iNNODISK®
Beyond your imagination

2012 Product Guide

The Best Industrial Storage Solution

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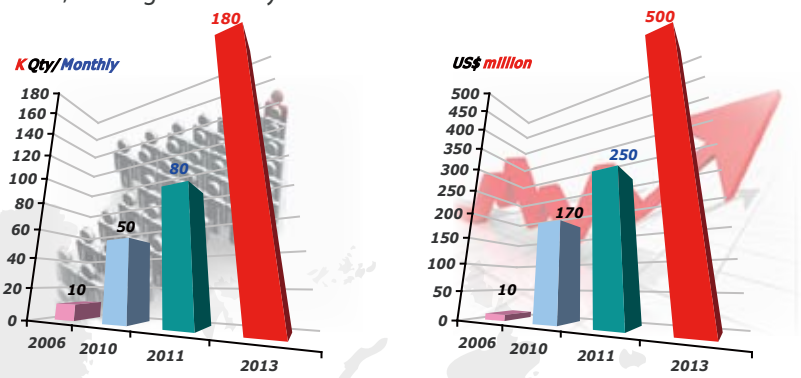
INNODISK®
Beyond your imagination

About InnoDisk

Founded in March 2005, InnoDisk Corp. has become the industry-leading manufacturer and solution provider of flash storage devices and DRAM module for industrial applications and embedded systems. With the long experience and profound knowledge in memory industrial, InnoDisk is capable of developing series of products with excellent quality, remarkable performance, and high reliability.



Growing Staff & Revenue

Own Production Line

In order to offer prompt delivery and mass production with various customized items, InnoDisk established its own production line in Nangang during 2007. At the end of 2009, after moving to Xizhi, the office and the factory, which is extended within two production lines, are set up at the same building and same floor. Because of this, it not only benefits the quality control of both pilot run and mass production, and thus InnoDisk is able to provide customers high-quality products and also fulfill customer satisfaction within satisfying delivery.

Head Quarter

Flash Storage

DRAM Memory

SGS UKAS MANAGEMENT SYSTEMS 005 · TAIWAN EXCELLENCE 2011 · BC AWARD BEST CHOICE 2011 · Windows® Embedded Partner · CE FC RoHS COMPLIANT

The Best Storage Solution

Application Solution





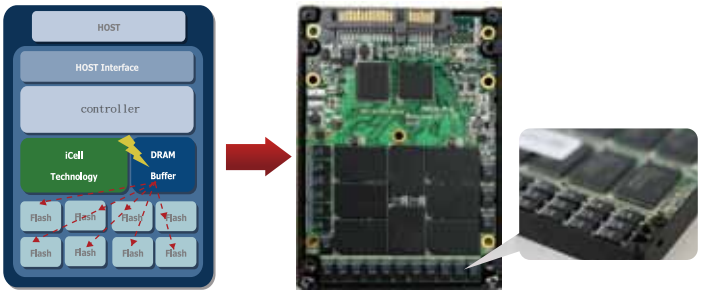

Industrial Appliation

2.5" & 1.8" Industrial SSD Series

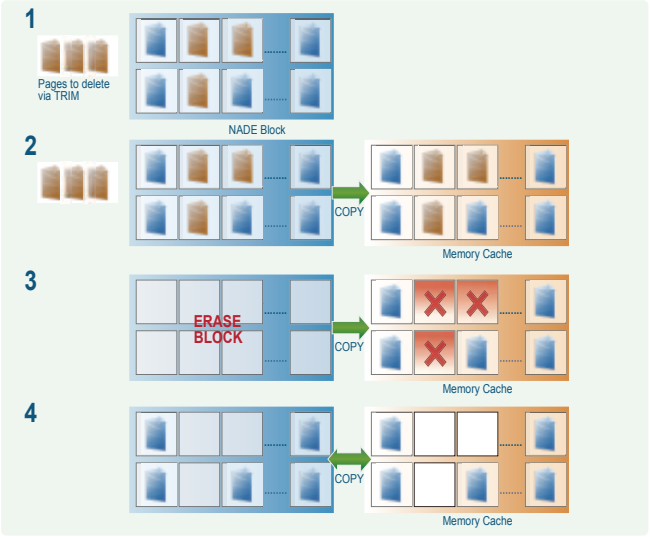
InnoDisk SSDs bring you to experience a high level of performance. Sequential read/write reaches up to 250 and 200MB per second respectively. Within a DRAM structure in hardware design, performance of random read/write has been enhanced significantly.

What's iCell?

Different from other SSD venders, InnoDisk SSDs are designed within iCell, which developed by RD team.
iCell enables SSD can work well and ensure reliability and accurate of data transferred even if abnormal power failure happens and there would be no data loss ever.



What's TRIM?



SSDs are made up of millions of NAND flash cells. They can be written to in groups called pages (generally 4KB in size) but can only be erased in larger groups called blocks (generally 128 pages or 512KB). These stipulations are partially the source of many SSD performance issues.In a supported OS (e.g. Windows 7), whenever you permanently delete a file or format your drive, the addresses that are erased are sent along with the TRIM command to the SSD's controller.

SLC Series

Model Name	InnoRobust II SATA SSD	SATA 25000	SATA 10000 Plus
Key Features	1. Military MIL-STD-810 F/G procedure 2. Qeraser, SEraser, Destroy function 3. H/W Write Protect	1. Supported iCell, 100% avoid data loss 2. High speed read/write & High IOPS 3. TRIM supported	1. Main stream SLC SSD 2. Cost-Effective in high speed
Interface	SATA II 3.0G	SATA II 3.0G	SATA II 3.0G
Flash type	SLC	SLC	SLC
Capacity	16GB~512GB	8GB~512GB	8GB~128GB
Max. Channels	8	8	8
Sequential R/W(MB/sec, max.)	200/170	240/200	240/220
Max. Power consumption	3.75 W (5Vx750mA)	3.5 W (5Vx700mA)	2.8 W (5Vx560mA)
Thermal Sensor	✓	✓	✓
External DRAM Buffer	✓	✓	
iCell	✓	✓	
TRIM	✓	✓	
ATA Security	✓	✓	✓
S.M.A.R.T.	✓	✓	✓
Dimension (WxLxH)	69.85 x 100.10 x 9.30 mm	69.85 x 100.10 x 9.30 mm	69.85 x 100.10 x 9.30 mm
Environment	Vibration: 20G @7~2000Hz, Shock 1500G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 4 million hours		
Standard OP(0°C~+70°C)	D2SN-xxxJ21AC***	D2SN-xxxJ20AC***	D2ST2--xxxJ20AC***
Wide temp. OP (-40°C~+85°C)	D2SN-xxxJ21AW***	D2SN-xxxJ20AW***	D2ST2--xxxJ20AW***
Notes	xxx = density (02GB=02G, 04GB=04G, 08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G, 128GB=A28, 256GB=B56, 512GB=C12) ***= flash configuration (internal control code)		

