

Adapter TSOP-48_B2

EzoFlash+ adapter for 8/16 bit flash memory in TSOP-48 package.

1. Part list.

BU5 - Straight pin-header, division 2.54mm, 2x16

BU7 - Straight pin-header, division 2.54mm, 1x5

JP7 / JP8 / JP9 - Straight pin-header, division 2.54mm, 2x3 (remove 2pins) / Jumper, division 2.54mm

R1 - 2k2

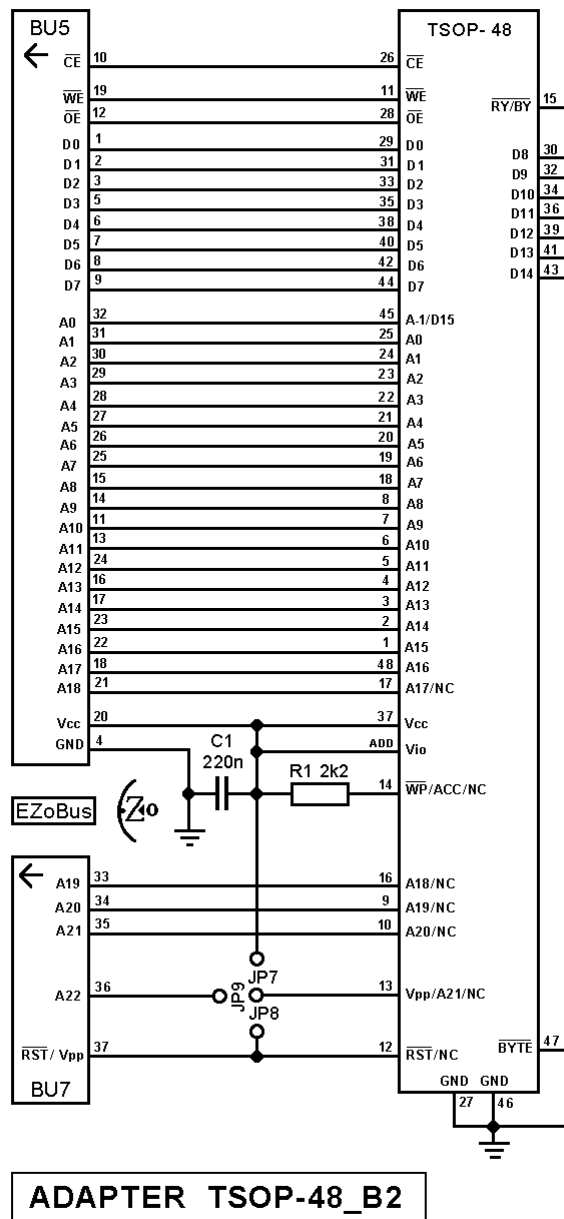
C1 - 220nF

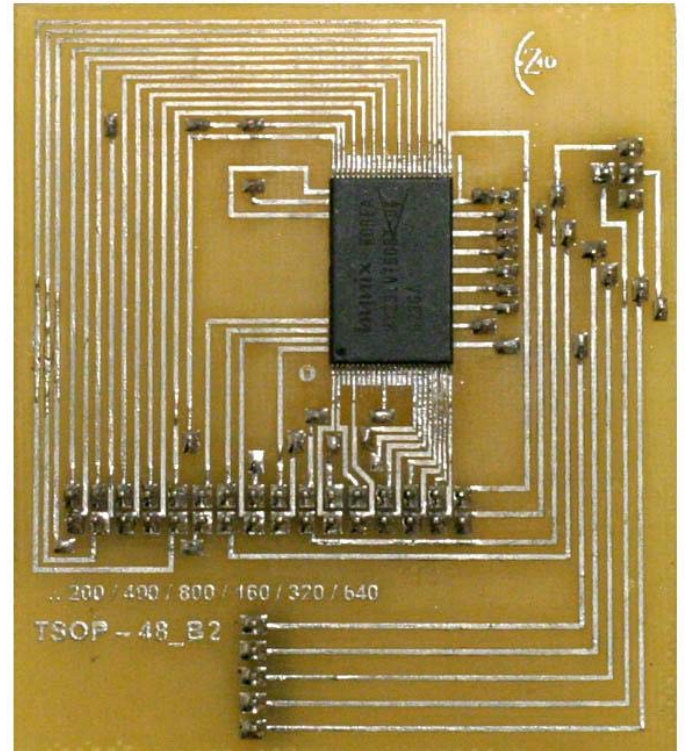
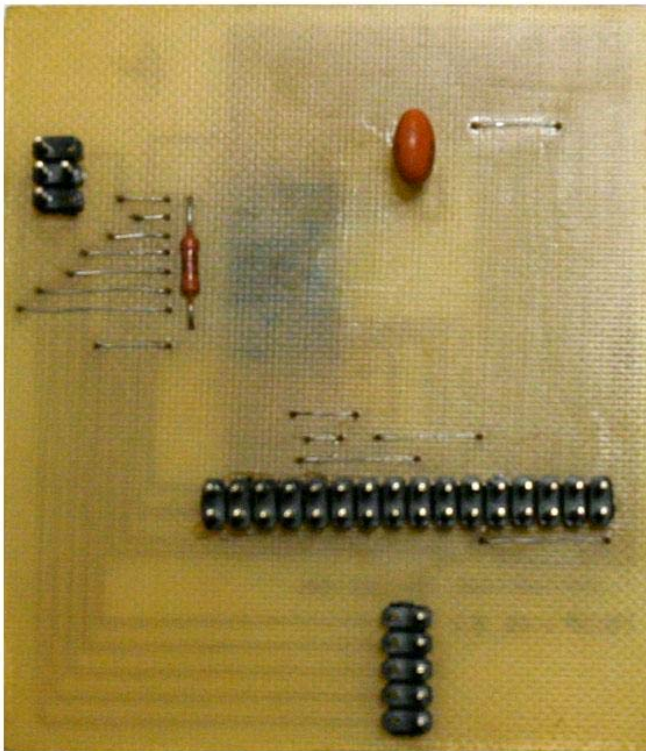
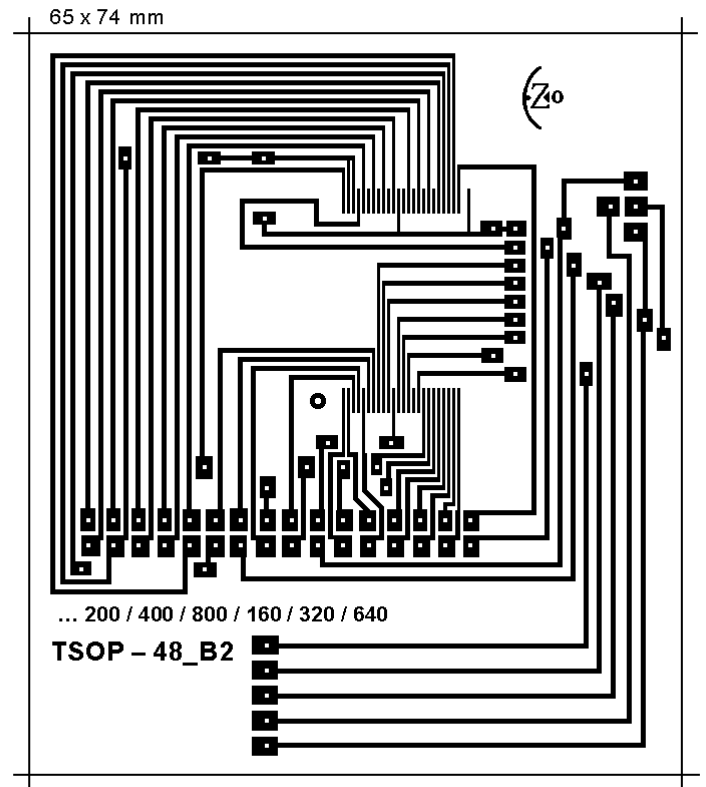
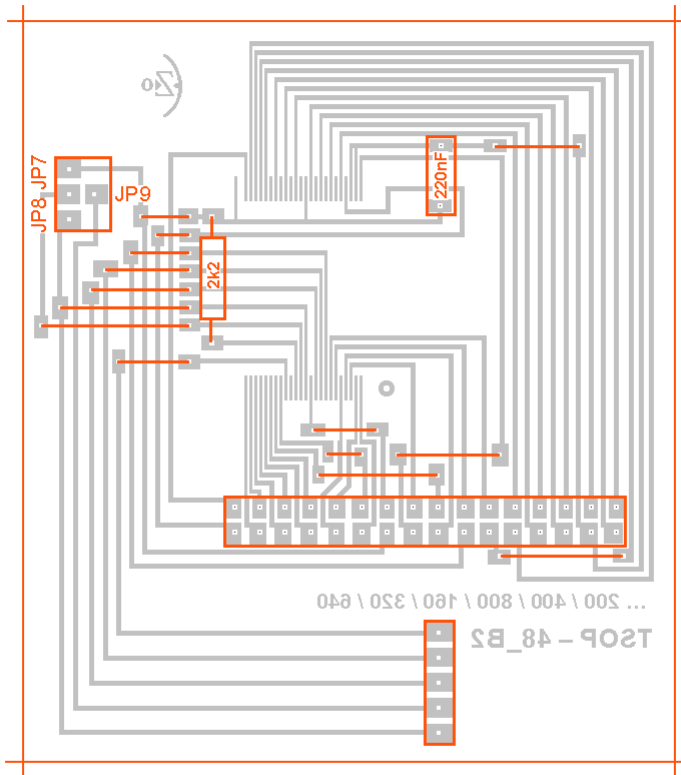
Optional:

