



Upgrading the memory modules NVT-0382 in the BeeHive8S

How-Do-It Manual

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version 1.10



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Introduction

This how-do-it manual is designated to guide the user with upgrading the memory modules in the BeeHive8S programmer unit. Manual contains sequences for installing/upgrading RAM memory modules of the programmer's unit safely.

Terms definition:

Site - the site is a component of the BeeHive8S programming unit. Each the site has its own ZIF programming socket. The sites are independent each other.

Motherboard - main board of the computer inside the BeeHive8S/BeeHive208S programmer.

Memory module – module board with RAM DDR2 800MHz CL5 Un-buffered DIMM (non-ECC) type, installed in the memory slots of the motherboard.

Spare part NVT-0382, BeeHive8S/BeeHive208S spare 1GB RAM module contains:

- 1 or 2 memory modules with RAM DDR2 1GB/800MHz, CL5
- Detailed upgrading manual (you are reading it)
- Transport package

Required tools:

- Bench with smooth surface or with a soft working pad
- Cross-screwdriver PHILIPS #2
- Screwdriver INBUS 2mm
- A box for screws

Procedure, sequence of steps

Notes:

- *Programmer uses memories in dual channel configuration therefore we highly recommend upgrade system memory with 2 pcs of memory modules.*
- *If you aren't familiar with upgrading PC hardware, we recommend you to ask some PC computer technician to install new memory modules.*
- *Observe the principles of handling electrostatic sensitive devices; the minimum precautions include operator discharging to a larger metal object prior starting the work itself, and avoiding excessive motions on a chair during operation.*
- *The below described procedure describes the sequence of the steps starting from the top. Omit, please, none step in the sequence.*

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Removing the upper cover of the programmer's unit

- Remove the supply cable from the programmer's unit.
- Place the programmer's unit on the bench in such a way that the connectors may point to you.
- Unscrew the screws from the top edge of the rear side of the upper cover. The screws store in a box.



Figure 1 The screws position on the rear side of the programmer's unit

- Turn the programmer's unit so, that the ZIF sockets levers may point to you.
- Unscrew all screws from the upper cover of the programmer's unit. The screws store in a box.



Figure 2 The screws position on the front and top sides of the programmer's unit

- Move the ZIF socket levers to the upper position.
- Carefully lift the upper cover of the programmer's unit. Recommended procedure: Lift the bottom edge of the front side of upper cover under ISP connector and lift up the cover. Be careful, because the earthing cable and USB cable for LCD module is connected to the upper cover.
- Pull out the connector attached to the earthing cable from the upper cover fast-on by moving it hither and thither. Pull by the connector or by its plastic insulation. This operation requires a good deal of force in fingers and patience. Avoid spreading the connector or pulling by the cable!
- Untwine a stripe fixing USB cable to the LCD module and withdraw the cable from its connector on the board.

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Installing new memory modules

- Locate free memory modules slot on the programmer's motherboard, see *Figure 3*.

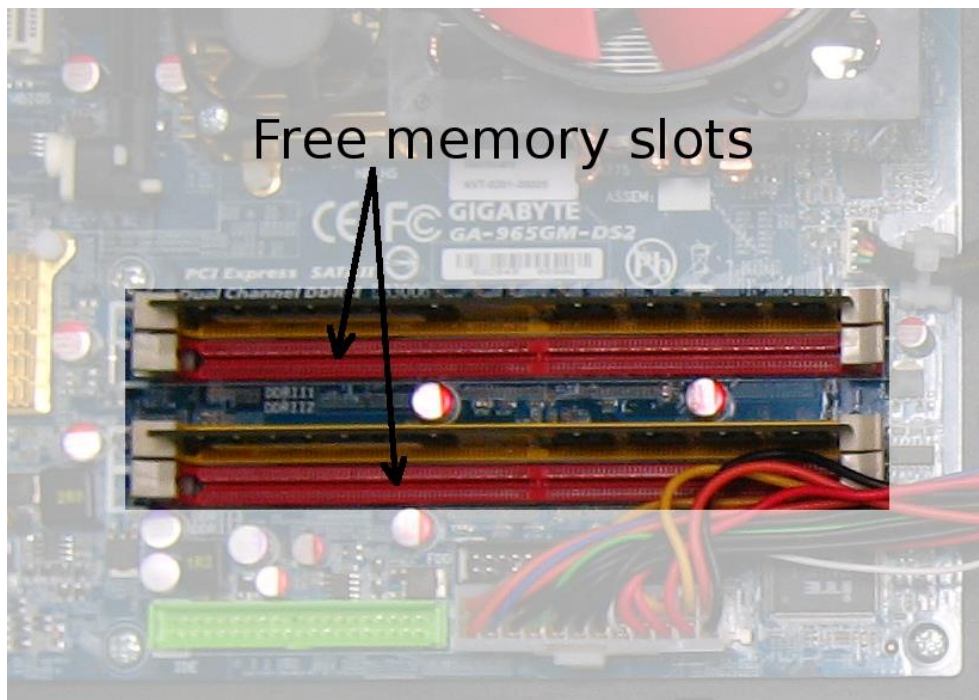


Figure 3 The memory slots on the motherboard

- Memory slots sockets are differentiated by colors. Some models of BeeHive8S programmers have occupied all four memory slots. If all memory slots are occupied, then remove two memory modules from slots (with the same color of the sockets).
- Insert new memory module(s) to free memory slots. Be careful about memory voltage key on the module (see *Figure 4*). This key must fit to the socket.

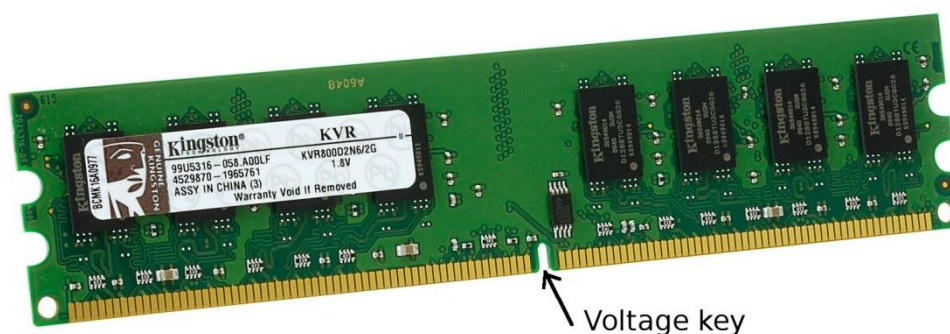


Figure 4 The memory module voltage key

Assembling the programmer's unit

- Lift up the upper cover so that you can plug USB into the connector on the LCD module. Fix the USB cable by twining the stripe around the cable.
- Insert the connector attached to the earthing cable to the upper cover fast-on in the upper cover.
- Shut the upper cover by tilting it down on the programming unit. **Check the LEDs for the correct position and take a care for the YES! buttons (the button must be freely in its hole)!**
- Screw the screws on the front and top side of the upper cover.
- Turn the programmer's unit so, that connector may point to you.



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- Screw the screws on the rear side of the programmer. **Take a care about the right screws for PC power source!**
- Insert the supply cable into the programmer's unit.

Close the works by running of Selftest Plus procedures of the sites. Test must be performed without an error message.