SIEMENS

Data sheet

6ES7717-1BB04-0AB4

No longer available SIMATIC Field PG M5 Advanced; I7-6820EQ (2.8 to 3.5 GHz; 4 kernels+hyperthreading; 8 MB SMART cache); 15.6" display; Full HD (1920x 1080); WLAN 802.11AC & Bluetooth V4.0; DVD +/-RW; HD graphic 530 1x 16 GB DDR4 SD-RAM SO-DIMM 512 GB SSD SATA (2.5"); without S5 interface, without S5-EPROMMER Line cable with power plug: USA; Keyboard: QWERTZ/QWERTY Windows 7 Ultimate SP1, 64 bit License for STEP 7 Professional V15; WinCC Advanced V15 Software version V15.0.0.0

General information	
Design of the programming device	Notebook
Display	
Design of display	15.6" full HD display in 16:9 format
Resolution (pixels)	
 Horizontal image resolution 	1 920 Pixel
 Vertical image resolution 	1 080 Pixel
General features	
Non-reflecting	Yes
Luminance	300 cd/m ²
Backlighting	
Type of backlighting	LED
Control elements	
Keyboard fonts	
Design	QWERTZ/QWERTY or AZERTY (French); 87 keys
Touch operation	
Integrated touch pad	Yes; Clickpad
Supply voltage	
Design of the power supply	External wide-range power supply; 3-pole
permissible range, lower limit (AC)	100 V; ±10 %, sinusoidal
permissible range, upper limit (AC)	240 V; ±10 %, sinusoidal
Line frequency	
 permissible range, lower limit 	47 Hz
• permissible range, upper limit	63 Hz
Processor	
Processor type	Intel Core i5-6440EQ (2.7 GHz to 3.4 GHz, 4 cores, 6 MB Smart Cache) or i7-6820EQ (2.8 GHz to 3.5 GHz, 4 cores, 8 MB Smart Cache)
Chipset	Mobile Intel QM170

