

# SATADOM<sup>®</sup>

Innodisk's Serial ATA Disk on Module (SATADOM<sup>®</sup>) is the world's smallest form factor with exclusive built-in Pin 7 and Pin 8 VCC, which simplifies motherboard design. Since it has no external cables, it is more robust and enhances the disk functions of various industrial and enterprise applications. Innodisk's SATADOM<sup>®</sup> also supports the SATA II and SATA III interface with faster data transfer rates and is available in capacities ranging from 512MB up to 256GB.

## SATADOM-SL 3ME4

Innodisk, the service-driven flash and DRAM module provider, features the innovative SATADOM<sup>®</sup> patented Pin8 and Pin7 cable-less SATA power combined with exclusive L3 architecture, prolonging the lifespan of SATADOM-SL 3ME4 with exceptional performance and reliability. SATADOM-SL 3ME4 is the best storage design for industrial computers and server boot drives. SATADOM-SL 3ME won the Taiwan Excellence Award 2017 in the highly competitive category of "Computer Hardware and Peripheral Equipment."

3ME4 series

- High performance
- LDPC
- Low WAI
- SMART supported
- Original MLC designed

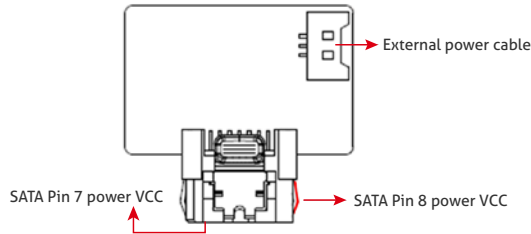


SATADOM-SL

- Tiny size
- Cable-less (Pin8 /Pin7 supported)
- OS boot drive
- Durable

## Flexible power supply design

- External power cable
- SATA Pin 8 VCC
- SATA Pin 7 VCC



Form Factor	SATADOM-SV/SH			
Model Name	SATADOM 3TE7	SATADOM 3SE4	SATADOM 3IE4	SATADOM 3ME4
Key Features	<ol style="list-style-type: none"> <li>Industrial-grade firmware with 3D NAND</li> <li>Advanced LDPC ECC engine</li> <li>Internal RAID Technology</li> <li>DRAM-less, high-level data integrity</li> <li>Excellent data transfer speed</li> </ol>	<ol style="list-style-type: none"> <li>High quality SLC-based solution</li> <li>DRAM-less, high-level data integrity</li> <li>LDPC technology secures SSD reliability</li> <li>Excellent data transfer speed</li> </ol>	<ol style="list-style-type: none"> <li>Cost-effective industrial Flash with iSLC</li> <li>Exclusive L<sup>3</sup> architecture</li> <li>Latest LDPC ECC engine</li> <li>Pin 8/Pin 7 supported</li> </ol>	<ol style="list-style-type: none"> <li>Vertical and low profile horizontal design</li> <li>Exclusive L<sup>3</sup> architecture</li> <li>Latest LDPC ECC engine</li> <li>High IOPS</li> <li>Pin 8/Pin 7 supported</li> </ol>
Interface	SATA III 6Gb/s	SATA III 6Gb/s	SATA III 6Gb/s	SATA III 6Gb/s
Flash Type	3D TLC	SLC	iSLC	MLC
Capacity	32GB~256GB	8GB~32GB	8GB~64GB	8GB~128GB
Max. Channel	2	2	2	2
Sequential RW (MB/sec, max)	340/160	520/260	530/350	530/120
Max. Power Consumption	1.27W (5V x 254mA)	1.58W (5V x 315mA)	0.95W (5V x 189mA)	1.27W (5V x 254mA)
Thermal Sensor	Y	Y	Y	Y
External DRAM Buffer	N	N	N	N
iData Guard	Y	Y	Y	Y
iCell	N	N	N	N
TRIM	Y	Y	Y	Y
ATA Security	Y	Y	Y	Y
S.M.A.R.T	Y	Y	Y	Y
Dimension (WxLxH/mm)	SV: 40.4 x 21.03 x 10.4 mm SH: 32.7 x 18 x 14.15 mm	SV: 40.4 x 21.03 x 10.4 mm SH: 32.7 x 18 x 14.15 mm	SV: 40.4 x 21.03 x 10.4	SV: 40.4 x 21.03 x 10.4 SH: 32.7 x 18 x 15.15
Environment	Vibration: 20G@7~2000Hz Shock: 1500G@0.5ms Storage Temperature: -55°C ~ +95°C MTBF: >3 million hours			
Standard Temp. OP (0°C~+70°C)	SV: DESSV-XXXDK1EC***# SH: DESSH-XXXDK1EC***#	SV: DESSV-XXXM41SC***# SH: DESSH-XXXM41SC***#	SV: DHSSV-XXXM41BC***#	SV: DESSV-XXXM41BC***# SH: DESSH-XXXM41BC***#
Wide Temp. OP (-40°C~+85°C)	SV: DESSV-XXXDK1EW***# SH: DESSH-XXXDK1EW***#	SV: DESSV-XXXM41SW***# SH: DESSH-XXXM41SW***#	SV: DHSSV-XXXM41BW***#	SV: DESSV-XXXM41BW***# SH: DESSH-XXXM41BW***#
Notes	*** = density (08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G, 128GB=A28, 256GB=B56, 512GB=C12) *** = flash configuration (internal control code) # = power supply method (A=pin 8+ external power cable / B=Pin 7+ Pin 8) *For SLC 01GB~4GB, please check FF 3SE or 3SE3			



