

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS SIMATIC S7

6ES7677-2DB40-0AA0

OPEN CONTROLLER COMPUTER

Used with the applicable SIMATIC ET 200SP Open Controller configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens official product documentation



Figure similar

SIMATIC ET 200SP Open Controller, CPU 1515SP PC2, spare part, 8 GB RAM, without CFast Interfaces: 1x slot CFast, 1x slot SD/MMC, 1x connection for ET 200SP bus adapter PROFINET, 1x 10/100/1000 Mbit/s Ethernet, 2x USB 3.0; 2x USB 2.0, 1x display port,

General information	
Product type designation	CPU 1515SP PC2
HW functional status	FS01
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	V15 with HSP 269
Installed software	
• Visualization	No
• Control	No
Configuration control	
via dataset	Yes
Control elements	
Mode selector switch	1
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Mains buffering	
• Mains/voltage failure stored energy time	5 ms
Input current	
Current consumption (rated value)	1.8 A; Full processor load, incl. ET 200SP modules and using USB
Current consumption (in no-load operation), typ.	0.5 A
Current consumption, max.	2.9 A
I^2t	0.426 A ² ·s; with starting current inrush
Power	
Active power input, max.	43 W; incl. ET 200SP modules and using USB
Infeed power to the backplane bus	8.75 W
Power loss	
Power loss, typ.	16 W
Storage	
Type of memory	DDR3L
Main memory	8 GB RAM
CFast memory card	No
SIMATIC memory card required	No
Hardware configuration	
Integrated power supply	Yes
Number of DP masters	
• via CM	1

Rack	
• Modules per rack, max.	64; CPU + 64 modules + server module (mounting width max. 1 m)
Time of day	
Clock	
• Type	Hardware clock
• Backup time	6 wk; At 40 °C ambient temperature, typically
• Deviation per day, max.	10 s; Typ.: 2 s
Interfaces	
Number of industrial Ethernet interfaces	2
Number of PROFINET interfaces	1; X1 via BusAdapter BA 2x RJ45
Number of PROFIBUS interfaces	1; Via CM DP module
Number of RS 485 interfaces	1; Via CM DP module
Number of USB interfaces	4; 2x USB 2.0, 2x USB 3.0 on front side
Video interfaces	
• Graphics interface	1x DisplayPort
1. Interface	
Interface types	
• RJ 45 (Ethernet)	Yes; Via BusAdapter BA 2x RJ45
— Transmission rate, max.	100 Mbit/s
— Industrial Ethernet status LED	Yes
• Number of ports	2
• integrated switch	Yes
2. Interface	
Interface types	
• RJ 45 (Ethernet)	Yes; Integrated
— Transmission rate, max.	1 000 Mbit/s
— Industrial Ethernet status LED	No
• Number of ports	1
Protocols	
Open IE communication	
• TCP/IP	
— Data length, max.	64 kbyte
Standards, approvals, certificates	
Ecological footprint	
• environmental product declaration	Yes
Global warming potential	
— global warming potential, (total) [CO2 eq]	432 kg
— global warming potential, (during production) [CO2 eq]	73.8 kg
— global warming potential, (during operation) [CO2 eq]	365 kg
— global warming potential, (after end of life cycle) [CO2 eq]	-6.71 kg
Ambient conditions	
Ambient temperature during operation	
• min.	-20 °C
• max.	Up to 60 °C with max. 32 ET 200SP modules; up to 55 °C with max. 64 ET 200SP modules
• horizontal installation, min.	-20 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	-20 °C
• vertical installation, max.	50 °C; With max. 32 ET 200SP modules
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Peripherals/Options	
SD card	Optionally for additional mass storage
Dimensions	
Width	160 mm
Height	117 mm