Hyper-threading	Yes; for Intel Core i7 processor
Turbo Boost Technology 2.0	Yes
Coordia	
Graphic Graphics controller	Intel® HD graphics 530
Graphics controller	intere the graphics coo
Drives	
DVD-RW	Yes
Hard disk	Yes; Easy to replace
Memory capacity	1 Tbyte; HDD
SSD	Yes; Easy to replace
Memory capacity	512 Gbyte; Up to 1 TB SSD
TPM Security Chip	Yes; 2.0 (version for China without TPM)
Memory	
Type of memory	DDR4-SDRAM SO-DIMM
Work memory	
Number of slots	2; Can be equipped with 1x 8 GB, 1x 16 GB or 2x 16 GB
Accumulator	
Replaceable	Yes; Lithium-ion battery
Capacity	8.8 A·h
Hardware configuration	
-	
Slots	
Number of ExpressCard slots	1; Type 34
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	1; Type 34 1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12
Number of ExpressCard slots Interfaces	
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Number of ExpressCard slots Interfaces PROFIBUS/MPI	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud
Number of ExpressCard slots Interfaces PROFIBUS/MPI Number of RS 232 interfaces	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud 1; 25-pin socket
Number of ExpressCard slots Interfaces PROFIBUS/MPI Number of RS 232 interfaces Number of USB interfaces	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud 1; 25-pin socket 4; USB 3.0
Number of ExpressCard slots Interfaces PROFIBUS/MPI Number of RS 232 interfaces Number of USB interfaces Type A Type C	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud 1; 25-pin socket 4; USB 3.0 3; 1x USB port incl. integrated charging function for USB devices (e.g. smartphone) - also with device switched off
Number of ExpressCard slots Interfaces PROFIBUS/MPI Number of RS 232 interfaces Number of USB interfaces Type A Type C Number of chip-card readers	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud 1; 25-pin socket 4; USB 3.0 3; 1x USB port incl. integrated charging function for USB devices (e.g. smartphone) - also with device switched off 1 1; Smart Card Reader (ISO/IEC 7816)
Number of ExpressCard slots Interfaces PROFIBUS/MPI Number of RS 232 interfaces Number of USB interfaces Type A Type C Number of chip-card readers Bluetooth radio standard	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud 1; 25-pin socket 4; USB 3.0 3; 1x USB port incl. integrated charging function for USB devices (e.g. smartphone) - also with device switched off 1 1; Smart Card Reader (ISO/IEC 7816) Yes; V4.0
Number of ExpressCard slots Interfaces PROFIBUS/MPI Number of RS 232 interfaces Number of USB interfaces Type A Type C Number of chip-card readers	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud 1; 25-pin socket 4; USB 3.0 3; 1x USB port incl. integrated charging function for USB devices (e.g. smartphone) - also with device switched off 1 1; Smart Card Reader (ISO/IEC 7816)
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Number of ExpressCard slots Interfaces PROFIBUS/MPI Number of RS 232 interfaces Number of USB interfaces Type A Type C Number of chip-card readers Bluetooth radio standard Multimedia card/SD card slot	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud 1; 25-pin socket 4; USB 3.0 3; 1x USB port incl. integrated charging function for USB devices (e.g. smartphone) - also with device switched off 1 1; Smart Card Reader (ISO/IEC 7816) Yes; V4.0 2 in 1 (SDHC UHS-II, MMC) SIMATIC memory cards (for S7-300/400), SMC (for S7-1x00), SIMATIC micro memory card (for S7-300/C7/ET 200) - including
Number of ExpressCard slots Interfaces PROFIBUS/MPI Number of RS 232 interfaces Number of USB interfaces Type A Type C Number of chip-card readers Bluetooth radio standard Multimedia card/SD card slot Card reader for SIMATIC memory cards	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud 1; 25-pin socket 4; USB 3.0 3; 1x USB port incl. integrated charging function for USB devices (e.g. smartphone) - also with device switched off 1 1; Smart Card Reader (ISO/IEC 7816) Yes; V4.0 2 in 1 (SDHC UHS-II, MMC) SIMATIC memory cards (for S7-300/400), SMC (for S7-1x00), SIMATIC micro memory card (for S7-300/C7/ET 200) - including programming interfaces
Number of ExpressCard slots Interfaces PROFIBUS/MPI Number of RS 232 interfaces Number of USB interfaces Type A Type C Number of chip-card readers Bluetooth radio standard Multimedia card/SD card slot Card reader for SIMATIC memory cards Universal Audio Jack	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud 1; 25-pin socket 4; USB 3.0 3; 1x USB port incl. integrated charging function for USB devices (e.g. smartphone) - also with device switched off 1 1; Smart Card Reader (ISO/IEC 7816) Yes; V4.0 2 in 1 (SDHC UHS-II, MMC) SIMATIC memory cards (for S7-300/400), SMC (for S7-1x00), SIMATIC micro memory card (for S7-300/C7/ET 200) - including
Number of ExpressCard slots Interfaces PROFIBUS/MPI Number of RS 232 interfaces Number of USB interfaces Type A Type C Number of chip-card readers Bluetooth radio standard Multimedia card/SD card slot Card reader for SIMATIC memory cards Universal Audio Jack Video interfaces	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud 1; 25-pin socket 4; USB 3.0 3; 1x USB port incl. integrated charging function for USB devices (e.g. smartphone) - also with device switched off 1 1; Smart Card Reader (ISO/IEC 7816) Yes; V4.0 2 in 1 (SDHC UHS-II, MMC) SIMATIC memory cards (for S7-300/400), SMC (for S7-1x00), SIMATIC micro memory card (for S7-300/C7/ET 200) - including programming interfaces Yes; Audio socket for 3.5 mm jack
Number of ExpressCard slots Interfaces PROFIBUS/MPI Number of RS 232 interfaces Number of USB interfaces Type A Type C Number of chip-card readers Bluetooth radio standard Multimedia card/SD card slot Card reader for SIMATIC memory cards Universal Audio Jack Video interfaces analog video signal (VGA)	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud 1; 25-pin socket 4; USB 3.0 3; 1x USB port incl. integrated charging function for USB devices (e.g. smartphone) - also with device switched off 1 1; Smart Card Reader (ISO/IEC 7816) Yes; V4.0 2 in 1 (SDHC UHS-II, MMC) SIMATIC memory cards (for S7-300/400), SMC (for S7-1x00), SIMATIC micro memory card (for S7-300/C7/ET 200) - including programming interfaces Yes; Audio socket for 3.5 mm jack
Number of ExpressCard slots Interfaces PROFIBUS/MPI Number of RS 232 interfaces Number of USB interfaces Type A Type C Number of chip-card readers Bluetooth radio standard Multimedia card/SD card slot Card reader for SIMATIC memory cards Universal Audio Jack Video interfaces analog video signal (VGA) DVI-I	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud 1; 25-pin socket 4; USB 3.0 3; 1x USB port incl. integrated charging function for USB devices (e.g. smartphone) - also with device switched off 1 1; Smart Card Reader (ISO/IEC 7816) Yes; V4.0 2 in 1 (SDHC UHS-II, MMC) SIMATIC memory cards (for S7-300/400), SMC (for S7-1x00), SIMATIC micro memory card (for S7-300/C7/ET 200) - including programming interfaces Yes; Audio socket for 3.5 mm jack Yes; via adapter from DVI to VGA Yes; 1x
Number of ExpressCard slots Interfaces PROFIBUS/MPI Number of RS 232 interfaces Number of USB interfaces Type A Type C Number of chip-card readers Bluetooth radio standard Multimedia card/SD card slot Card reader for SIMATIC memory cards Universal Audio Jack Video interfaces analog video signal (VGA)	1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud 1; 25-pin socket 4; USB 3.0 3; 1x USB port incl. integrated charging function for USB devices (e.g. smartphone) - also with device switched off 1 1; Smart Card Reader (ISO/IEC 7816) Yes; V4.0 2 in 1 (SDHC UHS-II, MMC) SIMATIC memory cards (for S7-300/400), SMC (for S7-1x00), SIMATIC micro memory card (for S7-300/C7/ET 200) - including programming interfaces Yes; Audio socket for 3.5 mm jack

