SIEMENS

Data sheet

6ES7648-2BF10-0XM1

SIMATIC CFast memory card, 128 GB, for IPCs with corresponding slot Further information, quantity and content: See technical data



General information	
Product type designation	CFast memory card
Control elements	
Frame size/design	
 Standard 	Yes
● Flat	Yes
Installation type/mounting	
Mounting position	Any, dependent on target device
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
Supply voltage	
Type of supply voltage	DC
Rated value (DC)	3.3 V
Input current	
Current consumption (rated value)	100 mA; Typical
Power	
Active power input, typ.	1.1 W; Inactive 0.4 W
Memory	
Type of memory	CFast Type I
Memory size	128 Gbyte; 1 year (data retention)
Speed class	Write speed: up to 200 MB/s (UDMA6), read speed: up to 100 MB/s (UDMA6)
Write cycles MLC flash	8.8; Terabytes, industrial quality
Wear leveling (distributed writing)	Yes
Write protection switch	No
Interfaces	
Interfaces/bus type	Serial ATA
Standards, approvals, certificates	
CE mark	Yes; Certificates, Declaration of Conformity can be downloaded from SIOS, for commodities directly from the manufacturer
EAC (formerly Gost-R)	Yes
RoHS conformity	Yes
Use in hazardous areas	
ATEX Zone 2	Yes; Always comply with the operating instructions of the target device.
ATEX Zone 22	Yes; Always comply with the operating instructions of the target device.
• IECEx Zone 1	No

• IECEx Zone 11	No
• IECEx Zone 2	Yes; Always comply with the operating instructions of the target device.
• IECEx Zone 22	Yes; Always comply with the operating instructions of the target device.
cULus Class I Zone 1	Yes; Always comply with the operating instructions of the target device.
• cULus Class I Zone 2, Division 2	Yes; Always comply with the operating instructions of the target device.
• cULus Class II Division 2	Yes; Always comply with the operating instructions of the target device.
• FM Class I Division 2	Yes; Always comply with the operating instructions of the target device.
FM Class II Division 2	Yes; Always comply with the operating instructions of the target device.
Marine approval	
Germanischer Lloyd (GL)	Yes; Always comply with the operating instructions of the target device.
American Bureau of Shipping (ABS)	Yes; Always comply with the operating instructions of the target device.
Bureau Veritas (BV)	Yes; Always comply with the operating instructions of the target device.
Det Norske Veritas (DNV)	Yes; Always comply with the operating instructions of the target device.
Korean Register of Shipping (KRS)	Yes; Always comply with the operating instructions of the target device.
Lloyds Register of Shipping (LRS) Alice Market Colombia	Yes; Always comply with the operating instructions of the target device.
Nippon Kaiji Kyokai (Class NK) Nippon Kaiji Kyokai (Class NK)	Yes; Always comply with the operating instructions of the target device.
Polski Rejestr Statkow (PRS)	Yes; Always comply with the operating instructions of the target device.
Chinese Classification Society (CCS)	Yes; Always comply with the operating instructions of the target device.
Ambient conditions	
Suited for indoor use	Yes; Always comply with the operating instructions of the target device.
Suited for outdoor use	Yes; Always comply with the operating instructions of the target device.
Ambient temperature during operation	
• min.	0 °C; Any mounting angle
• max.	55 °C; Any mounting angle
Ambient temperature during storage/transportation	10.00
• min.	-40 °C
• max.	70 °C
Relative humidity	0.5.07
Operation, max.	85 %
Condensation permissible	No
Operating systems	
pre-installed operating system	
Windows CE	Yes
Runs under operating system	
• Windows CE	
Windows CE	No
Windows Vista	No
Windows VistaWindows XP	No No
Windows VistaWindows XPWindows 7	No No Yes
Windows VistaWindows XPWindows 7Windows 8	No No Yes Yes
 Windows Vista Windows XP Windows 7 Windows 8 Windows 10 	No No Yes Yes
 Windows Vista Windows XP Windows 7 Windows 8 Windows 10 Linux 	No No Yes Yes
 Windows Vista Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories	No No Yes Yes Yes
 Windows Vista Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories Function description	No No Yes Yes
Windows Vista Windows XP Windows 7 Windows 8 Unidows 10 Linux Accessories Function description Mechanics/material	No No Yes Yes Yes
Windows Vista Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories Function description Mechanics/material Enclosure material (front)	No No Yes Yes Yes Yes Yes fixed mode, multiple partitions possible
Windows Vista Windows XP Windows 7 Windows 8 Unidows 10 Linux Accessories Function description Mechanics/material	No No Yes Yes Yes
Windows Vista Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories Function description Mechanics/material Enclosure material (front)	No No Yes Yes Yes Yes Yes fixed mode, multiple partitions possible
Windows Vista Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories Function description Mechanics/material Enclosure material (front) Plastic	No No Yes Yes Yes Yes Yes fixed mode, multiple partitions possible
Windows Vista Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories Function description Mechanics/material Enclosure material (front) Plastic Dimensions	No No Yes Yes Yes Yes Yes Yes fixed mode, multiple partitions possible Yes
Windows Vista Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories Function description Mechanics/material Enclosure material (front) Plastic Dimensions Width Height Thickness	No No Yes Yes Yes Yes Yes Yes fixed mode, multiple partitions possible Yes 42.8 mm
Windows Vista Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories Function description Mechanics/material Enclosure material (front) Plastic Dimensions Width Height	No No Yes Yes Yes Yes Yes Yes fixed mode, multiple partitions possible Yes 42.8 mm 36.4 mm
Windows Vista Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories Function description Mechanics/material Enclosure material (front) Plastic Dimensions Width Height Thickness	No No Yes Yes Yes Yes Yes Yes fixed mode, multiple partitions possible Yes 42.8 mm 36.4 mm
Windows Vista Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories Function description Mechanics/material Enclosure material (front) Plastic Dimensions Width Height Thickness Weights	No No Yes Yes Yes Yes Yes fixed mode, multiple partitions possible Yes 42.8 mm 36.4 mm 3.6 mm
Windows Vista Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories Function description Mechanics/material Enclosure material (front) Plastic Dimensions Width Height Thickness Weights Weight without packaging	No No Yes Yes Yes Yes Yes fixed mode, multiple partitions possible Yes 42.8 mm 36.4 mm 3.6 mm
Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories Function description Mechanics/material Enclosure material (front) Plastic Dimensions Width Height Thickness Weights Weight without packaging Weight incl. packaging Scope of supply	No No Yes Yes Yes Yes Yes fixed mode, multiple partitions possible Yes 42.8 mm 36.4 mm 3.6 mm
Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories Function description Mechanics/material Enclosure material (front) Plastic Dimensions Width Height Thickness Weights Weight without packaging Weight incl. packaging Scope of supply Delivery quantity in pieces	No No Yes Yes Yes Yes Yes fixed mode, multiple partitions possible Yes 42.8 mm 36.4 mm 3.6 mm
Windows XP Windows 7 Windows 8 Windows 10 Linux Accessories Function description Mechanics/material Enclosure material (front) Plastic Dimensions Width Height Thickness Weights Weight without packaging Weight incl. packaging Scope of supply	No No Yes Yes Yes Yes Yes fixed mode, multiple partitions possible Yes 42.8 mm 36.4 mm 3.6 mm

Manufacturer's address	Gleiwitzerstraße 555, 90475 Nuremberg, Germany
Target devices	Suitable for IPC and HMI devices with the corresponding interfaces (see manual)
Note:	bootable, real-time capable, error correction, wear leveling, power loss protection and diagnostics-capable
last modified:	3/12/2021 🖸