# **SIEMENS**

# **Data sheet**

6ES7954-8LF02-0AA0



\*\*\*Spare part\*\*\* SIMATIC S7, memory cards for S7-1x 00 CPU/SINAMICS, 3, 3V Flash, 24 MByte

Figure similar

General information	
Product type designation	Memory card
Product function	
Protection function	
Engineering with	
Integrated drive control	
Operating mode	
Operator control and monitoring	
Process images	
User administration	
Alarms	
Recipes/user archives	
Display	
Line display	
Resolution (pixels)	
Control elements	
Input device	
Keyboard fonts	
Touch operation	
Connection type	
Special operator controls	
Frame size/design	
Ergonomics	
Supply voltage	
Line frequency	
Mains filter	
Mains buffering	
Load voltage L+	
Digital inputs	
Load voltage 1L+	
Load voltage 2L+	
Load voltage L1	
Auxiliary voltage 1L+, load voltage 2L+	
Input voltage	
Input voltage acc. to VDE	
Input voltage acc. to UL	

Line frequency		
Output current		
horizontal installation  vertical installation		
Encoder supply		
Output current		
5 V encoder supply		
24 V encoder supply		
Additional 24 V encoder supply		
Memory		
Type of memory	Flash-EPROM	
Flash	Yes	
Memory size	24 Mbyte	
Number of write/delete operations, min.	500 000	
Data retention (after final programming action), min.	10 y; If the delete/write processes < 50 000 (1 a if the delete/write processes > 450 000)	
Work memory		
Working memory for additional functions		
Battery		
Design		
CPU-blocks		
DB		
FB		
FC FC		
Counters, timers and their retentivity		
S7 counter		
IEC counter		
S7 times		
Data areas and their retentivity		
Flag		
Address area		
I/O address area		
of which distributed		
per integrated IO subsystem		
Process image		
Subprocess images		
Digital channels		
Analog channels		
Addressing volume		
Hardware configuration		
Formation of potential groups		
Module exchange		
Interface modules		
Number of DP masters		
Number of IO Controllers		
Number of operable FMs and CPs (recommended)		
Expansion modules		
Rack		
Submodules		
Selection of BaseUnit for connection variants		
PtP CM		
Time of day		
Clock		
Operating hours counter		
Time switching clocks		
Digital inputs		
Number of simultaneously controllable inputs		
riamos, or ormanariodally solutionable inpute		

all mounting positions

horizontal installation

Digital input functions, parameterizable

Input voltage

Input current

for 10 k switched contact

Internal preparation time

Input delay (for rated value of input voltage)

for standard inputs

for interrupt inputs

Encoder connection

Connection method

### **Digital outputs**

Digital output functions, parameterizable

Control supply voltage

Switching capacity of the outputs

Load resistance range

Trend key points E

Output voltage

Output current

Output delay with resistive load

Parallel switching of two outputs

Switching frequency

Total current of the outputs

horizontal installation

Total current of the outputs (per group)

all mounting positions

horizontal installation

vertical installation

Total current of the outputs (per module)

all mounting positions

horizontal installation

Pulse output (passive)

Frequency output

Relay outputs

Integrated high-speed cams

# **Analog inputs**

Input ranges

Measuring range

Input ranges (rated values), voltages

Input ranges (rated values), currents

Input ranges (rated values), thermocouples

Input ranges (rated values), resistance thermometer

Input ranges (rated values), resistors

Input ranges (rated values), strain gauges (full bridges)

Thermocouple (TC)

Characteristic linearization

## Analog outputs

Output ranges, voltage

Output ranges, current

Connection of actuators

Load impedance (in rated range of output)

## Analog value generation for the inputs

Integration and conversion time/resolution per channel

## Analog value generation for the outputs

Integration and conversion time/resolution per channel

Encoder

Connection of signal encoders Connectable encoders Incremental encoder Encoder signals, incremental encoder (symmetrical) Encoder signals, incremental encoder (asymmetrical) Encoder signals, absolute encoder (SSI) Encoder signals, IEPE Drive axis EC motor Errors/accuracies Operational error limit in overall temperature range Basic error limit (operational limit at 25 °C) Power electronics Control of heating elements Load connection type Setpoint input Heating power Interfaces Video interfaces Touch interfaces MPI PROFIBUS DP **PROFIBUS PA** Supports protocol for PROFINET IO **PROFINET** functions Industrial Ethernet Point-to-point connection Integrated protocol driver Telegram length, max. Transmission rate, 20 mA (TTY) Transmission rate, RS 422/485 Transmission speed, RS 232 Signals **ET-Connection** EtherNet/IP AS-Interface WLAN 1. Interface Interface types Protocols **MPI** PROFIBUS DP master Services PROFIBUS DP slave PROFINET IO Controller Services Update time for IRT **PROFINET IO Device** Services **PROFINET CBA** Open IE communication CAN **BACnet** 2. Interface Interface types **Protocols** PROFIBUS DP master

