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NA-Ertal

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TIA Portal Module 012-001 Firmware Update SIMATIC S7-1500

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Matching SCE Trainer Packages for these Learn-/Training Document

- SIMATIC S7 CPU 1516F-3 PN/DP Order no.: 6ES7516-3FN00-4AB2
- SIMATIC STEP 7 Professional V14 SP1 Single license Order no.: 6ES7822-1AA04-4YA5
- SIMATIC STEP 7 Professional V14 SP1 Classroom license (set of 6) Order no.: 6ES7822-1BA04-4YA5
- SIMATIC STEP 7 Professional V14 SP1 Upgrade license (set of 6)
 Order no.: 6ES7822-1AA04-4YE5
- SIMATIC STEP 7 Professional V14 SP1 Student license (set of 20)
 Order no.: 6ES7822-1AC04-4YA5

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Firmware Update – SIMATIC S7-1500

1 Goal

This chapter will show how the **firmware version of the CPU** of a **SIMATIC S7-1500** can be checked and upgraded using the TIA Portal.

The SIMATIC S7 controllers listed in Chapter 3 can be used.

2 Requirement

No prerequisites have to be met for successful completion of this chapter.

3 Required hardware and software

- 1 Engineering station: requirements for hardware and operating system (for additional information, see Readme on the TIA Portal Installation DVD)
- 2 STEP 7 Professional software in TIA Portal V14 or higher
- 3 SIMATIC S7-1500 controller, e.g. CPU 1516F-3 PN/DP Firmware V1.6 or higher with memory card
- 4 Ethernet connection between engineering station and controller



1 Engineering station



2 SIMATIC STEP 7 Professional (TIA Portal) V14 or higher



4 Ethernet connection

3 SIMATIC S7-1500 controller

4 Theory

4.1 SIMATIC S7-1500 automation system

The SIMATIC S7-1500 automation system is a modular controller system for the middle to upper performance range.

A comprehensive range of modules is available to optimally adapt the system to the automation task.

SIMATIC S7-1500 is the next generation of the SIMATIC S7-300 and S7-400 automation systems with the following new performance features:

- Increased system performance
- Integrated motion control functionality
- PROFINET IO IRT
- Integrated display for machine-level operation and diagnostics
- STEP 7 language innovations while maintaining proven functions

The S7-1500 controller consists of a power supply (1), a CPU with integrated display (2) and input and output modules for digital and analog signals (3). The modules are mounted on a mounting rail with integrated DIN rail profile (4). If necessary, communications processors and function modules for special tasks such as stepper motor control are also used.



The system is programmed with the STEP 7 Professional software.

4.2 Operator control and display elements of the CPU 1516F-3 PN/DP

The figure below shows the operator control and display elements of a CPU 1516F-3 PN/DP.

The arrangement and number of elements differ from this figure for other CPUs.

4.2.1 Front view of the CPU 1516F-3 PN/DP with integrated display



- 1) LED displays for the current operating mode and diagnostic status of the CPU
- 2) Display
- 3) Control keys

4.2.2 Status and error displays

The CPU comes with the following LED displays:



- 1) RUN/STOP LED (yellow/green LED)
- 2) ERROR LED (red LED)
- 3) MAINT LED (yellow LED)
- 4) LINK RX/TX LED for port X1 P1 (yellow/green LED)
- 5) LINK RX/TX LED for port X1 P2 (yellow/green LED)
- 6) LINK RX/TX LED for port X1 P1 (yellow/green LED)

4.2.3 Operator control and connection elements of the CPU 1516F-3 PN/DP behind the front flap



- 1) LED displays for the current operating mode and diagnostic status of the CPU
- 2) Display connection
- 3) Slot for the SIMATIC memory card
- 4) Mode selector
- 5) LED displays for the 3 ports of PROFINET interfaces X1 and X2
- 6) MAC addresses of the interfaces
- 7) Display connection
- 8) Slot for the SIMATIC Memory Card
- 9) Mode selector
- 10 LED displays for the 3 ports of PROFINET interfaces X1 and X2
- 11) MAC addresses of the interfaces

Note: The hinged front cover with the display can be removed and inserted during operation.

