

## Information about the software

After updating the controller, the user will have the following benefits:

- programming the FlashEPROMS (storing of CNC instructions) takes place in considerably shorter time than before, the storage of 1000 instructions only takes approx. 20 seconds
- the storage capacity of the FlasEPROM's can be used in a better way, up to 3500 CNC instructions can be stored
- deleting the stored CNC program can take place purely by means of the software, analog to the interface card ("@0k"), the deleting cycle is about 2 seconds, the previous inconvenient handling for resetting the FlashEPROM's can thus be omitted
- the update does not have any effect on functionalities of the controller in the DNC mode

The programming of the FLASH memory takes place as described in the manual "Programming of the IMC4" in chapter 3.

Resetting the FLASH memory can now take place by software with the following instruction:

Structure:        **@<GN>k<CR>**

@                = Data opening statement  
<GN>           = Device number, standard = 0  
k                = Instruction reset memory  
<CR>           = Carriage Return as close statement

Start:            **@0k**

Explanation:    The controller will be addressed by "@0". "k" indicates that the FLASH memory of the controller is to be resetted. The instruction will be concluded with carriage return. If the instruction was understood correctly by the controller, resetting the FLASH memory starts, this will take about 2 seconds. The controller acknowledges the resetting afterwards with an acknowledgement "0".

Note:            The information, technical data and dimensions contained in this manual correspond to the newest technical conditions at the time of the publication. Nevertheless, existing misprints and mistakes cannot be excluded. We are always grateful for improvement suggestions and errors hints. We would like to point out that the soft- and hardware designations of the respective firms used in our manual are generally registered trade marks and therefore subject to mark or patent-legal protection. All rights reserved. No part of our manual may be reproduced in any form (print, photocopy or another procedure) or processed, copied or distributed by using electronic systems without written permission of iselautomation.

Ladies and Gentlemen,

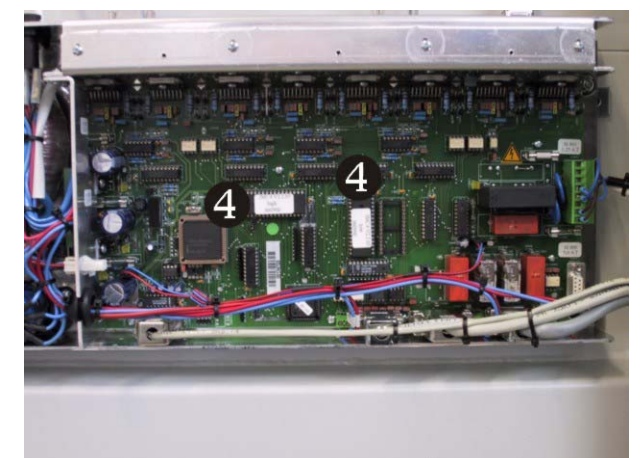
You decided to get an extension for your CPM with an improved FLASH memory module. Following this, the handling for the interchange of the memory modules is to be described. The manipulations to the opened CPM, required for this, may only be performed by an electrical expert. Please consider, that the opened CPM contains parts and sections with 230 V mains voltage that you could get in touch with. Always pull the mains plug, before you open the machine !



**Before you start working, please read this instruction carefully.**

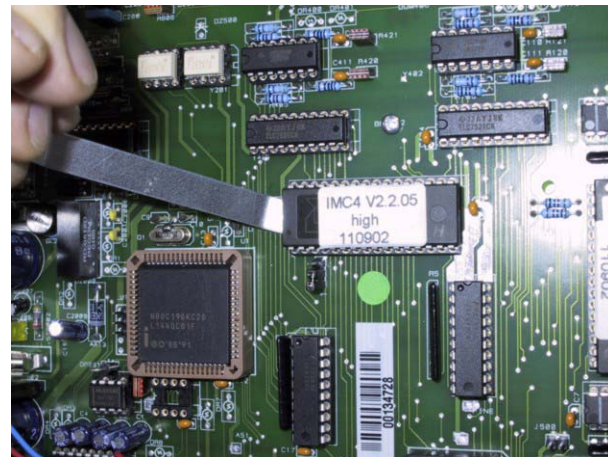
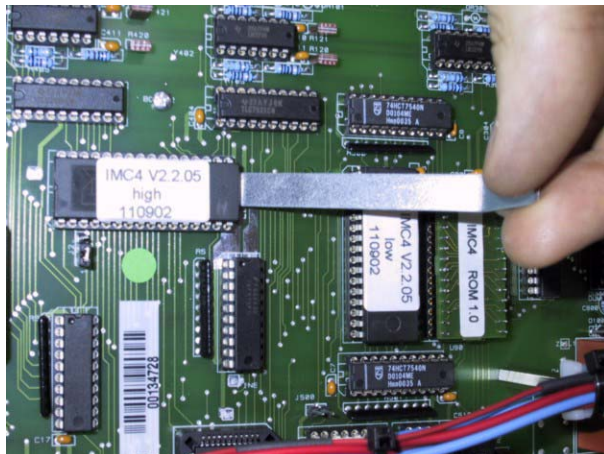
1. **Switch off** the CPM-xxxx machine at the mains switch (❶) and **pull the mains plug** (❷), accessible at the backside of the machine. Make sure, that the machine is standing safe. Now you can open the backwall of the CPM by using an **hexagon socket screw key (Allen key)**, size 4 (❸). The backwall is connected with the machine by a **protective grounding**. Take off the contact from the backwall.
2. Please discharge electrostatic potential differences between yourself and the machine (and the internal electronics) by touching an uncoated (bare metal) section of the housing. **Attention: Did you really pull the mains plug ?**