MLC Series




Model Name	EverGreen Plus 2.5" SATA SSD	EverGreen 2.5" SATA SSD	InnoLite II 2.5'' SATA SSD	InnoLite II 1.8'' SATA SSD
Key Features	1. Supported iCell,100% avoid data lose 2. L²Architecture, least 20 times lifespan prolonged 3. High speed R/W & High IOPS	1. High speed R/W & High IOPS SSD 2. L² Architecture, least 10 times lifespan prolonged	1. Main stream MLC SSD 2. Budget friendly	1. Entry, Economy MLC SSD 2. 1.8" housing, 50% space saved
Interface	SATA II 3.0G	SATA II 3.0G	SATA II 3.0G	SATA II 3.0G
Flash type	MLC	MLC	MLC	MLC
Capacity	8GB~512GB	8GB~512GB	8GB~512GB	8GB~64GB
Max. Channels	8	8	8	4
Sequential R/W(MB/sec, max.)	220 / 150	220 / 150	240 / 220	120 / 50
Max. Power consumption	2.5 W (5Vx500mA)	2.5 W (5Vx500mA)	2.5 W (5Vx500mA)	2.5 W (5Vx500mA)
Thermal Sensor	✓		✓	✓
External DRAM Buffer	✓			
iCell	✓	✓		
TRIM	✓	✓		
ATA Security	✓	✓	✓	✓
S.M.A.R.T.	✓	✓	✓	✓
Dimension (WxLxH)	69.90 x 99.80 x 9.30 mm	69.90 x 99.80 x 9.30 mm	69.90 x 99.80 x 9.30 mm	69.20 x 50.00 x 9.00 mm
Environment	Vibration: 20G @7~2000Hz, Shock 1500G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 1 million hours			
Standard OP(0°C~+70°C)	D2SL-xxxJ20AC***	D2SN-xxxJ20AC***	D2ST2-xxxJ20AC***	D1ST2-xxxJ20AC***
Wide temp. OP (-40°C~+85°C)	D2SL-xxxJ20AW***	D2SN-xxxJ20AW***	D2ST2-xxxJ20AW***	D1ST2-xxxJ20AW***
Notes	xxx = density (02GB=02G, 04GB=04G, 08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G, 128GB=A28, 256GB=B56, 512GB=C12) ***= flash configuration (internal control code)"			



1.8'' SATA D150 SSD	InnoRoubst II PATA SSD	ATA 9000
1. Entry, Economy SLC SSD 2. 1.8" housing, 50% space saved 3. Low power consumption	1. Military MIL-STD-810 F/G procedure 2. QEraser, SEraser, Destroy function 3. H/W Write Protect	1. Supported iCell , 100% avoid data loss 2. High speed read/write High IOPS
SATA II 3.0G	PATA/ IDE 44pin	PATA/ IDE 44pin
SLC	SLC	SLC
2GB~64GB	8GB ~ 128GB	8GB ~ 128GB
4	8	8
130/125	90/90	90/90
1 W (5Vx200mA)	2.8 W (5Vx560mA)	2.8 W (5Vx560mA)
✓	✓	✓
	✓	✓
	✓	✓
	✓	✓
✓	✓	✓
✓	✓	✓
69.85 x 50.00 x 9.30 mm	9.85 x 100.10 x 9.30 mm	69.85 x 100.10 x 9.30 mm
Vibration: 20G @7~2000Hz, Shock 1500G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 4 million hours		
D1ST2-xxxJ30AC***	D2D9-xxxJ21AC***	D2D9-xxxJ20AC***
D1ST2-xxxJ30AW***	D2D9-xxxJ21AW***	D2D9-xxxJ20AW***
xxx = density (02GB=02G, 04GB=04G, 08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G, 128GB=A28, 256GB=B56, 512GB=C12) ***= flash configuration (internal control code)		

InnoDisk Serial ATA Disk On Module (SATADOM®) offers capacities from 128MB up to 32GB. Specifically, it supports SATA II interface with excellent and fast data transfer rate. Innodisk SATADOM series provide the smallest form factor in the world which enhances the functionality for various applications.

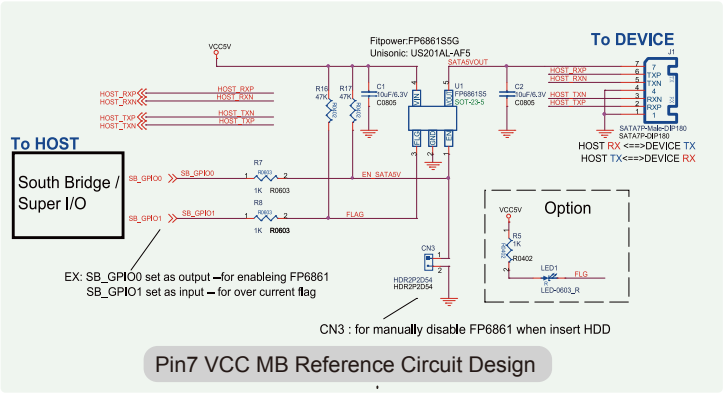
Pin7 VCC Advantages

1.Customer doesn't need to use a power cable for providing power.
2.Pin7 VCC can save the manufactured charge cost.
3.To use our suggested circuit, your rainboard will be able to support either InnoDisk SATADOM or other DOM and HDD.

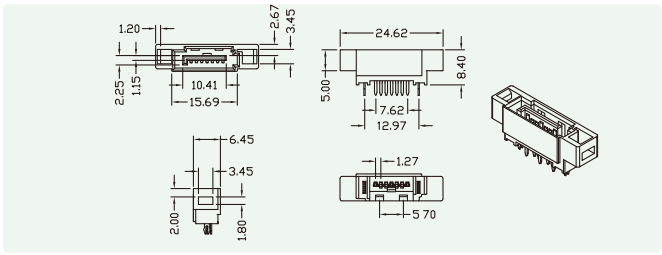
* SATADOM D150Q with Pin7 VCC is designed with a fuse (polyswitch500mA, 6V) on Pin7's circuit

Recommendation

InnoDisk suggests that customers MUST design their board with a fuse in order to prevent over current. In other word, customers are DO NOT "directly" layout 5V VCC to SATA socket on board. Therefore, we strongly introduce our circuit to protect MB and device, either by using "POWER SWITH" or "JUMPER+FUSE".