Surface Mount 0.5mm TSOP-48 Socket Meritec 980020-48-01

Solder chip on adapter contactpads or apply socket.

2. Schematic, PCB and pictures





3. Supported chip list

Willem programmer software version 0.97ja.

Verified chips on mentioned adapter are underlined. Details find in chip_test.xls file

Software may not support some chip, report problem in Willem/EZoFlash forums.

GROUP B (Top or Bottom Boot Block)

Selected device group

Flash 29/39/49Fxxx > 29Fx00 8/16bit > ...;

Adapter 3.3V > 29VF/39LF/VF/49LFxxx > 29LVx00 (8/16bit) > ...;

Don't select group (addressing problems) : AT49Fxxxx 8/16bit

- Vcc=5V. Jumpers Jp1, Jp3 (+5V), Jp5 (A18).

Alliance AS29F200T, AS29F200B **AMD** AM29F100T, AM29F100B, AM29F200T, AM29F200B, AM29F200AT, AM29F200AB, AM29F200BT, AM29F200BB, AM29F400T, AM29F400B, AM29F400AT, AM29F400AB, AM29F400BT, AM29F400BB, AM29F800T, AM29F800B, AM29F800BT, AM29F800BB, AM29F160DT, AM29F160DB, **Amic** A29400TV, A29400UV, A29800TV, A29800UV, **Atmel** AT49F2048A, AT49F4096A, AT49F8192A, AT49F8192AT, AT49F8011, AT49F8011T, AT49F1614, AT49F1614T **Bright** BM29F400T, BM29F400B **EON** EN29F800T, EN29F800B **Fujitsu** (MBM) 29F200T, 29F200B, 29F200TC, 29F200BC, 29F400T, 29F400B, 29F400TA, 29F400BA, 29F400TC, 29F400BC, 29F800T, 29F800B, 29F800TA, 29F800BA, 29F160TE, 29F160BE **Hynix** HY29F400T, HY29F400B, HY29F400AT, HY29F400AB, HY29F800T, HY29F800B, HY29F800AT, HY29F800AB **Macronix** MX29F100T, MX29F100B, MX29F200T, MX29F200B, MX29F400T, MX29F400B, MX29F400CT, MX29F400CB, MX29F800T, MX29F800B **Mitsubishi** M5M29FT800, M5M29FB800, M5M29FT160A, M5M29FB160A **Mosel** Vitelic V29C51400T, V29C51400B **SGS/ST Micro** M29F100T, M29F100B, M29F100BT, M29F100BB, M29F200T, M29F200B, M29F200BT, M29F200BB, M29F400T, M29F400B, M29F400BT, M29F400BB, M29F800AT, M29F800AB, M29F800DT, M29F800DB, M29F160BT, M29F160BB **Texas Instr.** TMS29F400T, TMS29F400B **Toshiba** TC58F400, TC58F401