Remove the 2 pieces of memory modules (❹) (32 pins) carefully from the socket. Please use the provided removing tool as lever. Take the short leg and slide it underneath the memory module, coming from the front side. Now lever the memory module out of the socket, alternating from both accessible sides.

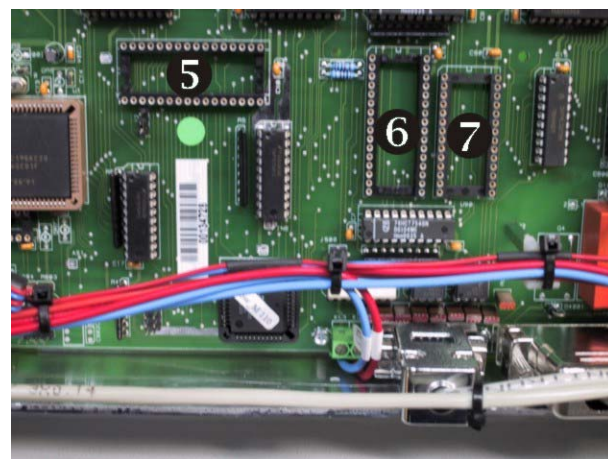




Push the lever slightly inward, if possible, in direction to the memory module to lift it out. Avoid using the lever only on one side of the memory module in order to prevent a bending of the PIN's (see pictures).



Take the first memory module, labelled **"IMC4 V2.4.00 high"**, out of the protection box and insert it into the horizontal socket (⑤) on the right side of the processor (square socket) in such a way that you can read the writing on the label. In this case, a groove in the case of the memory module is visible on the left side of the socket (PIN 1, horizontal lower left side). While performing the described process, make sure you don't bent a PIN of the memory module.



3. Take the second memory module, labelled **"IMC4 V2.4.00 low"**, out of the protection box and insert it into the left one of the two vertical sockets (⑥) on the right side of the processor (square socket) in such a way that you can read the writing on the label from the left side. In this case, a groove in the case of the memory module is on top (PIN 1, vertical upper left side). The right one of the two sockets has only 28 pin and is not suitable for holding the memory module. Carrying out the described process, make sure that you don't bend any PIN of the memory module.

4. Take the third memory module (module with circuit board), labelled **"IMC4 ROM 1.0"** out of the protection box and insert it into the remaining right socket (⑦) of the two vertical sockets right beside the processor (square socket) in such a way that you can read the writing on the label from the left side. The writing **TOP** and **1**, which is etched out of the circuit board, can be read sidecorrect (PIN 1, vertically upper left). Carrying out the described process, make sure that you don't bend any PIN of the memory module.
5. Visually check all inserted memory modules for possible bent PIN's. If you should have bent a PIN inadvertently, carefully remove the memory module as described above. Try to straighten the PIN carefully with suitable pliers.
6. **Before closing the backwall, reattach the previously removed protective grounding to the backwall. This is absolutely necessary for observing the safety standards.**
7. Close the backwall of your CPM, plug-in the mains plug and switch on the mains switch underneath the mains socket again. Your CPM should function just like before the modification.

#### Contents of the supplied protection box:

- 1 piece FLASH memory module, labelled **"IMC4 V2.4.00 high"**
- 1 piece FLASH memory module, labelled **"IMC4 V2.4.00 low"**
- 1 piece PROM memory module on circuit board, labelled **"IMC4 ROM 1.0"**
- 1 piece metal levers for removing the existing FLASH memory