Industrial Ethernet interface
 — 100 Mbps
 — 1000 Mbps
 — 1000 Mbps
 — 1000 Mbps
 — Wake on LAN
 IAMT (Intel Active Management Technology)
 WLAN
 — Type
 — 1000 Mbps
 — 2x Ethernet (RJ45)
 Yes
 — Yes
 — Gigabit Ethernet; 2x RJ45 with 2 independent MAC/IP
 — addresses
 — Yes; Via Port 1
 — Yes
 — Yes
 — Yes
 — Yes
 — Name on LAN
 — Yes
 —

Integrated Functions

Monitoring functions

• Status LEDs

Battery status, device status, access to HDD/DVD, access to SD/MMC, MPI/DP, S5 and S7 modules / Card Reader (except Smart Card Reader), Num Lock, Caps Lock, WLAN active

EMC Interference immunity against discharge of static electricity Yes; ±4 kV contact discharge (to IEC 801-2/IEC 1000-4-2; ESD), • Interference immunity against discharge of ±8 kV air discharge (to IEC 801-2/IEC 1000-4-2; ESD) static electricity acc. to IEC 61000-4-2 Interference immunity to cable-borne interference ±2 kV (according to IEC 61000-4-4, burst); ±1 kV (according to • Interference immunity on supply cables IEC 61000-4-5, surge pulse/line to line); ±2 kV (according to IEC 61000-4-5, surge pulse/line to ground) ±1 kV (according to IEC 61000-4-4, burst, length < 30 m); ±2 kV • Interference immunity on signal cables (according to IEC 61000-4-4, burst, length > 30 m); ±2 kV (according to IEC 61000-4-5, surge sym./line to ground, length > 30 m)

Standards, approvals, certificates		
CE mark	Yes	
CSA approval	Yes	
UL approval	Yes	
DIN/ISO 9001	Yes	

Ambient conditions		
Ambient temperature during operation		
• min.	5 °C; Max. 10 °C/h (no condensation)	
• max.	40 °C; Max. 10 °C/h (no condensation)	
Ambient temperature during storage/transportation		
• min.	-20 °C; Max. 20 °C/h (no condensation)	
• max.	60 °C; Max. 20 °C/h (no condensation)	
Relative humidity		
Operation, min.	5 %; At 30 °C/h (no condensation); Tested according to IEC	
	60068-2-78, IEC 60068-2-30, IEC 60068-2-14	
Operation, max.	85 %; At 30 °C/h (no condensation); Tested according to IEC	
	60068-2-78, IEC 60068-2-30, IEC 60068-2-14	
Vibrations		

 Operation, tested according to IEC 60068-2-6 	Yes
Shock testing	
• tested according to IEC 60068-2-27	Yes
Operating systems	
Additional info on operating system	Multi-Language User Interface (MUI): 6 languages (English, German, French, Spanish, Italian, Chinese)
pre-installed operating system	
• Windows 7	Yes; Ultimate 64 bit, SP1
Software	
Preinstalled	
STEP 7 Professional 2010	Yes; Software version: SR4
 STEP 7 Professional (TIA Portal) 	Yes; Software version: V14
WinCC flexible Advanced 2008	Yes; Software version: SP3
WinCC Advanced (TIA Portal)	Yes; Software version: V14
• STEP 5	Yes; Optional; software version: STEP 5 V7.23 HF2 (incl. GRAPH 5/II V7.15)
Mechanics/material	
Material of housing	metal
Handle	Yes; retractable
Socket for Kensington lock	Yes
rubber corner guards	Yes
Dimensions	
Width	385 mm
Height	53 mm
Depth	275 mm
Weights	
Weight, approx.	3.4 kg; incl. rechargeable battery
Scope of supply	
Accumulator	Yes
Power supply	Yes
Backpack	Yes
SIMATIC Software	Yes
Recovery media	Yes; Restore & Recovery
Other	
free hotline	Yes
Note:	Made in Germany: development and production in Germany
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