- Vcc=2.7-3.6V. Jumpers Jp2 (+3.6V), Jp5 (A18)

ACTrans AC29LV160T, AC29LV160B, AC29LV320T, AC29LV320B, AC39LV088 **Alliance** AS29LV400T, AS29LV400B, AS29LV800T, AS29LV800B, AS29LV160T, AS29LV160B, **AMD** AM29LV200T, AM29LV200B, AM29LV200BT, AM29LV200BB, AM29LV400T, AM29LV400B, AM29LV400BT, AM29LV400BB, AM29LV800T, AM29LV800B, AM29LV800BT, AM29LV800BB, AM29LV800DT, AM29LV800DB, AM29LV160T, AM29LV160B, AM29LV160BT, AM29LV160BB, AM29LV160DT, AM29LV160DB, AM29LV160MT, AM29LV160MB, AM29LV320DT, AM29LV320DB, AM29LV320MT, AM29LV320MB, AM29LV320MH(TSOP-56), AM29LV320ML(TSOP-56) **Amic** A29L400TV, A29L400UV, A29L800TV, A29L800UV, A29L160TV, A29L160UV, A29L320T, A29L320U, A29L320AT, A29L320AU **Atmel** AT49LV2048A, AT49BV2048A, AT49LV4096A, AT49BV4096A, AT49BV4096AT, AT49LV8192A, AT49LV8192AT, AT49BV8192A, AT49BV8192AT, AT49LV8011, AT49LV8011T, AT49BV8011, AT49BV8011T, AT49LV161, AT49LV161T, AT49BV161, AT49BV161T, AT49LV1614, AT49LV1614T, AT49BV1614, AT49BV1614T, AT49LV1614A, AT49LV1614AT, AT49BV1614A, AT49BV1614AT, AT49BV162A, AT49BV162AT, AT49BV163A, AT49BV163AT, AT49BV163D, AT49BV163DT, AT49LV321, AT49LV321T, AT49BV321, AT49BV321T, AT49LV3218, AT49LV3218T AT49BV3218, AT49BV3218T, AT49BV322A, AT49BV322AT, AT49BV322D, AT49BV322DT **EliteMT** F49L400UA, F49L400BA **EON** EN29LV400T, EN29LV400B, EN29LV400T, EN29LV400AB, EN29LV800AT, EN29LV800B, EN29LV800AT, EN29LV800AB, EN29LV800BT, EN29LV800BB, EN29LV160T, EN29LV160B, EN29LV160AT, EN29LV160AB, EN29LV320T, EN29LV320B, EN29LV320AT, EN29LV320AB **ESI** ES29LV400DT, ES29LV400DB, ES29LV400ET, ES29LV400EB, ES29LV800DT, ES29LV800DB, ES29LV160DT, ES29LV160DB, ES29LV160ET, ES29LV160EB, ES29LV320DT, ES29LV320DB **Fujitsu** (MBM) 29LV200T, 29LV200B, 29LV200TA, 29LV200BA, 29LV200TC, 29LV200BC, 29LV400T, 29LV400B, 29LV400TA, 29LV400BA, 29LV400TC, 29LV400BC, 29LV800T, 29LV800B, 29LV800TA, 29LV800BA, 29LV800TB, 29LV800BB, 29LV160T, 29LV160B, 29LV160TE, 29LV160BE, 29LV320TE, 29LV320BE, 29PL32TM, 29PL32BM **Hynix** HY29LV400T, HY29LV400B, HY29LV400AT, HY29LV400AB, HY29LV800T, HY29LV800B, HY29LV800AT, HY29LV800AB, HY29LV160T, HY29LV160B, HY29LV160BT, HY29LV160BB **LinkSmart** L29S400, L29S400B, L29S800, L29S800B, L29S160, L29S160B **Macronix** MX29LV400T, MX29LV400B, MX29LV400CT,