4.2.4 SIMATIC Memory Card (MC)

A SIMATIC Micro Memory Card (MC) is used as the memory module for the CPUs. This is a preformatted memory card that is compatible with the Windows file system. It is available with various storage capacities and can be used for the following purposes:

- Transportable data storage medium
- Program card
- Firmware update card

For operation of the CPU, the MMC **must** be inserted because the CPUs have no integrated load memory. A commercially available SD card reader is needed to write/read the SIMATIC memory card with the programming device or PC. This allows files to be copied directly to the SIMATIC memory card using Windows Explorer, for example.

Note: It is recommended that the SIMATIC Memory Card only be removed or inserted when the CPU is in the POWER OFF state.

4.2.5 Mode selector

The mode selector allows you to set the operating mode of the CPU. The mode selector is designed as a toggle switch with three switch positions.

Position	Meaning	Explanation
RUN	RUN mode	The CPU is executing the user program
STOP	STOP mode	The CPU is not executing the user program
MRES	Memory reset	Position for the memory reset of the CPU

You can also use the button on the CPU operator panel of the SIMATIC STEP 7 Professional V14 software in Online & Diagnostics to switch the operating mode (**STOP** or **RUN**).

The operator panel also contains an **MRES** button for performing a memory reset and displays the status LEDs of the CPU.

Press Control	CPU 1516-3 PN/DP
	RUN
ERROR	STOP
MAINT	MRES

4.3 SIMATIC STEP 7 Professional V14 (TIA Portal V14) programming

software

The SIMATIC STEP 7 Professional (TIA Portal) software is the programming tool for the following automation systems:

- SIMATIC S7-1500
- SIMATIC S7-1200
- SIMATIC S7-300
- SIMATIC S7-400
- SIMATIC WinAC

SIMATIC STEP 7 Professional provides the following functions for plant automation:

- Configuration and parameter assignment of the hardware
- Specification of the communication
- Programming
- Testing, commissioning and service with operational/diagnostic functions
- Documentation
- Creation of visualizations for SIMATIC Basic Panels with the integrated WinCC Basic software
- Visualization solutions for PCs and other panels can also be created with other WinCC software packages

Support is provided for all functions through detailed online help.

4.3.1 Basic settings for the TIA Portal

- B Users can specify their own default settings for certain settings in the TIA Portal. A few important settings are shown here.
- ® In the project view, select the ® "Options" menu and then ® "Settings".



- One basic setting is the selection of the user interface language and the language for the program display. In the curriculums to follow, "English" will be used for both settings.
- Inder I "General" in "Settings", select "User interface language I English" and "Mnemonic
 International".

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	Multiuser	Show list of recently used	International	
	CAx	projects:	8 🗢 elements	
			Load last opened project during startup	
		Tooltips:	Show truncated texts completely	
			Show tooltips (context-sensitive help is available)	

Note: These settings can always be changed.

4.3.2 Setting the IP address on the programming device

You need a TCP/IP connection in order to upgrade the CPU of a SIMATIC S7-1500 controller from the PC, the programming device or a laptop.

It is important that the IP addresses of both devices match for the computer and SIMATIC S7-1500 to communicate with each other via TCP/IP.

First, we will show you how to set the IP address of a computer with the Windows 10 operating system.

® Select the network icon in the taskbar at the bottom and click ® "Network settings".



In the network settings window that opens, click
 "Ethernet" and then on
 "Change adapter options".

