2
IC3
4015
10k
33
37
JP4 JP5
4015
IC2
4015
IC1
1
2
31
32
2k2
V1
BC547
V2
BC327
1N4148
BC557
V4
78L12
470n
BC547
V3
L7805
IN
JP1 JP2
JP3
470
LED3
Yellow
LED1
Green
LED5
Red



63 x 106 mm



EZoFlash+. Parallel memory programmer.

Simplified and based on Willem EPROM programmer schematics and SW.

EZoFlash+ is oriented in flash memory programming and support:
- 8bit , 8/16bit and 16 bit flash memory in TSOP, PSOP, DIP and PLCC packages,
- +3.3V and +5.0V Vcc devices;
- get ID, read, verify, erase, blank check and program actions;
- adress range to 64Mbit (..A22);
- +12V driver for programming and temporary sector unprotection;
- adapters with sockets for DIP-32 and PLCC-32 devices;
- adapters with flash soldering or identical footprint sockets for TSOP-32,40,48,56 and PSOP-44 devices.

Latest adapters allow FWH/LPC, AT89C51 family, EPROM and EEPROM programming.

Recommended SW versions
0.97ja, 10.06.2004, http://www.willem.org/ZIP/epr097ja.zip
0.97g, 26.01.2003, http://www.willem.org/ZIP/epr097g.zip

Important. Not running SW on powered programmer with adapter - connected PC can activate voltage drivers (+5 and +12, all LEDs flash) and damage target chip !
Keep sequence: Connect programmer to PC and power supply, run SW, (green LED only flashes), insert adapter.

Default jumpers settings are JP1 and JP3 (+5V-programmer /+5V-target chip), JP5 (A18).
Change jumpers from JP1, JP3 to JP2 (+4.3V/+3.6V) for 3.3V devices.
Some chips may require less voltage – no jumpers JP1..JP3 (+3.6V/+3.0V) or set JP3 (+3.6V/+3.6V)
Change jumper JP5 to JP4 for adapters used only on BU3 and where RST=log1 or Vpp=12V is required.
Adapters jumpers settings find in adapters doc's. Common jumpers: JP7 set Vpp=Vcc, JP8 set Vpp=+12V

EZoFlash+ (v4.3) programmer. Part list .

IC1..IC3 - 4015
IC4..IC5 - 4503
IC6 - 4014
IC7 - 74HC04
IC8 - L7805
IC9 - 78L12
V2 - BC327
V4 - BC557
V1, V3 - BC547
D1 - LED, green, 3mm diameter
D3 - LED, yellow, 3mm diameter
D5 - LED, red, 3mm diameter
D2,D4,D6..D9 - 1N1418 or KD522 (used in sample, picture)
C1..C4 - 470n
R1..R3, R7,R9,R12..R13 – 2k2
R4 - 470
R5..R6, R10 - 9k1 or 10k
R14 - 10k
BU1 - D-Sub 25 poles male connector with angled solder pins
BU2 - Chassis connector 2.5mm for PCB
BU3 - Strip connector socket, division 2.54 , 2x16
BU4 - Strip connector socket, division 2.54 , 1x5
JP1..JP3 – Straight pin header, division 2.54, 1x6 (one pin is removed) / Jumper , division 2.54 (2pcs)
JP4..JP5 – Straight pin header, division 2.54, 1x3 / Jumper, division 2.54 (1pc)