MX29LV400CB, MX29LV401T, MX29LV401B, MX29LV800T, MX29LV800B, MX29LV800AT, MX29LV800AB, MX29LV800BT, MX29LV800BB, MX29LV800CT, MX29LV800CB, MX29LV160T, MX29LV160B, MX29LV160AT, MX29LV160AB, MX29LV160BT, MX29LV160BB, MX29LV160CT, MX29LV160CB, MX29LV161T, MX29LV161B, MX29LV320T, MX29LV320B, MX29LV320AT, MX29LV320AB, MX29LV8100T, MX29LV8100B, MX29LV1610T, MX29LV1610B, MX26LV400T, MX26LV400B, MX26LV800T, MX26LV800B, MX26LV800AT, MX26LV800AB, MX26LV1600T, MX26LV160B, MX26LV160AT, MX26LV160AB **Mitsubishi** M5M29GT160B, M5M29GB160B **Renesas** M5M29KT331A, M5M29KB331A **Sanyo** LE28FV4101T, LE28FW4101T, LE28FU4101T **ST Micro** M29W200BT, M29W200BB, M29W400T, M29W400B, M29W400BT, M29W400BB, M29W400DT, M29W400DB, M29W800T, M29W800B, M29W800AT, M29W800AB, M29W800DT, M29W800DB, M29W160BT, M29W160BB, M29W160DT, M29W160DB, M29W160ET, M29W160EB, M29W320DT, M29W320DB **Spansion** S29AL004D..-01, S29AL004D..-02, S29AL008D..-01, S29AL008D..-02, S29AL016D..-01, S29AL016D..-02, S29AL016M..-01, S29AL016M..-02, S29AL016M..-R1, S29AL016M..-R2, S29GL016A..-R1, S29GL016A..-R2, S29AL032D..-03, S29AL032..-04, S29GL032A..-R1(TSOP-56), S29GL032A..-R2(TSOP-56), S29GL032A..-R3, S29GL032A..-R4, S29GL032M..-R1(TSOP-56), S29GL032M..-R2(TSOP-56), S29GL032M..-R3, S29GL032M..-R4, **SST** SST39VF088, SST39VF1681, SST39VF1682, SST36VF3203, SST36VF3204 **Texas Instr.** TMS29LF800T, TMS29LF800B **Toshiba** TC58FVT400, TC58FVB400, TC58FVT800, TC58FVB800, TC58FVT160, TC58FVB160, TC58FVT160A, TC58FVB160A, TC58FVT321, TC58FVB321 **Utron** UT29L800AT, UT29L800AB, UT29L1600AT, UT29L1600AB, UT29L3200AT, UT29L3200AB **Winbond** W19B320AT, W19B320AB, W19B320ST, W19B320SB, W19L320ST, W19L320SB

- **Dual/multi bank.** Vcc=2.7-3.6V. Jumpers Jp2 (+3.6V), Jp5 (A18)

Selected device

Adapter 3.3V> 29VF/39LF/VF/49LFxxx > 29LVx00 (8/16bit)> ..