Settir	ngs	
ŝ	Home	Ethernet
Fir	nd a setting	VMware Network Adapter VMnet8 No Internet
₽	Status	VMware Network Adapter VMnet1 No Internet
(h	Wi-Fi	Unidentified network
臣	Ethernet	Related settings
(}≣	Dial-up	Change adapter options
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	VPN	Change advanced sharing options
5	Airplane mode	Network and Sharing Center
(( ₁ ))	Mobile hotspot	HomeGroup
Ċ	Data usage	Windows Firewall
$\oplus$	Ргоху	

Select the desired 
 "LAN Connection" that you want to use to connect to the controller and click 
 "Properties".



® Select ® "Properties" for ® "Internet Protocol Version 4 (TCP/IPv4)".

Connect using: Intel(R) Ethemet Connection (4) I219-LM Configure This connection uses the following items: VMware Bridge Protocol VMware Bridge Protocol Gas Packet Scheduler QoS Packet Scheduler QoS Packet Scheduler PROFINET Protocol Version 4 (TCP/IPv4) Microsoft Network Adapter Multiplexor Protocol PROFINET IO protocol (DCP/LLDP) PROFINET IO protocol Driver Install Uninstall Properties Description	tworking	Sharing			
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VMware Bridge Protocol  VMware Bridge Protocol  Gamma Constraints for Microsoft Networks  QoS Packet Scheduler  Alternet Protocol Version 4 (TCP/IPv4)  Alternet Protocol (DCP/LLDP)  PROFINET IO protocol (DCP/LLDP)  Alternet LDP Protocol Driver  Install Uninstall Properties Description	his connec	tion uses the	following items	C	onfigure
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Install Uninstall Properties Description	Mic	orosoft Netwo	ork Adapter Mult protocol (DCP/L	iplexor Protoc LDP)	ol
Description	Mic	crosoft Netwo OFINET IO p crosoft LLDP	ork Adapter Mult protocol (DCP/L Protocol Driver	iplexor Protoc LDP)	col 🗸
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.	Mic     PR     Mic     Mic	rosoft Netwo OFINET IO p rosoft LLDP	ork Adapter Mult protocol (DCP/L Protocol Driver	iplexor Protoc LDP)	col v

You can now use the following IP address, for example 
 IP address: 192.168.0.99 and enter the following 
 subnet mask 255.255.0. Accept the settings. (
 "OK")

General									
You can get IP settings assigned this capability. Otherwise, you n for the appropriate IP settings.	d automatic need to ask	ally you	if yo ur ne	ur i two	net ork	wor adn	'k sup ninist	oports rator	
Obtain an IP address autor	matically								
• Use the following IP addres	ss:								
IP address:	19	92.	168		0	. 9	99		
Subnet mask:	2	55.	255	. 2	55	5.	0		
Default gateway:						<u>.</u> ;;			
Obtain DNS server address automatically									
Use the following DNS serv	er address	es:							
Preferred DNS server:			927			2			
Alternate DNS server:			9	•		•			
Validate settings upon exit	t					Ac	dvan	ced	

## 4.3.3 Setting the IP address in the CPU

Before a firmware update of the CPU can be performed, set the IP address of the SIMATIC S7-1500 correctly so that the programming device can reach the CPU via TCP (IP communication). The IP address of the SIMATIC S7-1500 is set as follows.

® Double-click the Totally Integrated Automation Portal to select it. (® TIA Portal V14)



® Click ® "Online & Diagnostics" and open ® "Project view".



In the project tree under 
 "Online access", select the network adapter that was set previously. If you click 
 "Update accessible devices", you will see the IP address (if previously set) or the MAC address (if IP address not yet assigned) of the connected SIMATIC S7-1500. Select 
 "Online & Diagnostics".



® Under ® "Functions", you now find the ® "Assign IP address" item. Enter the following IP address here (example): ® IP address: 192.168.0.1 ® Subnet mask 255.255.255.0. Next, click ® "Assign IP address" and this new address will be assigned to your SIMATIC S7-1500.