Pin7 VCC MB Reference Circuit Design



iSOCKET Advantages

1.iSOCKETcan be increased the options for SATA device, no matter for InnoDisk SATADOM or other SATA devices.
2.iSOCKETcan be applied in the high vibration environment.




SLC Series

Model Name	SATADOM D150QV	SATADOM D150QV-L	SATADOM D150SV-L	SATADOM D150SV
Key Features	1. High speed & capacity SATADOM 2. Optional i-Socket housing	1. Ultra Low profile 2. High speed & capacity 3. Design for 1U Server platform	1. Low profile SATADOM	1. Vertical, Ultra slim SATADOM
Interface	SATAII	SATAII	SATAII	SATAII
Flash type	SLC	SLC	SLC	SLC
Capacity	2GB~32GB	4G~64GB	2G~8GB	2G~8GB
Max. Channels	4	4	2	2
Sequential R/W(MB/sec, max.)	125 / 120	125 / 120	30 / 25	30 / 25
Max. Power consumption	1 W(5V x 200 mA)	1 W(5V x 200 mA)	0.83W	0.83W
Thermal Sensor	✓	✓	✓	✓
H/W Write Protect	✓	✓	✓	✓
i-Socket	OPTION			
Pin7 Power	OPTION	OPTION	OPTION	OPTION
ATA Security	✓	✓	✓	✓
S.M.A.R.T.	✓	✓	✓	✓
Dimension (WxLxH)	25x39.4x6.5 mm	30x35x9.5 mm	29.6x32.8x8 mm	20.8x32.8x8 mm
Environment	Vibration: 20G @7~2000Hz, Shock 1500G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 3 million hours			
Standard OP (0°C~+70°C)	DESI-xxxJ30AC***	DESIL-xxxJ30ACX***	DES8-xxxJ30AC***	DES9-xxxJ30AC***
Wide temp. OP (-40°C~+85°C)	DESI-xxxJ30AW***	DESIL-xxxJ30AWX***	DES8-xxxJ30AW***	DES9-xxxJ30AW***
Notes	xxx = density (02GB=02G, 04GB=04G, 08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G) ***= flash configuration (internal control code)			

MLC Series

Model Name	InnoLite SATADOM D150QV	InnoLite SATADOM D150QV-L	InnoLite SATADOM D150QH
Key Features	1. High speed & capacity SATADOM 2. Optional i-Socket housing	1. Ultra Low profile,High speed & capacity 2. Design for 1U Server platform	1. High speed & capacity SATADOM 2. Horizontal, short SATADOM 3. Supported mounting hole
Interface	SATAII	SATAII	SATAII
Flash type	MLC	MLC	MLC
Capacity	4GB~64GB	4G~64GB	4GB~64GB
Max. Channels	4	4	4
Sequential R/W(MB/sec, max.)	120 / 90	125 / 120	120 / 90
Max. Power consumption	1.6 W(5V x 320 mA)	1.6 W(5V x 320 mA)	1.6 W(5V x 320 mA)
Thermal Sensor	✓	✓	✓
H/W Write Protect	✓	✓	✓
i-Socket	OPTION		
Pin7 Power	OPTION	OPTION	OPTION
ATA Security	✓	✓	✓
S.M.A.R.T.	✓	✓	✓
Dimension (WxLxH)	25 x 39.4 x 6.8 mm	30x35x9.5 mm	30 x 40 x 11.4 mm
Environment	Vibration: 20G @7~2000Hz, Shock 1500G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 1 million hours		
Standard OP (0°C~+70°C)	DESIH-xxxJ30ACX***	DESIL-xxxJ30ACX***	DESIB-xxxJ30ACX***
Wide temp. OP (-40°C~+85°C)	DESIH-xxxJ30AWX***	DESIL-xxxJ30AWX***	DESIB-xxxJ30AWX***
Notes	xxx = density (02GB=02G, 04GB=04G, 08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G) ***= flash configuration (internal control code)		

SATADOM D150QH	SATADOM D150SH-L	SATADOM D150SH
1. High speed & capacity SATADOM 2. Horizontal, short SATADOM 3. Supported mounting hole	1. High speed & capacity SATADOM 2. Horizontal, Ultra short form factor.	1. Horizontal, Ultra slim SATADOM
SATAII	SATAII	SATAII
SLC	SLC	SLC
2GB~32GB	2G~8GB	2G~8GB
4	2	2
125 / 120	30 / 25	30 / 25
1 W(5V x 200 mA)	1W(5V x 166 mA)	1W(5V x 166 mA)
✓	✓	✓
✓	✓	✓
OPTION	OPTION	OPTION
✓	✓	✓
✓	✓	✓
30x40x11.4 mm	20.3x30x11.4 mm	18x30.3x11.4
Vibration: 20G @7~2000Hz, Shock 1500G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 1 million hours		
DESIB-xxxJ30AC***	DES8B-xxxJ30AC***	DES9B-xxxJ30AC***
DESIB-xxxJ30AW***	DES8B-xxxJ30AW***	DES9B-xxxJ30AW***
xxx = density (02GB=02G, 04GB=04G, 08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G, 128GB=A28) ***= flash configuration (internal control code)		

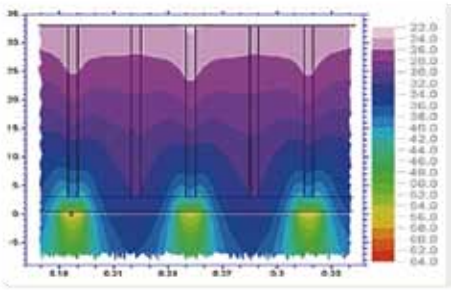
What's mSATA?

Mini-SATA, or mSATA, is a low-profile interface connector that enables more effective Serial ATA (SATA) integration in small form-factor drives roughly the size of a business card, such as solid state disks (SSDs). mSATA supports data transfer rates of 1.5 Gb/s and 3.0 Gb/s for high performance while enabling compact integration in a wide variety of applications for the hard drives and solid state drives (SSDs) used in ultraportable laptops, netbooks and similar mobile devices.

