# SQF-S10 630 SATA III (6.0Gb) CFast

# SQF-SHM 630 SATA III (6.0Gb) Half-Size mSATA



#### **Features**

- Compliant with standard CFast card Type 1 specifications
- Interface: SATA Gen. 3
- Supports 72 bit ECC correct per 1K Byte data
- Universal wear-leveling and bad block management
- · Shock resistance, anti-vibration and low power consumption
- GUI management tool & software API package

### **Specifications**

Connector Type	CFast Type 1 Connector
Flash type	SLC / Ultra MLC / MLC
	SLC: 1 to 32GB
Capacity	Ultra MLC: 4 to 32GB
	MLC: 4 to 64GB
Transfer Mode	SATA III (6.0 Gbps)
Sustained R/W	SLC: up to 500/150 MB/sec
Performance (*)	MLC: up to 250/100 MB/sec
Operating Temperature	Commercial grade: 0 to +70° C
Operating temperature	Industrial grade: -40 to +85° C
Shock Resistance	1,500 G, peak / 0.5 ms
Vibration Resistance	20 G, peak / 80 ~ 2000 Hz
Endurance	2,000,000 program/erase cycles
Dimensions (mm)	42.8 x 36.4 x 3.3

 $(^{\star})$  These values are for reference only; they may change according to the flash memory used.

## **Ordering Information**

	PN	Description
	SQF-S10S1-1G-S9C	SQFlash 630 series CFast SLC, DMA, 1 GB (0 ~ 70° C)
	SQF-S10S1-1G-S9E	SQFlash 630 series CFast SLC, DMA, 1 GB (-40 ~ 85° C)
	SQF-S10S2-XG-S9C	SQFlash 630 series CFast SLC, DMA, 2/4/8/16/32 GB (0 ~ 70° C)
	SQF-S10S2-XG-S9E	SQFlash 630 series CFast SLC, DMA, 2/4/8/16/32 GB (-40 ~ 85° C)
	SQF-S10U2-XG-S9C	SQFlash 630 series CFast Ultra MLC, DMA, 4/8/16/32 GB $(0 \sim 70^{\circ} \text{ C})$
	SQF-S10U2-XG-S9E	SQFlash 630 series CFast Ultra MLC, DMA, 4/8/16/32 GB (-40 $\sim$ 85° C)
	SQF-S10M1-4G-S9C	SQFlash 630 series CFast MLC, DMA, 4 GB (0 ~ 70° C)
	SQF-S10M1-4G-S9E	SQFlash 630 series CFast MLC, DMA, 4 GB (-40 ~ 85° C)
	SQF-S10M2-XG-S9C	SQFlash 630 series CFast MLC, DMA, 8/16/32/64 GB (0 ~ 70° C)
	SQF-S10M2-XG-S9E	SQFlash 630 series CFast MLC, DMA, 8/16/32/64 GB (-40 ~ 85° C)
Note: X stands for different capacities		



#### **Features**

- Half-Size Mini PCle Form Factor
- Interface: SATA Gen. 3
- Supports 72 bit ECC correct per 1K Byte data
- Universal wear-leveling and bad block management
- Shock resistance, anti-vibration and low power consumption
- GUI management tool & software API package

### **Specifications**

Connector Type	Mini PCIe 52pin connector with SATA pin-out
Flash type	SLC / Ultra MLC / MLC
	SLC: 1 to 32GB
Capacity	Ultra MLC: 4 to 32GB
	MLC: 4 to 64GB
Transfer Mode	SATA III (6.0 Gbps)
Sustained R/W	SLC: up to 130/100 MB/sec
Performance (*)	MLC: up to 250/100 MB/sec
Operating Temperature	Commercial grade: 0 to +70° C
Operating temperature	Industrial grade: -40 to +85° C
Shock Resistance	1,500 G, peak / 0.5 ms
Vibration Resistance	20 G, peak / 80 ~ 2000 Hz
Endurance	2,000,000 program/erase cycles
Dimensions (mm)	26.8 x 30 x 4.2

 $(\ensuremath{^\star})$  These values are for reference only; they may change according to the flash memory used.

## **Ordering Information**

PN	Description
SQF-SHMS1-1G-S9C	SQFlash 630 series HS mSATA SLC, DMA, 1 GB (0 ~ 70° C)
SQF-SHMS1-1G-S9E	SQFlash 630 series HS mSATA SLC, DMA, 1 GB (-40 ~ 85° C)
SQF-SHMS2-XG-S9C	SQFlash 630 series HS mSATA SLC, DMA, $2/4/8/16/32$ GB (0 ~ 70° C)
SQF-SHMS2-XG-S9E	SQFlash 630 series HS mSATA SLC, DMA, 2/4/8/16/32 GB (-40 ~ 85° C)
SQF-SHMU2-XG-S9C	SQFlash 630 series HS mSATA Ultra MLC, DMA, 4/8/16/32 GB (0 ~ 70° C)
SQF-SHMU2-XG-S9E	SQFlash 630 series HS mSATA Ultra MLC, DMA, 4/8/16/32 GB (-40 $\sim$ 85° C)
SQF-SHMM1-4G-S9C	SQFlash 630 series HS mSATA MLC, DMA, 4 GB (0 ~ 70° C)
SQF-SHMM1-4G-S9E	SQFlash 630 series HS mSATA MLC, DMA, 4 GB (-40 ~ 85° C)
SQF-SHMM2-XG-S9C	SQFlash 630 series HS mSATA MLC, DMA, 8/16/32/64 GB (0 ~ 70 $^{\circ}$ C)
SQF-SHMM2-XG-S9E	SQFlash 630 series HS mSATA MLC, DMA, 8/16/32/64 GB (-40 ~ 85° C)
Noto: V stands for differen	at consolition

Note: X stands for different capacities