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Project Edit View Insert Online Options Tools Window	Help Totally Integrated Automation PORTAL
Project tree 🔲 🖣	ction (4) I219-LM + plc_1500.profinet-schnittstelle_1 [192.168.0.1] + PLC_1500 [192.168.0.1] 💫 🖬 🗮 🗙 📢
Devices	Diagnostics     Assign IP address to the device     O
Online access     Displayhide interfaces     Online access     Displayhide interfaces     Online & accessible devices     Online & accessible devices     Online & adiagnostics     Online & diagnostics     Online & diagnostics     Online & adiagnostics     Online & adiagnos	Functions     Functions     Settime     Firmware update     Assign PROFINET device na     Reset to factory settings     Form are information about industrial security. please visit     http://www.siemens.com/industrial/security     Save service data     MAC address: 28 - 63 - 36 - 8F - 8D - 96     Accessible devices     IP address: 192 . 168 . 0 . 1     Subnet mask: 255 . 255 . 0     Dust endered     Boutter address: 192 . 168 . 0 . 1     Subnet mask: 255 . 255 . 0
	Router address:       192       168       0       1         Assign IP address:       Assign a device address to the module         Image: Second Se
Portal view 🖸 Overview 🛂 Online & dia	🔝 🤨 Scanning for devices completed for int

If the IP address was not successfully assigned, you will receive a message in the ® "Info" window under ® "General".

				Q Prop	erties	L Info	<b>&amp;</b> Diagnostics	
General	Cross-references	Compile	Energy	y Suite			-	
	Show all messages	•						
! Message				Go to	?	Date	Time	
😧 🔻 The IP	address could not be assi	gned.			?	5/15/2017	12:14:00 PM	^
😮 The	e set command could not l	be executed.				5/15/2017	12:14:00 PM	
								V

#### 4.3.4 Formatting the memory card in the CPU

® First, select the ® "Format memory card" function and press the ® "Format" button.



® Confirm the prompt asking if you really want to format the memory card with ® "Yes".



If necessary, stop the CPU. (
 "Yes")

Online &	diagnostics (0241:	000025) ×
	Formatting a mer you want to stop	nory card is only permitted in STOP mode. Do the CPU?
		Yes No

### 4.3.5 Restoring the factory settings of the CPU

Before you can reset the CPU, you must wait until the formatting of the CPU has finished. Afterwards, you must select 
 "Update accessible devices" and 
 "Online & Diagnostics" of your CPU again. To reset the controller, select the 
 "Reset to factory settings" function and then 
 "Delete IP address" and click 
 "Reset".

Image: Save project     Image: Save project       Project tree     Image: Save project       Devices     Image: Save project	<ul> <li>(A) ± 10 [1] [2] [2] ≤ 0 online</li> <li>n (4) 1219-LM ► plc_1.profin</li> <li>⇒ Diagnostics</li> <li>⇒ Functions</li> </ul>	ne 🖉 Gooffline 👔 📘 💽 🗶 🖃 Y PO et interface_1 [192.168.0.1] → CPUcommon [192.168.0.1] 🛁 🖬 Reset to factory settings	
Gonline access     Display/hide interfaces     Intel(R) Ethernet Connection (4) 1219-LM     Update accessible devices     Implc_1.profinet interface_1 [192.168.0.1]     Uonline & diagnostics     Implc_1.profinet interface_1     Interface     Implc_data types     Implc_data types     Implc_data types     Implc[R] Dual Band Wireless-AC 8265	Assign IP address Set time Firmware update Assign RROFINET device na Reset to factory settings Format memory card Save service data	IP address: 192 . 168 . 0 . 1 PROFINET device name: plc_1.profinet interface_1 Retain IP address Delete IP address Reset Reset	
C internal [Local]     DICSIM [PN/IE]			>
TeleService [Automatic protocol detection]     Top Card Reader/USB memory	General Cross-reference	Compile Energy Suite	
▼ Details view	Message     Scanning for devices comp	Go to ? leted for interface Intel/R) Ethernet Connection (4) I219-LM. Four	

® Confirm the prompt asking if you really want to reset the module with ® "Yes".