The Serial ATA International Organization (SATA-IO), the same organization responsible for the SATA, SATA II, and SATA III (SATA 6 Gb/s) specifications, released the mSATA specification in September 2009, and mSATA drives are now available from a variety of manufacturers,including Toshiba, Samsung, HP, Intel,SanDisk and Dell.

Integrated Thermal Sensor

As the speed of the SSD product get faster and faster, overall power consumption continues to increase. Accordingly, it brings a new concern: thermal management. The advantage of Thermal Sensor is that it will allow the SSD to either change the speed or throttle back on the flash accesses to allow the SSD to stay within temperature limits and prevent any reliability failures due to overheating.



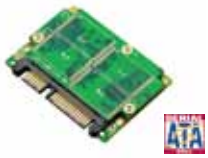
mini PCIeDOM D150

Mini PCIeDOM, which designed for industrial PC and embedded system, featuring Standard Mini PCI Express interface and driverless.

- Standard PCI Express
- Driverless
- 2GB~64GB within SLC flash
- Supports Windows XP Embedded, Windows 7 Embedded
- Customized function support

Model Name	mini PCIeDOM D150	miniDOM-U	mSATA D150Q
Key Features	1. Driver-Less 2. Optional write protect 3. Optional quick erase function	1. USB interface 2. compatible with mPCIe pinout	1. Optional H/W Write Protect. 2. JEDEC MO-300
Interface	mini PCIe	USB 2.0	SATA II 3.0G (JEDEC MO-300)
Pin Definition	Pin 23/25 – PERn0/PERp0 Pin 31/33 – PETn0/PETp0	Pin 36 – USB_D- Pin 38 – USB_D+	Pin 23/25 - TX+/TX- Pin 31/33 - RX-/RX+
Flash type	SLC	SLC	SLC
Capacity	2GB~64GB	2GB~8GB	2GB~32GB
Max. Channels	4	2	4
Sequential R/W(MB/sec, max.)	135 / 120	30 / 20	135/130
Max. Power consumption	0.66 W (3.3Vx200mA)	0.625 W (5Vx125mA)	0.75 W (3.3Vx230mA)
Thermal Sensor			✓
External DRAM Buffer			
H/W Write Protect	Optional		Optional
ATA Security			✓
S.M.A.R.T.	✓		✓
Dimension (WxLxH)	30 x 51 x 3.6 mm	30 x 50.95 x 3.4 mm	29.85 x 50.8 x 3.5mm
Environment	Vibration: 20G @7~2000Hz, Shock 1500G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 3 million hours		
Standard OP (0°C~+70°C)	DRPP-xxxJ30AC***	DRPU-02GI21AC***	DRPS-xxxJ30AC***
Wide temp. OP (-40°C~+85°C)	DRPP-xxxJ30AW***	DRPU-02GI21AW***	DRPS-xxxJ30AW***
Notes	xxx = density (02GB=02G, 04GB=04G, 08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G) ***= flash configuration (internal control code)		

SATA Slim (JEDEC MO-297) series




Model Name	SATA Slim J200	SATA Slim D150Q	EverGreen SATA Slim	InnoLite SATA Slim D150Q
Key Features	1. High speed R/W & High IOPS	1. H/W Write Protect.	1. High speed R/W & Hi IOPS 2. L^2 Architecture, least 10 times lifespan prolonged	1. Budget friendly
Interface	SATA II 3.0G	SATA II 3.0G	SATA II 3.0G	SATA II 3.0G
Connector	SATA 7+15	SATA 7+15	SATA 7+15	SATA 7+15
Flash type	SLC	SLC	MLC	MLC
Capacity	8GB~128GB	2GB~32GB	8GB~64 GB	8GB~64GB
Max. Channels	8	4	8	4
Sequential R/W(MB/sec, max.)	220/200	135/130	220 / 150	110/40
Max. Power consumption	2.5 W (5Vx500mA)	1 W (5Vx200mA)	2.5 W (5Vx500mA)	1 W (5Vx200mA)
Thermal Sensor	✓	✓	✓	✓
External DRAM Buffer	✓		✓	
H/W Write Protect	Option	✓	Option	Option
ATA Security		✓	✓	✓
S.M.A.R.T.	✓	✓	✓	✓
Dimension (WxLxH)	39 x 54 x 6.8 mm	39 x 54 x 3.3 mm	39 x 54 x 3.3 mm	39 x 54 x 3.3 mm
Environment	Vibration: 20G @7~2000Hz, Shock 1500G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 3 million hours			
Standard OP (0°C~+70°C)	D1SS-xxxJ30AC***	D1SS-xxxJ30AC***	D1SS-xxxJ20AC***	D1SS-xxxJ30AC***
Wide temp. OP (-40°C~+85°C)	D1SS-xxxJ30AW***	D1SS-xxxJ30AW***	D1SS-xxxJ20AW***	D1SS-xxxJ30AW***
Notes	xxx = density (02GB=02G, 04GB=04G, 08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G, 128GB=A28, 256GB=B56, 512GB=C12) ***= flash configuration (internal control code)			



EverGreen mSATA	InnoLite mSATA D150Q	InnoLite mSATA mini D150
1. High speed R/W & High IOPS SSD 2. L^2 Architecture, least 10 times lifespan prolonged 3. JEDEC MO-300	1. Optional H/W Write Protect. 2. JEDEC MO-300	1. mPCIe half form factor. 2. JEDEC MO-300
SATA II 3.0G (JEDEC MO-300)	SATA II 3.0G (JEDEC MO-300)	SATA II 3.0G
Pin 23/25 - TX+TX- Pin 31/33 - RX-/RX+	Pin 23/25 - TX+/TX- Pin 31/33 - RX-/RX+	Pin 23/25 - TX+/TX- Pin 31/33 - RX-/RX+
MLC	MLC	MLC
8GB~128GB	4GB~64GB	4GB~32GB
4	4	4
110 / 25	110/40	60/30
0.75 W (3.3Vx230mA)	0.75 W (3.3Vx230mA)	0.75 W (3.3Vx230mA)
	✓	✓
✓	Optional	✓
✓	✓	✓
✓	✓	✓
29.85 x 50.80 x 3.50 mm	29.85 x 50.80 x 3.50 mm	29.85 x 26.80 x 3.70 mm
Vibration: 20G @7~2000Hz, Shock 1500G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 3 million hours		
DRPS-xxxJ20BC***	DRPS-xxxJ30AC***	DRPSH-xxxJ30AC***
DRPS-xxxJ20BC***	DRPS-xxxJ30AW***	DRPSH-xxxJ30AW***
xxx = density (02GB=02G, 04GB=04G, 08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G, 128GB=A28) ***= flash configuration (internal control code)		

What is CF-SATA?

