

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6ES7954-8LC04-0AA0

SIMATIC 4 MB MEMORY CARD

Used with the applicable SIMATIC S7 Memory Card system configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official pages follow this cover with source pagination retained.

Source: Siemens S7-1500 / ET 200MP, A5E03461182-AN, 11/2025.

Secure erasure of data from the CPU and SIMATIC Memory Card

To delete all data from the data memories of the CPU, reset the CPU to factory settings. The function deletes all information that was saved internally on the module.

For secure deletion of the data, follow these steps in the order given:

1. Format the SIMATIC Memory Card.

The formatting deletes all contents from the SIMATIC Memory Card.

Formatting with STEP 7:

- Establish an online connection.
- Open the online and diagnostics view of the CPU (either from the project context or via "Accessible devices").
- In the dialog window, select "Functions > Format memory card" and then click the "Format" button.

Formatting using the display of a CPU:

- In the display of the CPU, select the menu "Settings" > "Card functions" > "Format card" and confirm with OK.

2. Restore the factory settings of the CPU.

We recommend resetting the CPU in STEP 7. When you reset a CPU to factory settings, select the options shown in the figure before the reset.

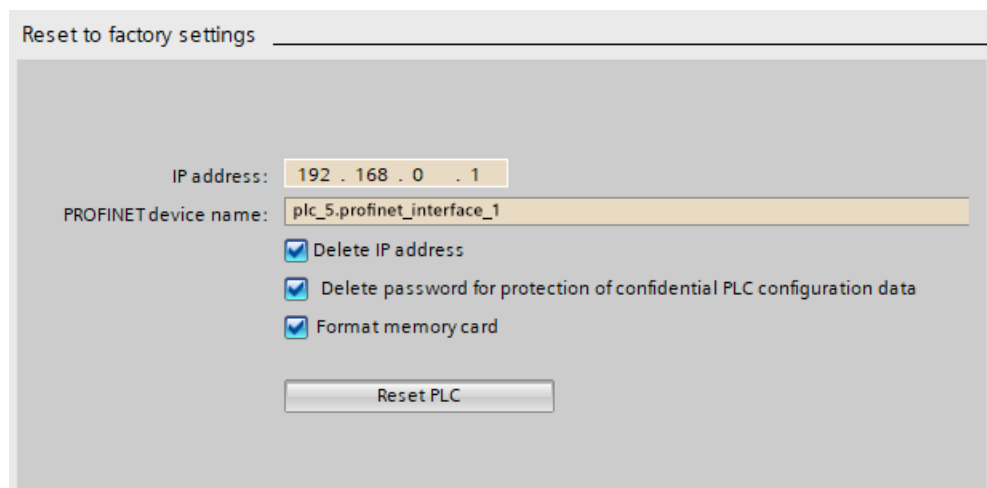


Figure 4-1 Resetting the CPU to factory settings

NOTE

If you reset the CPU using STEP 7 and you have selected the "Format memory card" option, you can skip step 1 of the described sequence of steps.

Result: All data that was still contained in the data memories of the modules and the SIMATIC Memory Card has been deleted. You can now dispose of the components.

For more information on resetting the CPU to factory settings, refer to the section [Resetting the CPU to factory settings \(Page 394\)](#).

NOTE

If you no longer plan to use the SIMATIC Memory Card after formatting it, destroy it before disposing of it.

A secure destruction method is to shred the card to such a degree that it cannot be reconstructed. For this, you can also use a waste disposal service that specializes in data storage medium destruction.

Secure erasure of data from the interface module

With the following tools, you can securely erase the data from the interface module:

- STEP 7 < V19
- SIMATIC Automation Tool
- MultiFieldbus Configuration Tool (MFCT)
- PRONETA

Follow these steps in the order given:

1. Establish an online connection.
2. Open the Online and Diagnostics view of the IM (either from the project context or via "Accessible devices").
3. In the dialog box "Functions > Reset to factory settings", select the option "Delete I&M data" and then the "Reset" button.