AMD AM29DL400BT, AM29DL400BB, AM29DL800BT, AM29DL800BB, AM29DL161DT, AM29DL161DB, AM29DL162DT, AM29DL162DB, AM29DL163DT, AM29DL163DB, AM29DL164DT, AM29DL164DB, AM29DL320GT, AM29DL320GB, AM29DL322DT, AM29DL322DB, AM29DL322GT, AM29DL322GB, AM29DL323CT, AM29DL323CB, AM29DL323DT, AM29DL323DB, AM29DL323GT, AM29DL323GB, AM29DL324DT, AM29DL324DB, AM29DL324GT, AM29DL324GB, **Amic** A29DL323TV, A29DL323UV, A29DL324TV, A29DL324UV **Fujitsu** (MBM) 29DL400TC, 29DL400BC, 29DL800TA, 29DL800TB, 29DL161TD, 29DL161BD, 29DL161TE, 29DL161BE, 29DL162TD, 29DL162BD, 29DL162TE, 29DL162BE, 29DL163TD, 29DL163BD, 29DL163TE, 29DL163BE, 29DL164TD, 29DL164BD, 29DL164TE, 29DL164BE, 29DL321TD, 29DL321BD, 29DL322TD, 29DL322BD, 29DL322TE, 29DL322BE, 29DL323TD, 29DL323BD, 29DL323TE, 29DL323BE, 29DL324TD, 29DL324BD, 29DL324TE, 29DL324BE, **Hynix** HY29DL162T, HY29DL162B, HY29DL163T, HY29DL163B **NEC** uPD29F032202AL-T, uPD29F032202AL-B, uPD29F032203AL-T, uPD29F032203AL-B, uPD29F032204AL-T, uPD29F032204AL-B **Samsung** K8D1716UBC, K8D1716UTC, K8D3216UBC, K8D3216UTC **Sanyo** LE28DW8163, LE28DW1621T, LE28DW3212T **ST Micro** M29DW323DT, M29DW323DB, M29DW324DT, M29DW324DB, **Toshiba** TC58FVM5T2A, TC58FVM5B2A, TC58FVM5T3A, TC58FVM5B3A **Winbond** W19B322MT, W19B322MB, W19B323MT, W19B323MB, W19B324MT, W19B324MB

- **64Mbit** .Vcc=2.7-3.6V. Jumpers Jp2 (+3.6V), Jp5 (A18).

Selected device

Adapter 3.3V> 29VF/39LF/VF/49LFxxx > 29LVx00 (8/16bit)> 29LV320

Set jumper Jp9 (A21 log.0) - get ID, erase all chip, read and program 1st 32Mb.

Set jumper Jp7 (A21 log1) - read and program 2nd 32Mb.

AMD AM29DL640D, AM29DL640G, AM29DL640H, AM29LV640MT, AM29LV640MB, AM29LV640MH(TSOP-56), AM29LV640ML(TSOP-56) **Fujitsu** (MBM) 29DL640E **Macronix** MX29LV640T, MX29LV640B, MX29LV640BT, MX29LV640BB, MX29LV640DT, MX29LV640DB **Renesas** M5M29KT641, M5M29KB641 **Spansion** S29GL064A..-R1(TSOP-56), S29GL064A..-R2(TSOP-56), S29GL064A..-R3, S29GL064A..-R4, S29GL064A..-R8, S29GL064A..-R9, S29GL064M..-R1(TSOP-56), S29GL064M..-R2(TSOP-56), S29GL064M..-R3, S29GL064M..-R4 **ST Micro** M29DW640D, M29W640DT, M29W640DB, M29W640FT, M29W640FB, M29W640GT, M29W640GT (TSOP-56), M29W640GB, M29W640GB (TSOP-56), M29W640GH,

M29W640GH(TSOP-56), M29W640GL, M29W640GL(TSOP-56) **Toshiba** TC58FVT641, TC58FVB641, TC58FVM6T2A, TC58FVM6B2A

GROUP E (Vpp, Top or Bottom Boot Block)

Selected device group Flash 28Fxxx > 28Fx00 8/16bit > ...