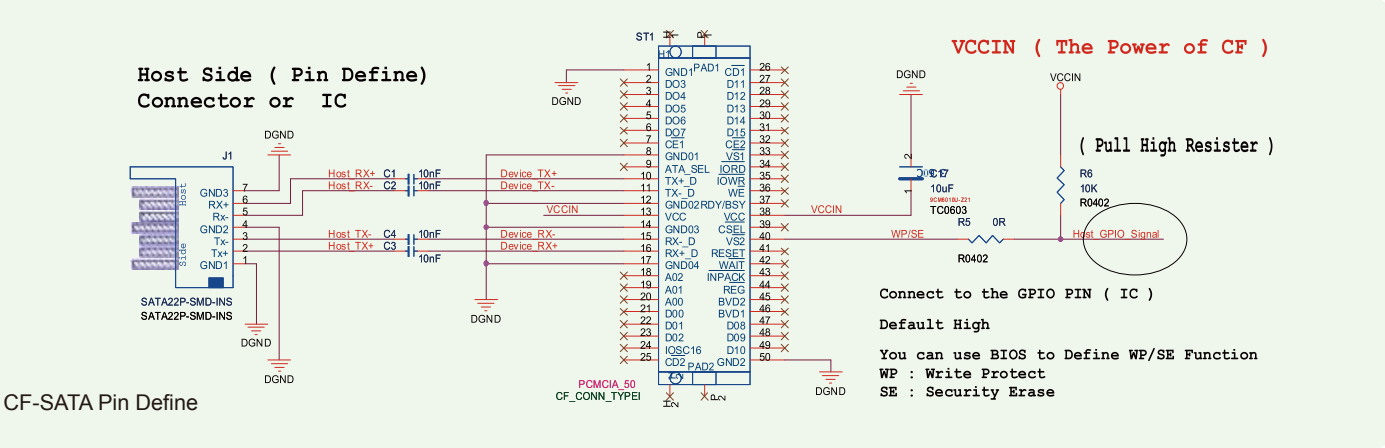
InnoDisk CF-SATA has the same mechanical design with Compact Flash card and complies with Serial ATA by extracting unusual pins from CF50 pin. Hence, Compact Flash card and CF-ATA can share with one CF50pin socket

- Replace solution of CF
- 50pins SATA interface
- Support industrial grade up to 64GB
- High-reliability: anti-shock and vibration
- Excellent data transfer speed
- Support Thermal Sensor
- Optional write protect and security erase function

SATA Eye Pattern

SATA Signal		
Pin	Pure IDE Mode	CF_SATA
1	DGND	DGND
8	DGND	AGND
10	DGND	(From Host to SATA) RX+
11	DGND	From Host to SATA
12	DGND	AGND
13	VCC5	VCC5
14	DGND	AGND
15	DGND	(From Host to SATA) TX-
16	DGND	(From Host to SATA) TX+
17	DGND	AGND
38	VCC5	VCC5
40	VS2 (No connector)	WP(Write Protect) or SE(Security)

CF-SATA INTERFACE



CF-SATA Pin Define

SLC Series

Model Name	CF-SATA	CFast D150Q	InnoLite CFast D150Q
Key Features	1. Replace solution of CF 50pins with SATA interface 2. Excellent data transfer speed 3. Thermal sensor	1.Excellent data transfer speed 2.Compliant with CFast 1.0 standard	1.Excellent data transfer speed 2.Compliant with CFast 1.0 standard
Interface	SATA II 3.0G	SATA II 3.0G	SATA II 3.0G
Connector	50 pin CF Connector	CFast Type	CFast Type
Flash type	iSLC	SLC	MLC
Capacity	4GB~64GB	2GB~32GB	64GB
Max. Channels	4	4	4
Sequential R/W(MB/sec, max.)	120 / 90 MB/sec	130 / 110 MB/sec	110 / 40 MB/sec
Max. Power consumption	1 W (5Vx200mA)	0.76W (3.3Vx230mA)	0.76W (3.3Vx230mA)
Thermal Sensor	✓	✓	✓
H/W Write Protect		✓ (BGA Type)	
ATA Security	✓	✓	✓
S.M.A.R.T.	✓	✓	✓
Dimension (WxLxH)	36.40 x 42.80 x 3.30 mm	36.40 X 42.80 X 3.60mm	36.40 X 42.80 X 3.60 mm
Environment	Vibration: 20G @7~2000Hz, Shock 1500G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 3 million hours		
Standard OP (0°C~+70°C)	DC1M-xxxJ301C***	DC1T-xxxJ30AC***	DC1T-xxxJ30AC***
Wide temp. OP (-40°C~+85°C)	DC1M-xxxJ301W***	DC1T-xxxJ30AW***	DC1T-xxxJ30AW***
Notes	xxx = density (02GB=02G, 04GB=04G, 08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G, 128GB=A28) ***= flash configuration (internal control code)		

