SIEMENS6ES7512-1DK01-0AB0 SIMATIC Memory Card required, BusAdapter required for Port 1 and 2

Our Product Introduction

Basic Information

- Place of Origin: Germany
- Brand Name: SIEMENS
- Certification: CE
- Model Number: 6ES7512-1DK01-0AB0
- Minimum Order Quantity: 1
- Price: USD
- Packaging Details: 15,10 x 15,40 x 4,60
- Delivery Time: 10-12Days
- Payment Terms: L/C, T/T
- Supply Ability: 100

Product Specification

Product Description

SIEMENS6ES7512-1DK01-0AB0 SIMATIC Memory Card required, BusAdapter required for Port 1 and 2
The SIEMENS 6ES7512-1DK01-0AB0 is a central processing unit (CPU) that is part of the SIMATIC S7-1500 automation system. Here are the key details about this CPU:
SIMATIC Memory Card Required:
- Like other SIMATIC S7-1500 CPUs, this model requires a SIMATIC memory card to be inserted for operation.
- The memory card provides storage for the user program, configuration data, and other runtime information.
BusAdapter Required for Port 1 and Port 2:
- This CPU has two Ethernet/PROFINET ports.
- However, to use these ports, a separate BusAdapter is required to be connected.
- The BusAdapter provides the necessary connectivity for the Ethernet/PROFINET interfaces.
Other Features:
- CPU Type: CPU 1512SP-1 PN
- Work Memory: 300 KB for program and 1 MB for data
- Compact, space-saving design in an ET 200SP module
- Part of the modular SIMATIC S7-1500 system
- Programmed using the STEP 7 engineering software
The key distinguishing features of this CPU model are its compact, space-saving design in the ET 200SP module format and the requirement for a BusAdapter to be connected to the Ethernet/PROFINET ports.
This makes the CPU 1512SP-1 PN well-suited for applications where space is limited, such as in distributed control systems or in confined areas. The BusAdapter requirement provides flexibility in terms of the type of network connectivity required for the application.
Overall, this CPU model is a compact and versatile option within the SIMATIC S7-1500 automation system, designed for applications that need a smaller form factor but still require the capabilities of the S7-1500 platform.

General information	
Product type designation	CPU 1512SP-1 PN
HW functional status	FS05
Firmware version	V2.9
Product function	
● I&M data	Yes; I&M0 to I&M3
● Module swapping during operation (hot swapping)	Yes; Multi-hot swapping
● Isochronous mode	Yes; Only with PROFINET; with minimum OB 6x cycle of 625 µs
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	V17 (FW V2.9) / V13 SP1 Update 4 (FW V1.8) or higher
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)	0.6 A
Current consumption, max.	0.9 A
Inrush current, max.	4.7 A; Rated value
I^2t	0.14 $A^2 \cdot s$
Power	
Infeed power to the backplane bus	8.75 W
Power loss	
Power loss, typ.	5.6 W
Memory	
Number of slots for SIMATIC memory card	1
SIMATIC memory card required	Yes
Work memory	
● integrated (for program)	200 kbyte

● integrated (for data)	1 Mbyte
Load memory	
● Plug-in (SIMATIC Memory Card), max.	32 Gbyte
Backup	
● maintenance-free	Yes
CPU processing times	
for bit operations, typ.	48 ns
for word operations, typ.	58 ns
for fixed point arithmetic, typ.	77 ns
for floating point arithmetic, typ.	307 ns
CPU-blocks	
Number of elements (total)	4 000; Blocks (OB, FB, FC, DB) and UDTs
DB	
● Number range	1 ... 60 999; subdivided into: number range that can be used by the user: 1 ... 59 999, and number range of DBs created via SFC 86: 60 000 ... 60 999
● Size, max.	1 Mbyte; For DBs with absolute addressing, the max. size is 64 KB
FB	
● Number range	0 ... 65 535
● Size, max.	200 kbyte
FC	
● Number range	0 ... 65 535
● Size, max.	200 kbyte
OB	
● Size, max.	200 kbyte
● Number of free cycle OBs	100
● Number of time alarm OBs	20
● Number of delay alarm OBs	20
● Number of cyclic interrupt OBs	20; With minimum OB 3x cycle of 500 µs
● Number of process alarm OBs	50
● Number of DPV1 alarm OBs	3
● Number of isochronous mode OBs	1
● Number of technology synchronous alarm OBs	2
● Number of startup OBs	100
● Number of asynchronous error OBs	4
● Number of synchronous error OBs	2
● Number of diagnostic alarm OBs	1
Nesting depth	
● per priority class	24
Counters, timers and their retentivity	
S7 counter	
● Number	2 048
Retentivity	
— adjustable	Yes
IEC counter	
● Number	Any (only limited by the main memory)
Retentivity	
— adjustable	Yes
S7 times	
● Number	2 048
Retentivity	
— adjustable	Yes
IEC timer	
● Number	Any (only limited by the main memory)
Retentivity	
— adjustable	Yes
Data areas and their retentivity	

Retentive data area (incl. timers, counters, flags), max.	128 kbyte; Available retentive memory for bit memories, timers, counters, DBs, and technology data (axes): 88 KB
Flag	
● Size, max.	16 kbyte
● Number of clock memories	8; 8 clock memory bit, grouped into one clock memory byte
Data blocks	
● Retentivity adjustable	Yes
● Retentivity preset	No
Local data	
● per priority class, max.	64 kbyte; max. 16 KB per block