If necessary, stop the CPU. (
 "Yes")



Once the CPU has been reset, click 
 "Update accessible devices" again. The MAC address of the connected SIMATIC S7-1500 can now be seen. Select 
 "Assign IP address" under
 "Functions" in 
 "Online & Diagnostics". Enter the following IP address here (example): IP address: 192.168.0.1 Subnet mask 255.255.255.0. Click "Assign IP address" and this new address will be assigned to your SIMATIC S7-1500.

Via Siemens	_ ¤ ×
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Project tree 🛛 🖉 🖣	LM 🕨 Accessible device [28-63-36-8F-BD-96] 🕨 Accessible device [28-63-36-8F-BD-96] 🛛 🗖 🖬 🗙 📢
Devices	Diagnostics     General     Functions     Devices connected to an enterprise network or directly to the internet     Tormore information about industrial security, please visit
Image: State	Assign IP address Assign PROFINET device na
V. Online & diagnostics     Intel(R) Dual Band Wireless-AC 8265	MAC address: 28 -63 -36 -8F -8D -96 Accessible d
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Cara Readeriusis memory	Outer address:     0     0     0       Assign IP address     •
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▼ Details view	General     Cross-references     Compile     Energy Suite       Show all messages     Image: Compile     Image: Compile     Image: Compile
Portal view 🔛 Overview 🗓 C	nline & dia

You will receive a message regarding successful transfer of parameters in the 
 Info"
 "General" window.

		<b>Properties</b>	i, Info	<b>Diagnostics</b>		٦8	-
G	eneral Cross-references Com	bile Energy Suite	•				
٢	🚹 📵 Show all messages 💌						
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0	Scanning for devices completed for interfa	ace Intel(R) Ethernet Con	nection (4) I21	9-LM. Foun			^
0	The parameters were transferred success	fully.					~
<		III			1	>	

### 4.3.6 Downloading a firmware update from the SIEMENS Support website

You can download current firmware updates free of charge from the Industry Online Support of SIEMENS AG.

Open your choice of Internet browser and enter the address
 "support.automation.siemens.com".



® Select your desired language ® "Language" ® "English".



In "Searching for product information", enter the CPU for which you need a firmware update. For example: IST-1500 CPU1516F"

Industry Support Sieme $ imes +$				-		×
ightarrow D   A support.industry.siemens.com/cs/start?lc=en-	DE	1	•   =	2	٩	••
SIEMENS		-			٢	▶ Inter
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> mySupport			<ul> <li>&gt; Favor</li> <li>&gt; Perso</li> <li>&gt; My res</li> </ul>	ites nal mess	ages	
Searching for product information			> CAx d	ownloads	s	
This is how you get quick and easy current information from our global support database. Simply enter your specific product information.			> My Pr ⊞ Use	oducts / ( r online )	Clipboard (39)	1
S7-1500 CPU1516F × Q						
			Siem	ens at	Hanno	over
© Siemens AG 2009-2017 - Imprint   Privacy policy   Cookie policy   Terms of use	Digital ID					

Inder "Filter criteria for entries" select the "Entry type" I Download" and click the entry with firmware updates for your CPU and the associated display in the selection list.

