MEMKOR
Solid Advantage

ORANGE Series

SSD in Chip SSDiC

SSD in Chip (SSDiC): JEDEC MO-276

Overview

The SSDiC is the smallest member of the Memkor Orange Series family of SSDs.

The SSDiC integrates into standard JEDEC MO-276 0.630″ x 0.787″ FR-XBGA the same technology and the same functions as the other Orange Series SSDs.

Memkor's Orange Series SSDs includes on all models options for Write Protect, military grade Secure Erase features, provide built-in hardware AES-256 encryption engine and built in firmware functions enabling either traditional FIPS-like data at rest protection management scenarios.

State of the art flash management techniques combined with a strong EDC/ECC/CRC ensures performance stability and consistency, along with the highest reliability and unparalleled user data integrity.

Memkor Orange Series SSDs are built to meet both Commercial and Defense focused environmental requirements.

Loyal to Defense and Industrial Markets, Memkor offers locked Bill-of-Materials utilizing high reliability components, firmware tailoring and is committed to providing excellent customer service throughout product life cycle and Supply Chain component management for long-term deployment applications.

Features and Values

- Designed as a storage for thinnest and smallest devices
- All SSD functions built into JEDEC MO-276 standard
- Up to 64GB of capacity
- Up to 420/150 MB/s sustained read/write
- Delivers performance to smallest computer devices
- High performance boot drive
- Rugged design for Defense and Industrial applications
- Extensive SMART for health monitoring
- Military grade Data Elimination
- Hardware and/or software triggered Data Elimination
- Hardware or software enabled Write Protect
- Built-in hardware AES-256
- Latest and greatest flash management techniques
- Custom firmware and feature set are available

Specification

Form Factor	JEDEC MO-276 FR-XBGA
Interface	SATA 6Gbps option for maximum performance, or SATA 3Gbps option for minimum power consumption
Data throughput	SATA III: up to 150/420 MB/s sustained write/read SATA II: up to 150/250 MB/s sustained write/read
Maximum Capacity	• up to 64GB MLC NAND
Temperature Range	• -40°C to 85°C Industrial/Military • 0°C to 70°C Commercial
Data Reliability	• Flash managed by static and dynamic wear leveling and powerful ECC/EDC/CRC • Uncorrectable bit error rate (UBER): less than 10^{-16}
Data Retention	• 10/1 year at the beginning/end of SSD life
Endurance	• up to 48 TB (64 GB MLC NAND)
Data Security	• Optional AES-256 • Enhanced ATA Security/Authentication support • Military grade Data Elimination • HW and/or SW Write Protect
Component reliability	• MTBF: 1,000,000
Health monitoring	• S.M.A.R.T. to report system health • Thermal performance monitoring and management

Ordering Information

Model: MKD BG ii xxx y O - O2 s M ee ww

Model: MKD ff ii xxx y O					
Memkor SSD	Form Factor ff:	Interface ii:	Capacity xxx:	Operating temp y:	Series
MKD	BG - SSDiC	ST - SATA	064 - 64GB GB	C – 0° to 70°C I – -40° to 85°C	O - ORANGE

- O1 s n ee ww				
Technology Code	Secure Erase: s	NAND: M	Encryption: ee	Write Protect: ww
O1 - SATA III L2 - SATA II	0 - no SE (D) Ask us about available options	M - MLC	- No Encryption (D) Ask us about available options	- no WP (D) Ask us about available options

D - default
I - Low
H - High
E - Enabled
SE - Secure Erase
WP - Write Protect

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