Industrial Solution

CF Card & EDC series

Model Name	EDC 4000 Vertical Type	EDC 4000 Horizontal Type	InnoLite EDC
Key Features	1. Plactic housing, dust prevention 2. High compatibility & reliability	1. High compatibility & reliability 2. Supported mounting hole	1. Cost-effective Lifesapn 2. Static wear leveling algorithm 3. Auto ECC function
Connector	PIO & MwDMA mode 0-4 UltraDMA mode 0-4	PIO & MwDMA mode 0-4 UltraDMA mode 0-4	PIO & MwDMA mode 0-4 UltraDMA mode 0-4
Interface	2.00 mm Pin Pitch (2 x 22) 2.54 mm Pin Pitch (2 x 20)	2.00 mm Pin Pitch (2 x 22) 2.54 mm Pin Pitch (2 x 20)	2.00 mm Pin Pitch (2 x 22) 2.54 mm Pin Pitch (2 x 20)
Flash type	SLC	SLC	MLC
Capacity	1GB ~ 16GB	1GB ~ 32GB	4GB~32GB
Max. Channels	2	2	2
Sequential R/W(MB/sec, max.)	40/20	40/20	40/15
Max. Power consumption	0.75 W (5Vx150mA) 0.49 W (3.3	0.75 W (5Vx150mA) 0.49 W (3.3Vx150mA)	0.75 W (5Vx150mA) 0.49 W (3.3Vx150mA)
H/W Write Protect	✓	✓	✓
ATA Security	✓	✓	✓
S.M.A.R.T.	✓	✓	✓
Dimension (WxLxH)	40pin: 27.8x60.2x6.4mm 44pin: 27.8x50.3x5.8mm	40pin(A,B type): 32.4x55x12.87mm 40pin(C,D type): 32.4x55x14.62mm 40pin(E,F type): 32.4x55x18.29mm 44pin(A,B type): 32.4x55x 6.70mm 44pin(C,D type): 32.4x55x 9.58mm 44pin(E,F type): 32.4x55x12.98mm	40pin: 27.8x60.2x6.4mm 44pin: 27.8x50.3x5.8mm
Environment	Vibration: 20G @7~2000Hz, Shock 1500G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 3 million hours		
Standard OP (0°C~+70°C)	DE0H-xxxD31C*** DE4H-xxxD31C***	DE0P%-xxxD31C*** DE4P%-xxxD31C***"	DE0H-XXXD51C(W)*** DE4H-XXXD51C(W)***
Wide temp. OP (-40°C~+85°C)	DE0H-xxxD31W*** DE4H-xxxD31W***	DE0P%-xxxD31W*** DE4P%-xxxD31W***"	
Notes	xxx = density (02GB=02G, 04GB=04G, 08GB=08G, 16GB=16G, 32GB=32G) ***= flash configuration (internal control code) %=Horizontal type(A,B,C,D,E,F)		

iCF 9000	iCF 4000	InnoLite iCF
1. High sustained read and write speed 2. Power cycling failure preventation	1. High compatibility & reliability	1. Cost-effective Lifesapn 2. Static wear leveling algorithm 3. Auto ECC function
PIO & MwDMA mode 0-4 UltraDMA mode 0-7	PIO & MwDMA mode 0-4 UltraDMA mode 0-4	PIO & MwDMA mode 0-4 UltraDMA mode 0-4
50 pin CF Connector	50 pin CF Connector	50 pin CF Connector
SLC	SLC	MLC
2GB~32GB	1GB ~ 32GB	4GB-64GB
4	2	2
95 / 90	40/20	40/15
1.05 W (5Vx210mA)	0.75 W (5Vx150mA)	0.75 W (5Vx150mA)
0.69 W (3.3Vx210mA)	0.49 W (3.3Vx150mA)	0.49 W (3.3Vx150mA)
✓	✓	✓
✓	✓	✓
✓	✓	✓
36.4 x 42.8 x 3.3 mm	36.4 x 42.8 x 3.3 mm	36.4 x 42.8 x 3.3 mm
Vibration: 20G @7~2000Hz, Shock 1500G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 3 million hours		
DC1M-xxxD71C*** DC1M-xxxD71W***	DC1M-xxxD31C*** DC1M-xxxD31W***	DC1M-xxxD51C*** DC1M-xxxD51W***
xxx = density (02GB=02G, 04GB=04G, 08GB=08G, 16GB=16G, 32GB=32G, 64GB=64G, 128GB=A28) ***= flash configuration (internal control code)		

Industrial SD/micro SD card

While SD/micro SD card has been a popular embedded storage device for mobile market, InnoDisk has been developing a more reliable SD/micro SD card that will support ruggedized applications in the embedded fields. Therefore, InnoDisk would like to introduce you the industrial-grade SD/micro SD card built with SLC (Single Level Cell) flash, delivering the most reliable SD/micro SD card with outstanding performance and excellent endurance.

Model Name	Industrial SD Card	Industrial Micro SD Card
Key Features	1. S.M.A.R.T. & i-S.M.A.R.T. 2. Power cycling enhanced	1. S.M.A.R.T. & i-S.M.A.R.T. 2. Power cycling enhanced
Interface	SD 2.0	SD 2.0
Flash type	SLC	SLC
Capacity	512MB~8GB	1GB~4GB
Max. Channels	1	1
Sequential R/W(MB/sec, max.)	20 / 16 (Class 10)	19 / 15 (Class 10)
Max. Power consumption	0.198 W (3.3Vx60mA)	0.165 W (3.3Vx50mA)
H/W Write Protect	✓	
S.M.A.R.T.	✓	✓
Dimension (WxLxH)	24 x 32 x 2.1 mm	11 x 15 x 1 mm
Environment	Vibration: 5G @7~2000Hz, Shock 50G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 3 million hours	
Standard OP (0°C~+70°C)	DS2A-xxxI81C1* DS2A-xxxI81W1*	DS2M-xxxI81AC1** DS2M-xxxI81AW1**
Wide temp. OP (-40°C~+85°C)		
Notes	xxx = density (02GB=02G, 04GB=04G, 08GB=08G) ***= flash configuration (internal control code)	

Features

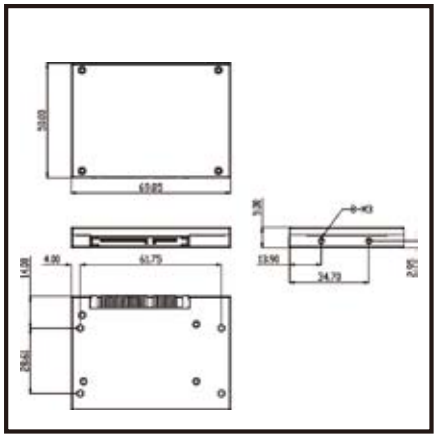
- Compatible with SD 1.x/2.0 specification
- Excellent data transfer rate
- Support wear-leveling algorithm
- Built-in ECC function
- Support Content Protection for Recordable Media (CPRM)
- Support auto-standby, power-off and sleep mode
- Support S.M.A.R.T function

Item	Industrial SD	Consumer SD
Flash Type	SLC / MLC	MLC / TLC
Operation Temperature	-40°C~85°C	-25°C~85°C
Product Longevity Supply (fixed BOM)	Yes	Yes
Sequential R/W Performance (MB/s)	20 / 16	18 / 13
Technical Support Power Cycling Enhanced	Over 3,000 cycles	
S.M.A.R.T	Support	