- Vcc=5V, Vpp=12V. Jumpers Jp1, Jp3 (+5V), Jp5 (A18), Jp8 (Vpp=12V)

Macronix MX28F2100T, MX28F2100B **SGS** M28F210, M28F220, M28F410, M28F420

- Vcc=5V, Vpp=5.0/12V.

Jumpers Jp1, Jp3 (+5V), Jp5 (A18), Jp7(Vpp=5V) or

Jumpers Jp1, Jp3 (+5V), Jp5 (A18); Jp8 (Vpp=12V)

Intel (TE,E) 28F200B5T, 28F200B5B, 28F400B5T, 28F400B5B, 28F800B5T, 28F800B5B

Micron MT28F200B5-T, MT28F200B5-B, MT28F400B5-T, MT400B5-B **Sharp** LH28F800BV(H)E-TV, LH28F800BV(H)E-BV

- Vcc=5V, Vpp=5.0V. Jumpers Jp1, Jp3 (+5V), Jp5 (A18), Jp7 (Vpp=5V)

Micron MT28F800B5-T, MT28F800B5-B **Sharp** LH28F400SU(H)E

- Vcc=3.3V, Vpp=3.3/12V.

Jumpers Jp2 (+3.6V), Jp5 (A18), Jp7 (Vpp=3.6V) or

Jumpers Jp2 (+3.6V), Jp5 (A18), Jp8 (Vpp=12V)

Intel (TE,E) 28F400B3T, 28F400B3B **Micron** MT28F200B3WG-T, MT28F200B3WG-B

Sharp LH28F800BJ(H)E-PTTL, LH28F800BJ(H)E-PBTL, LH28F800BV(H)E-TTL, LH28F800BV(H)E-BTL, LH28F160BJ(H)E-T, LH28F160BJ(H)E-B, LH28F160BV(H)E-TTL, LH28F160BV(H)E-BTL, LH28F320BJ(H)E-PT, LH28F320BJ(H)E-PB **Winbond** W28J800T, W28J800B, W28J160T, W28J160B, W28J320T, W28J320B

- Vcc=3.3V, Vpp=3.3/5.0V. Jumpers Jp2 (+3.6V), Jp5 (A18), Jp7 (Vpp=3.6V)

Micron MT28F400B3WG-T, MT28F400B3WG-B, MT28F800B3WG-T, MT28F800B3WG-B

- Vcc=3.3/5.0V, Vpp=5.0/12V.

Jumpers Jp2 (+3.6V), Jp5 (A18), Jp8(Vpp=12V) or

Jumpers Jp1, Jp3 (+5V), Jp8 (Vpp=12V) or

Jumpers Jp1, Jp3 (+5V), Jp7 (Vpp=5V)

Intel (TE,E) 28F200CVT, 28F200CVB, 28F400CVT, 28F400CVB, 28F400CET, 28F400CEB,

28F800CVT, 28F800CVB, 28F800CET, 28F800CEB **ISSI** IS28F200BVT, IS28F200BLVT, IS28F200BVB, IS28F200BLVB, IS28F400BVT, IS28F400BLVT, IS28F400BVB, IS28F400BLVB

Micron MT28F200B1WG-T, MT28F200B1WG-B, MT28F400B1WG-T, MT28F400B1WG-B,

MT28F800B1WG-T, MT28F800B1WG-B **Sharp** LH28F400BV(H)E-TL, LH28F400BV(H)E-BL

Texas Instr. TMS28F200A-T, TMS28F200A-B, TMS28F400A-T, TMS28F400A-B, TMS28F800A-T, TMS28F800A-B, TMS28F1600T, TMS28F1600B **Winbond** W28V400T, W28V400B