SQF-ISD Industrial SD Card

SQF-UDMIndustrial USB Disk Module



Features

- SLC and MLC NAND Flash and wide range temperature support
- Compliant with SD system specification version 2.0 and 3.0
- Write protection feature using mechanical switch
- Shock resistance, anti-vibration and low power consumption



Features

- Compliant with standard USB specifications
- Built-in EDC/ECC up to 12 random bits error per 512 bytes
- Advanced wear-leveling and block management
- Shock resistance, anti-vibration and low power consumption

Specifications

| Connector Type | SD Card |
|-----------------------|--|
| Flash Type | SLC / MLC |
| Capacity | SLC: 1 to 32 GB MLC: 4 to 64 GB |
| Sustained R/W | SLC: up to 25/15 MB/sec |
| Performance (*) | MLC: up to 22/10 MB/sec |
| Operating Temperature | Commercial grade: 0 to +70° C Industrial grade: -40 to +85° C |
| Shock Resistance | 1,500 G, Peak / 0.5 ms |
| Vibration Resistance | 5 G, Peak / 10 ~ 2000 Hz |
| Endurance | > 2,000,000 program/erase cycles |
| Dimensions (mm) | 32 (L) x 24 (W) x 2.1 (H) |

(*) These values are for reference only; they may change according to the flash memory used.

Specifications

| Connector Type | 10-pin 2.54 mm pitch receptacle housing connector |
|---------------------------|---|
| Flash Type | SLC / MLC |
| Capacity | SLC: 1 to 32 GB MLC: 4 to 64 GB |
| DC Supply Voltage | 5V (±10%) |
| Sustained R/W Performance | SLC: up to 32/26 MB/sec |
| (*) | MLC: up to 30/12 MB/sec |
| Operating Temperature | Commercial Grade: 0 to +70° C |
| Shock Resistance | 2,500 G, Peak / 0.5 ms |
| Vibration Resistance | 20 G, Peak / 80 ~ 2000 Hz |
| Endurance | > 5,000,000 program/erase cycles |
| Dimensions (mm) | 26.5 x 37.8 x 10.6 (PCB Size) |
| Orientation | Horizontal |

(*) These values are for reference only; they may change according to the flash memory used.

Ordering Information

| Part No. | Product Description |
|------------------|--|
| SQF-ISDS1-XG-86C | Advantech SQFlash SD Card C6 SLC 1/2 G (0 ~ 70° C) |
| SQF-ISDS1-XG-86E | Advantech SQFlash SD Card C6 SLC 1/2 G (-40 ~ 85° C) |
| SQF-ISDS1-XG-82C | Advantech SQFlash SD Card C10 SLC 4/8/16/32 G (0 ~ 70° C) |
| SQF-ISDS1-XG-82E | Advantech SQFlash SD Card C10 SLC 4/8/16/32 G (-40 ~ 85° C) |
| SQF-ISDM1-XG-82C | Advantech SQFlash SD Card C10 MLC 4/8/16/32/64 G (0 ~ 70° C) |
| SQF-ISDM1-XG-82E | Advantech SQFlash SD Card C10 MLC 4/8/16/32/64 G (-40 ~ 85° C) |
| | |

Note: X stands for different capacities

Ordering Information

| Part No. | Product Description |
|------------------|--|
| SQF-UDMS1-1G-HDC | Advantech SQFlash USB DOM SLC 1 G, 1-CH (0 ~ 70° C) |
| SQF-UDMS1-1G-HDE | Advantech SQFlash USB DOM SLC 1 G, 1-CH (-40 ~ 85° C) |
| SQF-UDMS2-XG-HDC | Advantech SQFlash USB DOM SLC 2/4/8/16/32 G, 2-CH (0 ~ 70° C) |
| SQF-UDMS2-XG-HDE | Advantech SQFlash USB DOM SLC $2/4/8/16/32$ G, 2 -CH $(-40 \sim 85^{\circ}$ C) |
| SQF-UDMM1-4G-HDC | Advantech SQFlash USB DOM MLC 4 G, 1-CH (0 ~ 70° C) |
| SQF-UDMM1-4G-HDE | Advantech SQFlash USB DOM MLC 4 G, 1-CH (-40 ~ 85° C) |
| SQF-UDMM2-XG-HDC | Advantech SQFlash USB DOM MLC 8/16/32/64 G, 2-CH (0 ~ 70° C) |
| SQF-UDMM2-XG-HDE | Advantech SQFlash USB DOM MLC 8/16/32/64 G, 2-CH (-40 \sim 85 $^{\circ}$ C) |

Note: X stands for different capacities