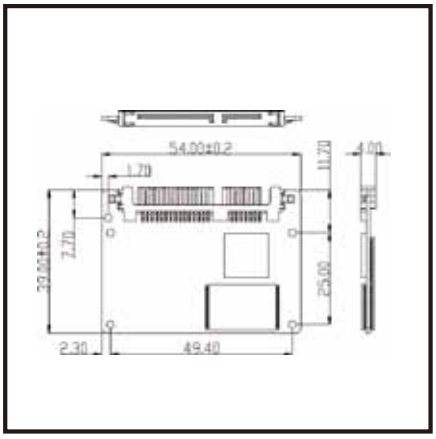
Model Name	USB-EDC (Vertical)	USB-EDC (Horizontal, P type)	USB-EDC (Horizontal, F type)	Industrial USB Drive 2.0
Key Features	1. Plastic housing, dust prevention	1. supported mounting hole	1. supported mounting hole	1. Metal Housing for ESD proof 2. Golden finger with 30µ 3. highly reliable data transfer quality
Interface	USB 2.0	USB 2.0	USB 2.0	USB 2.0
Connector	Type II	2.00 mm Pin Pitch (2 x 5)	2.54 mm Pin Pitch (2 x 5)	USB A-type plug
Flash type	SLC	SLC	SLC	SLC
Capacity	512MB~4GB	512MB~8GB	512MB~8GB	1GB~8GB
Max. Channels	1	2	2	1
Sequential R/W(MB/sec, max.)	19 / 17	32 / 23	32 / 23	19 / 17
Max. Power consumption	0.45 W (5Vx90mA)	0.6 W (5Vx120mA)	0.6 W (5Vx120mA)	0.45 W (5Vx90mA)
H/W Write Protect		Optional	Optional	
Dimension (WxLxH)	15.2 x 34.1 x 6.4 mm	26.65 x 37.8 x 5 mm	26.65 x 37.8 x 8.7 mm	16.58 x 45.88 x 7.56 mm
Environment	Vibration: 5G @7~2000Hz, Shock 50G @ 0.5ms, Storage Temperature: -55°C~+95°C, MTBF: 3 million hours			
Standard OP (0°C~+70°C)	DEUX-xxxU52C**	DEUP-xxxU52C**	DEUF-xxxU52C**	DEUA-xxxI21AC***
Wide temp. OP (-40°C~+85°C)		DEUP-xxxU52W*	DEUF-xxxU52W*	DEUA-xxxI21AW*
Notes	xxx = density (02GB=02G, 04GB=04G, 08GB=08G) ***= flash configuration (internal control code)			

Mechanical Drawing

1.8” SATA D150 SSD



SATA Slim



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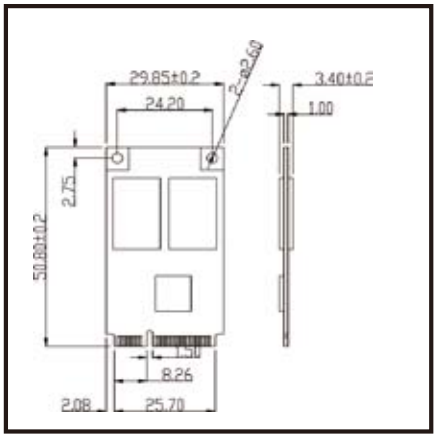
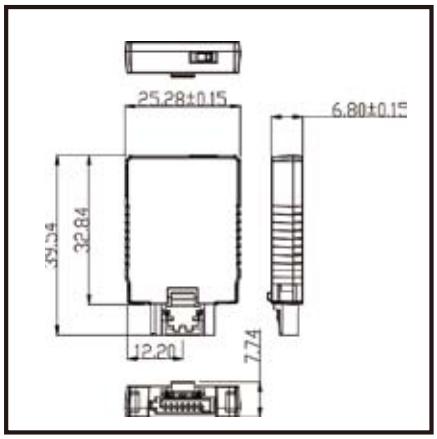


SATADOM D150QV



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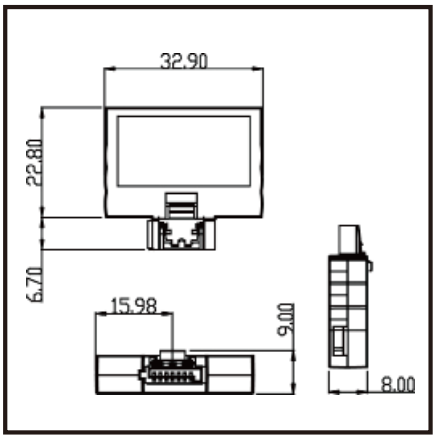

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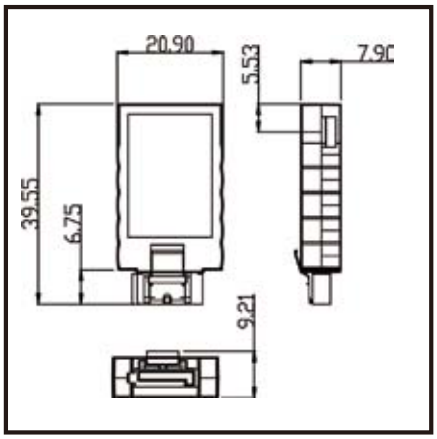

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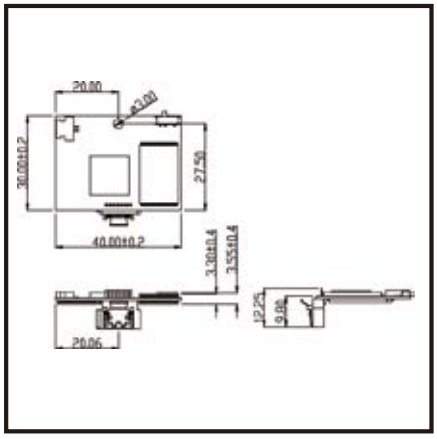

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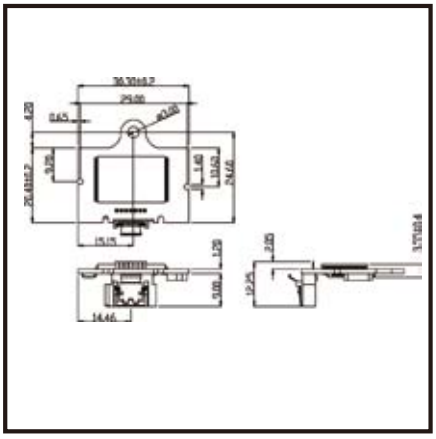