S7-1500 C	CPU1516F - Dc $ imes$	+								-		×
$\leftarrow \rightarrow$	O A	support.in	dustry.siemens.con	n/cs/products?s	earch=S7-150	0%20CPU1516F8	dtp=Download8	ımfn: 🛄 •	☆   =	- 14	\$	
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> Home	> Product Suppor								8	Product Su	pport   3	Servi
Filter cr	iteria for entries											
) All	Products () My Proc	ucts										
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> Sear	ch product									E	Save filt	er   🖻
		0 CPU1516	²¹ and 'Download'				1	1. 1.				1
18 Entr	ies Flitered by S7-15		Entries per page	20   50   100			«	< 1  >  »				
18 Entr	Actions		Entries per page	20   50   100			Relevance	< 1  >  »	my	Support	Cockp	it

Various updates are offered in the next window. Select the update for your CPU that is
 recommended for the upgrade.

	upport.indus	uy.siemens.com/cs/dc 🛄 💢   — 👘 a 8
A detailed description of perfor	ming the firmw	are update is provided in the entry > 77492231
	3	
Overview of article numbers and	d firmware vers	ions of the S7-1500 CPUs and displays plus ET200 CPUs:
Article number	Software	Upgrade by means of
	version	
13	test versions	of firmware for undate
Lu	test versions (	s niniware for update
SES7510-1DJ01-0AB0		
SES7510-1SJ01-0AB0		
SES7511-1AK01-0AB0		
SES7511-1CK00-0AB0		
SES7511-1FK01-0AB0		
SES7511-11K01-0AB0		Inird-party software - Licensing terms and copyright
5ES7512-1CK00-0AB0		Information
3ES/512-1DK01-0AB0		You can find the copyright information for third-party software
SES7512-1SK01-0AB0		contained in this product, particularly open source software, as wer
SES7513-1ALU1-UABU		Deadma OSS 1/210 file
ES7515-TFL01-0AB0		Readine_033_v210 lile.
SES7515-2AM01-0AB0		Special information for resellers
SES7515-2TM01-0AB0	V2.1.0	The information and the license terms in the Readme, OSS V210
SES7516-3AN01-0AB0		file must be passed on to the purchasing party to avoid license
3ES7516-3FN01-0AB0		infringements by the reseller or purchasing party.
SES7516-2PN00-0AB0		5 / / · · · · · · · · · · · · · · · · ·
SES7516-2GN00-0AB0		ReadMe OSS V210.htm (3.0 MB)
SES7517-3AP00-0AB0		
6ES7517-3FP00-0AB0		Recommended for update:
SES7517-3TP00-0AB0		see description Update V2.1.0 (CPUs)
6ES7517-3UP00-0AB0		21 of S7-1500_CPUs_V210.ZIP (543,7 MB)
SES7518-4AP00-0AB0		
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3ES7518-4AP00-3AB0		
3ES7518-4FP00-3AB0		
		Third-party software - Licensing terms and copyright

If you have not already registered, do so in the next window. (® "Yes I would like to register now"), or if already registered – log in with your "Login" and "Password". (® "Login")

Are you al	ready registered?	First time here?
Login	XXXXX	Register now to use the full range of functionality of the Internet appearance of Siemens. For each of the
Password	•••••	different applications only one registration is required
	> Forgotten your password/ login?	Yes, I would like to register now
	Recognition <b>i</b>	
	Login	

® Enter the requested data for the registration, select the option "Download of export restricted software" and then save the registration. (® I ® "Save")



#### Download of export restricted software

Access authorization for the download of export-restricted software Software that is subject to export restrictions may not be made generally accessible. Access authorization to export-restricted software may only be granted to selected, registered users.

Ves, I would like to register for access to export-restricted software

* Mandatory field

Save

Return to the login. After login you can save the firmware update on your computer.
 (® "Save as")

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Back on the Industry Online Support website of SIEMENS AG, you can select the firmware update for your display. Select the update recommended for the upgrade. You can then save the firmware update on your computer. (
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 Click the downloaded compressed files for your CPU and the display in Windows Explorer and select 
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### 4.3.7 Firmware update of the CPU

The files with the firmware update can be imported into the SIMATIC S7-1500 CPU as follows.

In the project tree under 
 "Online access", select the network adapter that was set previously. If you click 
 "Update accessible devices", you will see the IP address of the connected SIMATIC S7-1500. Select 
 "Online & Diagnostics". Under the "General" menu item, you can check the current firmware in your CPU in "Diagnostics".