Services PROFIBUS DP slave PROFINET IO Controller Services Update time for IRT **PROFINET IO Device** Services PROFINET CBA 3. Interface Interface types **Protocols** PROFIBUS DP master Services PROFIBUS DP slave **PROFINET IO Controller PROFINET IO Device** Services **PROFINET CBA** 4. Interface Interface types **Protocols** PROFIBUS DP master **PROFINET IO Controller** Interface types RJ 45 (Ethernet) RS 232 RS 485 RS 422 USB port **Protocols** Protocols (USB) Protocols (Ethernet) WEB characteristics Protocols (terminal link) Number of connections PROFINET IO Device Redundancy mode SIMATIC communication EtherNet/IP Services Updating times Redundancy mode Open IE communication Web server PROFIBUS DP **PROFIdrive** DALI Integrated protocols Freeport 3964 (R) OPC UA Global data communication S7 basic communication S7 communication LOGO! communication S5 compatible communication Standard communication (FMS)

### PROFINET CBA (at set setpoint communication load)

Remote interconnections with acyclic transmission

Remote interconnections with cyclic transmission

iPAR server

Number of connections

### Test commissioning functions

Status/control

Forcing

Diagnostic buffer

# Interrupts/diagnostics/status information

Alarms

## **Integrated Functions**

Monitoring functions

Safety monitoring functions

Counting functions

Load cell

Position detection

Control technology

Step-by-step controllers

Pulse generator

Measuring functions

Operating mode for measured value acquisition

Measuring range

Accuracy

Measuring inputs for voltage

Measuring inputs for current

Measuring inputs for current (Rog. or I/U converter)

Error limits

#### Counter

Counting mode

External gate counters

Counter input 5 V

Counter input 24 V

## Drive interface

Signal Input

## Potential separation

Potential separation digital inputs

Potential separation digital outputs

Potential separation analog inputs

Potential separation analog outputs

Potential separation channels

Potential separation valve outputs
Potential separation counter

Potential separation controller

#### ЕМС

Interference immunity against discharge of static electricity

Interference immunity against high-frequency electromagnetic fields

Interference immunity to cable-borne interference

Interference immunity against voltage surge

Interference immunity against conducted variable disturbance induced by high-frequency fields

Interference immunity to magnetic fields

Emission of radio interference acc. to EN 55 011 Emission of radio interference acc. to EN 55 022

## Standards, approvals, certificates

Highest safety class achievable in safety mode

Highest safety class achievable for safety-related tripping of standard modules

Highest safety class achievable for deactivated dark test

# Use in hazardous areas Ambient conditions Free fall Ambient temperature during operation Operation (vertical installation) Operation (max. tilt angle) Ambient temperature during storage/transportation Air pressure acc. to IEC 60068-2-13 Altitude during operation relating to sea level Relative humidity Vibrations Shock testing Resistance Coolants and lubricants Use in stationary industrial systems Use on land craft, rail vehicles and special-purpose vehicles Use on ships/at sea Fire resistance Hardware requirement Processor Graphic Operating systems pre-installed operating system Runs under operating system Software Preinstalled Software functions Multi-user system Runtime software Runtime Block Adjustable parameters Configuration Configuration Configuration software Script languages (Runtime) Programming Programming language Configuration examples Software libraries Know-how protection Access protection Languages Online languages Functionality under WinCC (TIA Portal) Multiproject Message system Recipe management Variables Images Image objects Complex image objects Attributes for dynamic objects Lists Archiving Filters Security

Data carrier support	
Logging through printer	
Character sets	
Transfer (upload/download)	
Process coupling	
Functions	
Functionality under WinCC Unified	
Parameter set management (recipes)	
Image objects	
Connection method	
ET-Connection	
Terminals	
Connection I/O signals	
Conductor cross-section in mm <sup>2</sup>	
Conductor cross-section acc. to AWG	
Dimensions	
Width	24 mm
Height	32 mm
Depth	2.1 mm
Weights	
Weight, approx.	3 g
Other	
Data for selecting a voltage transformer	

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