Form Factor	SATADOM-SL/SH Type D			
Model Name	SATADOM 3TE7	SATADOM 3SE4	SATADOM 3IE4	SATADOM 3ME4
Key Features	1. Industrial-grade firmware with 3D NAND 2. Advanced LDPC ECC engine 3. Internal RAID Technology 4. DRAM-less, high-level data integrity 5. Excellent data transfer speed	1. High quality SLC-based solution 2. DRAM-less, high-level data integrity 3. LDPC technology secures SSD reliability 4. Excellent data transfer speed	1. Below 1U best boot solution. 2. Cost-effective industrial Flash with iSLC 3. Exclusive L <sup>3</sup> architecture 4. Latest LDPC ECC engine 5. Pin 8/Pin 7 supported	1. Below 1U best boot solution. 2. Exclusive L <sup>3</sup> architecture 3. Latest LDPC ECC engine 4. High IOPS 5. Pin 8/Pin 7 supported
Interface	SATA III 6Gb/s	SATA III 6Gb/s	SATA III 6Gb/s	SATA III 6Gb/s
Flash Type	3D TLC	SLC	iSLC	MLC
Capacity	32GB~128GB	8GB~32GB	8GB~64GB	8GB~128GB
Max. Channel	2	2	2	2
Sequential R/W (MB/sec, max.)	340/160	520/260	530/350	530/120
Max. Power Consumption	1.02W (5V x 204mA)	0.95W (5V x 186mA)	1.02W (5V x 204mA)	1.02W (5V x 204mA)
Thermal Sensor	Y	Y	Y	Y
External DRAM Buffer	N	N	N	N
iData Guard	Y	Y	Y	Y
iCell	N	N	N	N
TRIM	Y	Y	Y	Y
ATA Security	Y	Y	Y	Y
S.M.A.R.T	Y	Y	Y	Y
Dimension (WxLxH/mm)	SL: 29.6 x 33.06 x 10.5 SH(D): 30 x 20.79 x 15.20	SL: 29.6 x 33.06 x 10.5 SH(D): 30 x 20.79 x 15.15	SL: 29.6 x 33.06 x 10.5	SL: 29.6 x 33.06 x 10.5 SH(D): 30 x 20.79 x 15.15
Environment	Vibration: 20G@7~2000Hz Shock: 1500G@0.5ms Storage Temperature: -55°C ~ +95°C MTBF: >3 million hours			
Standard Temp.OP(0°C~+70°C)	SL: DESSL-XXXDK1EC***# SH(D): DESSF-XXXDK1EC***#	SL: DESSL-XXXM41SC***# SH(D): DESSF-XXXM41SC***#	SL: DHSSL-XXXM41BC***#	SL: DESSL-XXXM41BC***# SH(D): DESSF-XXXM41BC***#
Wide Temp.OP (-40°C~+85°C)	SL: DESSL-XXXDK1EW***# SH(D): DESSF-XXXDK1EW***#	SL: DESSL-XXXM41SW***# SH(D): DESSF-XXXM41SW***#	SL: DHSSL-XXXM41BW***#	SL: DESSL-XXXM41BW***# SH(D): DESSF-XXXM41BW***#
Notes	xxx = density (08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G, 128GB=A28, 256GB=B56, 512GB=C12) *** = flash configuration (internal control code) # = power supply method (A=pin 8+ external power cable / B=Pin 7+ Pin 8) *For SLC 01GB~4GB, please check FF 3SE or 3SE3			