Devices       General         Image: Solution of the Tacks       Diagnostics tatus         Image: Solution of the Solution of the Tack Solu	Project tree 🔲 🖣	onnection (4) I219-LM > #	Accessible device [192.168.0.1]  CPU common [192.168.0.1]	_ = = >
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In the ® "Functions" menu, change to ® "Firmware update" ® "PLC". In the ® "Firmware loader" sub-item, click ® "Browse".

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Select the previously downloaded and extracted firmware file 
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The following dialog indicates whether your firmware file is compatible with your CPU. Now start the update. (
 "Run update")

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			🔍 Properties 🚯 Info 🖞 Diagnostics 👘 🖃 🗠

® The progress of the update and its successful completion are indicated with the following dialogs. Click ® "OK" to confirm.

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	Remaining unternaminutes. 1
	Cancel
Firmware	update
X	Activate firmware on target Please wait. This process may take a few minutes.
	Cancel
1	The firmware V 2.1.0 was transferred successfully to module CPUcommon [192.168.0.1] with article number 6ES7 516-3FN01-0AB0 and activated on the module.
	ОК

#### 4.3.8 Firmware update of the display

Once the firmware of the SIMATIC S7-1500 CPU has been updated, it is advisable to update the firmware of the display.

In the project tree under 
 "Online access", select the network adapter that was set previously. If you click 
 "Update accessible devices", you will see the IP address of the connected SIMATIC S7-1500. Select 
 "Online & Diagnostics" here. In the 
 "Functions" menu, change to 
 "Firmware update" 
 "Display". In the 
 "Firmware loader" sub-item, click 
 "Browse".

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Update accessible devices	PLC Local modules	Firmware:	V 2.0.0		
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® Select the previously downloaded and extracted firmware file ® "6ES7 ***-*****.upd" on your computer and click ® "Open".

Select minwale file				^
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<ul> <li>S7-1500_CPUs_V210</li> <li>SCE_DE_011-001_pics</li> <li>SCE_DE_012-001pics</li> <li>SCE_EN_011-001_pics</li> <li>SCE_EN_012-001pics</li> </ul>	× <			
File name:	6ES7 591-1BA01-0AA0 V02.00.00.upd	~	Firmware files (*.upd,*	.sem) 🗸 🗸
			Open	Cancel

The following dialog indicates whether your firmware file is compatible with your display. Now start the update. (
 "Run update")

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SUISE	Diagnostics     Functions     Assign IP address	Firmware loader		< for the second
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® The progress of the update and its successful completion are indicated with the following dialogs. Click ® "OK" to confirm.

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	Remaining time in seconds: ?
	Cancel
Firmware	update
Z	Activate firmware on target Please wait. This process may take a few minutes.
	Cancel
	×
1	The firmware V 2.0.0 was transferred successfully to module CPU display_1 with article number 6ES7591-1BA00-0AA0 and activated on the module.
	ок

## **5** Additional information

You can find additional information as an orientation aid for initial and advanced training, for example, Getting Started, videos, tutorials, apps, manuals, programming guidelines and trial software/firmware, at the following link:

#### siemens.com/sce/s7-1500

#### Preview "Additional information"

Getting Started, Videos, Tutorials, Apps, Manuals, Trial-SW/Firmware

- ↗ TIA Portal Videos
- TIA Portal Tutorial Center
- Getting Started
- ↗ Programming Guideline
- Easy Entry in SIMATIC S7-1200
- > Download Trial Software/Firmware
- 7 Technical Documentation SIMATIC Controller
- ↗ Industry Online Support App
- TIA Portal, SIMATIC S7-1200/1500 Overview
- ↗ TIA Portal Website
- ↗ SIMATIC S7-1200 Website
- SIMATIC S7-1500 Website