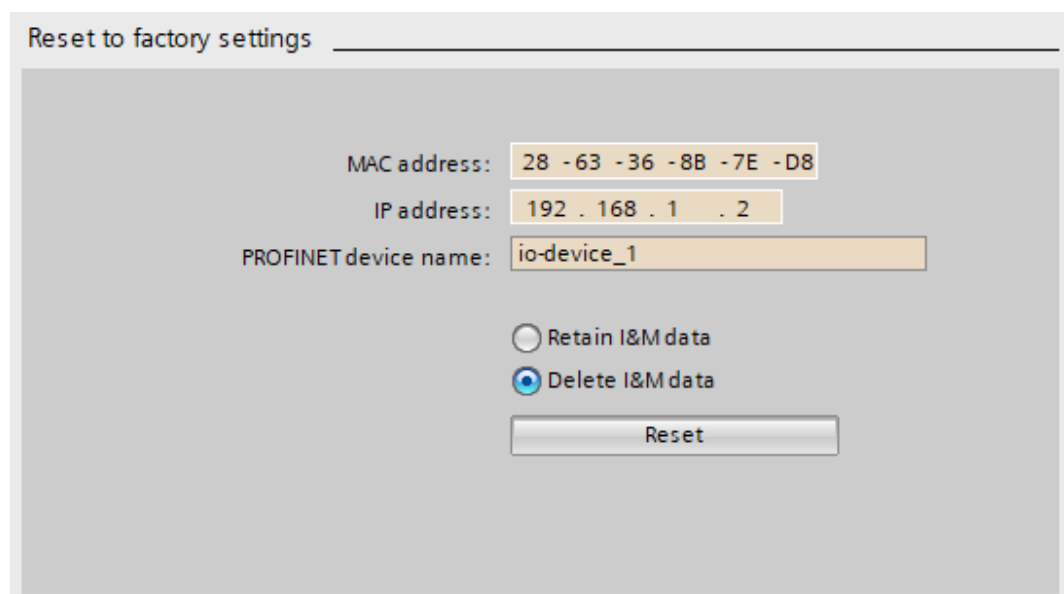


Figure 4-2 Resetting an interface module to factory settings

Result: All the data that was still in the data memories of the interface module was deleted. You can now dispose of the components.

Commissioning

13.1 Overview

Introduction

This section includes information on the following topics:

- Check before powering on for the first time
- Procedure for commissioning the S7-1500 automation system
 - Removing/inserting the SIMATIC memory card
 - First power-on of the CPU
- Procedure for commissioning the S7-1500 distributed I/O system
 - First power-on of the ET 200MP on PROFINET IO
 - First power-on of the ET 200MP on PROFIBUS DP
- Operating modes of the CPU STARTUP, STOP, RUN and operating mode transitions
- CPU memory reset: Automatic and manual
- Backing up and restoring the CPU configuration
- Time synchronization
- Identification and maintenance data
- Shared commissioning of projects

Commissioning requirements

NOTE

Performing tests

You must ensure the safety of your plant. You therefore need to perform a complete functional test and the necessary safety checks before the final commissioning of a plant.

Also allow for any possible foreseeable errors in the tests. This avoids endangering persons or equipment during operation.

NOTE

Check coding element in the I/O module

Make sure that the coding element is present in the I/O module before you plug in the front connector for the first time. This reduces the risk of plugging a wired front connector into the wrong type of module when replacing a module.

Inserting the SIMATIC memory card

To insert a SIMATIC memory card, follow these steps:

1. Open the front cover of the CPU.
2. Ensure that the CPU is either switched off, or in the STOP mode.
3. Insert the SIMATIC memory card, as depicted on the CPU, into the slot for the SIMATIC memory card.



- ① Standard, F-CPU as of article number 6ES751x-xxx02-0AB0, compact CPU as of article number 6ES751x-xxx01-0AB0, technology, TF-CPU as of article number 6ES751x-xxx03-0AB0: The slot for the SIMATIC memory card is located on the bottom of the CPU.

Figure 13-1 Slot for the SIMATIC memory card

4. Insert the SIMATIC memory card with light pressure into the CPU, until the SIMATIC memory card latches.

Removing the SIMATIC memory card

To remove a SIMATIC memory card, follow these steps:

1. Open the front cover.
2. Switch the CPU into STOP mode.
3. Press the SIMATIC memory card into the CPU with light pressure. Once it has clicked into place, remove the SIMATIC memory card.

Only remove the SIMATIC Memory Card in POWER OFF or STOP mode of the CPU. Ensure that:

- No writing functions are active in STOP. Writing functions are online functions with the PG/PC, for example loading/deleting a block and test functions.
- No writing functions were active before POWER OFF.

If you remove the SIMATIC memory card during a write process, the following problems can occur:

- The data content of a file is incomplete.
- The file is no longer readable, or no longer exists.
- The entire content of the card is corrupted.

Please also note the following FAQ on the Internet

(<https://support.industry.siemens.com/cs/ww/en/view/59457183>) for removal of the SIMATIC memory card.

Reactions after removing/inserting the SIMATIC memory card

Inserting and removing the SIMATIC memory card in STOP mode triggers a re-evaluation of the SIMATIC memory card. The CPU hereby compares the content of the configuration on the SIMATIC memory card with the backed-up retentive data. If the backed-up retentive data matches the data of the configuration on the SIMATIC memory card, the retentive data is retained. If the data differs, the CPU automatically performs a memory reset. The retentive data is deleted and CPU then goes to STOP.

The CPU evaluates the SIMATIC memory card and indicates this by flashing the RUN/STOP LED.

NOTE

Using the SIMATIC memory card as a firmware update card

If you use the SIMATIC memory card as a firmware update card, removing and inserting the card will not result in the loss of retentive data.

Reference

You can find more information on the SIMATIC memory card in the Function Manual Structure and use of the CPU memory

(<https://support.industry.siemens.com/cs/ww/en/view/59193101>).