Form Factor	SATADOM-ML/MH				
Model Name	SATADOM 3SE4	SATADOM 3IE4	SATADOM 3ME4	SATADOM 3TG6-P	SATADOM 3MG2-P
Key Features	1. High quality SLC-based solution 2. DRAM-less, high-level data integrity 3. LDPC technology secures SSD reliability 4. Excellent data transfer speed	1. Hardware write protect supported 2. Cost-effective industrial Flash with iSLC 3. Exclusive L <sup>3</sup> architecture 4. Latest LDPC ECC engine 5. High IOPS 6. Pin 8/Pin 7 supported	1. Hardware write protect supported 2. Exclusive L <sup>3</sup> architecture 3. Latest LDPC ECC engine 4. High IOPS 5. Pin 8/Pin 7 supported	1. Extreme seq. and random performance with 3D NAND solution 2. Advanced LDPC ECC engine 3. RAID engine offers additional level of data protection 4. AES 256-bit key, end-to-end data path protection	1. Hardware write protect supported 2. High IOPS 3. Write protect 4. High performance SATADOM
Interface	SATA III 6Gb/s	SATA III 6Gb/s	SATA III 6Gb/s	SATA III 6Gb/s	SATA III 6Gb/s
Flash Type	SLC	iSLC	MLC	3D TLC	MLC
Capacity	8GB~64GB	16GB~128GB	32GB~256GB	32GB~256GB	32GB~256GB
Max. Channel	2	2	2	4	4
Sequential R/W (MB/sec, max.)	520/360	530/360	530/210	540/470	560/180
Max. Power Consumption	1.58W (5V x 315mA)	0.815W (5V x 163mA)	0.815W (5V x 163mA)	2.68W (5V x 535mA)	2.68W (5V x 535mA)
Thermal Sensor	Y	Y	Y	Y	Y
External DRAM Buffer	N	N	N	Y	Y
iData Guard	Y	Y	Y	Y	Y
iCell	N	N	N	N	N
TRIM	Y	Y	Y	Y	Y
ATA Security	Y	Y	Y	Y	Y
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	ML: 36.7 x 31.2 x 10.7	ML: 31.2 x 36.7 x 10.7 MH: 23.5 x 33.6 x 14.8	ML: 31.2 x 36.7 x 10.7 MH: 23.5 x 33.6 x 14.8	ML: 37.17 x 31.5 x 12.6	ML: 37.17 x 31.5 x 12.6
Environment	Vibration: 20G@7~2000Hz Shock: 1500G@0.5ms Storage Temperature: -55°C ~ +95°C MTBF: >3 million hours				
Standard Temp.OP(0°C~+70°C)	ML: DESML-XXXM41SC***#	ML: DHSML-XXX-M41BC***# MH: DHSMH-XXX-M41BC***#	ML: DESML-XXX-M41BC***# MH: DESMH-XXX-M41BC***#	ML: DGSML-XXXM71EC***#	ML: DGSML-XXXD81BC***#
Wide Temp.OP (-40°C~+85°C)	ML: DESML-XXXM-41SW***#	ML: DHSML-XXX-M41BW***# MH: DHSMH-XXX-M41BW***#	ML: DESML-XXX-M41BW***# MH: DESMH-XXX-M41BW***#	ML: DGSML-XXXM71EW***#	ML: DGSML-XXXD-81BW***#
Notes	xxx = density (08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G, 128GB=A28, 256GB=B56, 512GB=C12) *** = flash configuration (internal control code) # = power supply method (A=pin 8+ external power cable / B=Pin 7+ Pin 8) *For SLC 4GB, please check FF 3SE or 3SE3				



