

# SIEMENS

## SIMATIC

### S7-1200

## S7-1200 CPU firmware update V4.2.3

### Product Information

The S7-1200 CPU firmware V4.2.3 replaces CPU firmware update V4.2.2.

**This firmware update corrects the following:**

- An issue in reading multi-dimensional arrays through user-defined web pages
- The D\_ACT\_DP instruction behavior
- An issue with Prioritized Startup
- An issue when updating firmware from V4.1.3 to V4.2.1 when not using the firmware update card

**Key features supported by S7-1200 CPU firmware V4.2.3:**

- Performance improvements in some library instructions
- Reading from and writing to multi-dimensional arrays from user-defined Web pages

**New Modbus capabilities:**

For the Modbus TCP, MB\_SERVER and Modbus RTU, Modbus\_Slave instructions, you can now perform the following:

- Limit the output bytes that you can write using the variables, "QB\_Start" and "QB\_Count"
- Limit the output bytes that you can read using the variables, "QB\_Read\_Start" and "QB\_Read\_Count"
- Limit the input bytes that you can read using the variables, "IB\_Read\_Start" and "QI\_Read\_Count"
- As of version V5.0 of the MB\_SERVER instruction or V4.0 of the Modbus\_Slave instruction and firmware (FW) version V4.2 of the S7-1200 CPU, you can access data areas in DBs instead of directly accessing process images and holding registers.

For the Modbus TCP, MB\_SERVER, you can perform the following:

- Update the New Data Ready (NDR) parameter in the same call that processes a Modbus TCP write request
- Update the Data Ready (DR) parameter in the same call that processes a Modbus TCP write request

Required software: STEP 7 V15 Basic or Professional. For more information about these key features, see the S7-1200 System Manual, edition 08/2018.

Table 1 CPU models affected by firmware update V4.2.3

<b>CPU model</b>	<b>Description</b>	<b>Article number</b>
CPU 1211C	CPU 1211C DC/DC/DC	6ES7211-1AE40-0XB0
	CPU 1211C AC/DC/Relay	6ES7211-1BE40-0XB0
	CPU 1211C DC/DC/Relay	6ES7211-1HE40-0XB0
CPU 1212C	CPU 1214C DC/DC/DC	6ES7212-1AE40-0XB0
	CPU 1212C AC/DC/Relay	6ES7212-1BE40-0XB0
	CPU 1212C DC/DC/Relay	6ES7212-1HE40-0XB0
CPU 1214C	CPU 1214C DC/DC/DC	6ES7214-1AG40-0XB0
	CPU 1214C AC/DC/Relay	6ES7214-1BG40-0XB0
	CPU 1214C DC/DC/Relay	6ES7214-1HG40-0XB0
CPU 1215C	CPU 1215C DC/DC/DC	6ES7215-1AG40-0XB0
	CPU 1215C AC/DC/Relay	6ES7215-1BG40-0XB0
	CPU 1215C DC/DC/Relay	6ES7215-1HG40-0XB0
CPU 1217C	CPU 1217C DC/DC/DC	6ES7217-1AG40-0XB0
<b>Fail-Safe CPUs</b>		
CPU 1212FC	CPU 1212FC DC/DC/DC	6ES7212-1AF40-0XB0
	CPU 1212FC DC/DC/Relay	6ES7212-1HF40-0XB0
CPU 1214FC	CPU 1214FC DC/DC/DC	6ES7214-1AF40-0XB0
	CPU 1214FC DC/DC/Relay	6ES7214-1HF40-0XB0
CPU 1215FC	CPU 1215FC DC/DC/DC	6ES7215-1AF40-0XB0
	CPU 1215FC DC/DC/Relay	6ES7215-1HF40-0XB0

## Required user action

You can install the CPU firmware update from the Web server, the online diagnostic functions of STEP 7, or by making a SIMATIC S7 Memory Card using the Siemens customer support Web site that contains the firmware update. The S7-1200 System Manual documents these methods.

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