Form Factor	SATADOM-SH Type C		SATADOM-MV	
Model Name	SATADOM 3SE4	SATADOM 3ME4	SATADOM 3IE4	SATADOM 3ME4
Key Features	1. High quality SLC-based solution 2. DRAM-less, high-level data integrity 3. LDPC technology secures SSD reliability 4. Excellent data transfer speed	1. Low profile horizontal design 2. Exclusive L <sup>3</sup> architecture 3. Latest LDPC ECC engine 4. High IOPS 5. Pin 8/Pin 7 supported	1. Hardware write protect supported 2. Cost-effective industrial Flash with iSLC 3. Exclusive L <sup>3</sup> architecture 4. Latest LDPC ECC engine 5. High IOPS 6. Pin 8/Pin 7 supported	1. Hardware write protect supported 2. Exclusive L <sup>3</sup> architecture 3. Latest LDPC ECC engine 4. High IOPS 5. Pin 8/Pin 7 supported
Interface	SATA III 6Gb/s	SATA III 6Gb/s	SATA III 6Gb/s	SATA III 6Gb/s
Flash Type	SLC	MLC	iSLC	MLC
Capacity	8GB~32GB	8GB~128GB	8GB~64GB	8GB~128GB
Max. Channel	2	2	2	2
Sequential RW (MB/sec, max.)	520/260	530/120	530/340	530/210
Max. Power Consumption	1.49W (5V x 297mA)	1.02W (5V x 204mA)	1.72W (5V x 343mA)	1.08W (5V x 216mA)
Thermal Sensor	Y	Y	Y	Y
External DRAM Buffer	N	N	N	N
iData Guard	Y	Y	Y	Y
iCell	N	N	N	N
TRIM	Y	Y	Y	Y
ATA Security	Y	Y	Y	Y
S.M.A.R.T	Y	Y	Y	Y
Dimension (WxLxH/mm)	32.7 x 18 x 14.5	32.7 x 18 x 14.5	41.55 x 25.26 x 10.4	41.55 x 25.26 x 10.4
Environment	Vibration: 20G@7~2000Hz Shock: 1500G@0.5ms Storage Temperature: -55°C ~ +95°C MTBF: >3 million hours			
Standard Temp.OP(0°C~+70°C)	DESSC-XXXM41SC***#	DESSC-XXXM41BC***#	DHSMV-XXXM41BC***#	DESMV-XXXM41BC***#
Wide Temp.OP (-40°C~+85°C)	DESSC-XXXM41SW***#	DESSC-XXXM41BW***#	DHSMV-XXXM41BW***#	DESMV-XXXM41BW***#
Notes	xxx = density (08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G, 128GB=A28, 256GB=B56, 512GB=C12) ***= flash configuration (internal control code) # =power supply method(A=pin 8+ external power cable / B=Pin 7+ Pin 8) *For SLC 01GB~4GB, please check FF 3SE or 3SE3			