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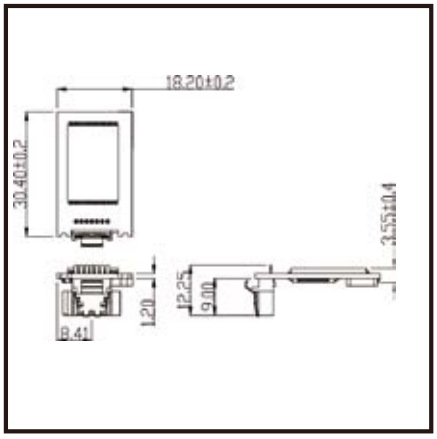

DRAM Module Series

i-DIMM®

i-DIMM series, everything you need for industrial DRAM module solution, is offering in technology of SDRAM, DDR, DDR2, and DDR3 in configuration of unbuffered long-DIMM, unbuffered SO-DIMM, Registered-DIMM, ECC DIMM, and Buffered DIMM. Extraordinary memory and customized memory modules are also available such as Wide Temperature range (-40°C~+85°C) or low profile PCB.

i-DIMM modules have been carefully engineering design under JEDEC standard with standardized compatibility and reliability test in temperature chamber to ensure the best quality of the products. Innodisk also guarantee that only original ic chips are use with long term supply and life time warranty. Not to mention, all i-DIMM has follow the regulation of ROHS, WEEE and ISO9001 production procedures. Innodisk i-DIMM, your best choice of industrial DRAM module.

Commercial Series

SO-DIMM

SDRAM SO-DIMM

Density	Data Rate	IC	IC Brand	Part No.
128MB	133MHz	16Mx16	Promos	M0SB-28PA4C03
128MB	100MHz	16Mx16	Promos	M0SB-28PA4CA2
256MB	133MHz	16Mx16	Promos	M0SB-56PA4C03
256MB	100MHz	16Mx16	Promos	M0SB-56PA4CA2
512MB	133MHz	32Mx8/BGA	Promos	M0SB-12PHXC03
512MB	100MHz	32Mx8/BGA	Promos	M0SB-12PHXCA2

Long-DIMM

SDRAM UDIMM

Density	Data Rate	IC	IC Brand	Part No.
128MB	133MHz	16Mx16	Promos	M0UB-28PA1C03
128MB	100MHz	16Mx16	Promos	M0UB-28PA1CA2
256MB	133MHz	16Mx16	Promos	M0UB-56PA1C03
256MB	100MHz	16Mx16	Promos	M0UB-56PA1CA2
512MB	133MHz	32Mx8	Promos	M0UB-12PH2C03
512MB	100MHz	32Mx8	Promos	M0UB-12PH2CA2

SO-DIMM

DDR SO-DIMM

Density	Data Rate	IC	IC Brand	Part No.
128MB	400MHz	16Mx16	Hynix	M1SF-28HA3C03
128MB	333MHz	16Mx16	Hynix	M1SF-28HA3CDB
256MB	400MHz	32Mx16	Hynix	M1SF-56HB3C03
256MB	333MHz	32Mx16	Hynix	M1SF-56HB3CDB
512MB	400MHz	32Mx16	Hynix	M1SF-12HB3C03
512MB	333MHz	32Mx16	Hynix	M1SF-12HB3CDB
512MB	400MHz	64Mx8	Hynix	M1SF-12HCSC03
512MB	333MHz	64Mx8	Hynix	M1SF-12HCSCDB
1GB	400MHz	64Mx8/BGA	Hynix	M1SF-1GHCVC03
1GB	333MHz	64Mx8/BGA	Hynix	M1SF-1GHCVCDB

Long-DIMM

DDR UDIMM

Density	Data Rate	IC	IC Brand	Part No.
128MB	400MHz	16Mx16	Hynix	M1UF-28HA1C03
128MB	333MHz	16Mx16	Hynix	M1UF-28HA1CDB
256MB	400MHz	32Mx16	Hynix	M1UF-56HB1C03
256MB	333MHz	32Mx16	Hynix	M1UF-56HB1CDB
512MB	400MHz	32Mx16	Hynix	M1UF-12HB1C03
512MB	333MHz	32Mx16	Hynix	M1UF-12HB1CDB
512MB	400MHz	64Mx8	Hynix	M1UF-12HC2C03
512MB	333MHz	64Mx8	Hynix	M1UF-12HC2CDB
1GB	400MHz	64Mx8	Hynix	M1UF-1GHC2C03
1GB	333MHz	64Mx8	Hynix	M1UF-1GHC2CDB

DRAM Module Series

SO-DIMM

DDR2 SO-DIMM

Density	Data Rate	IC	IC Brand	Part No.
256MB	800MHz	32Mx16	Hynix	M2SK-56HB4C06
256MB	667MHz	32Mx16	Hynix	M2SK-56HB4CJ6
256MB	533MHz	32Mx16	Hynix	M2SK-56HB4CH4
512MB	800MHz	64Mx16	Hynix	M2SK-12HD4C06
512MB	667MHz	64Mx16	Hynix	M2SK-12HD4CJ6
512MB	533MHz	64Mx16	Hynix	M2SK-12HD4CH4
512MB	800MHz	64Mx8	Samsung	M2SK-12SC5C06
512MB	667MHz	64Mx8	Samsung	M2SK-12SC5CJ6
512MB	533MHz	64Mx8	Samsung	M2SK-12SC5CH4
1GB	800MHz	64Mx16	Hynix	M2SK-1GHDAC06
1GB	667MHz	64Mx16	Hynix	M2SK-1GHDACJ6
1GB	533MHz	64Mx16	Hynix	M2SK-1GHDACH4
1GB	800MHz	128Mx8	Hynix	M2SK-1GHF5C06
1GB	667MHz	128Mx8	Hynix	M2SK-1GHF5CJ6
1GB	533MHz	128Mx8	Hynix	M2SK-1GHF5CH4
1GB	800MHz	128Mx8	Samsung	M2SK-1GSF5C06
1GB	667MHz	128Mx8	Samsung	M2SK-1GSF5CJ6
1GB	533MHz	128Mx8	Samsung	M2SK-1GSF5CH4
2GB	800MHz	128Mx8	Hynix	M2SK-2GHF6C06
2GB	667MHz	128Mx8	Hynix	M2SK-2GHF6CJ6
2GB	533MHz	128Mx8	Hynix	M2SK-2GHF6CH4
2GB	800MHz	128Mx8	Samsung	M2SK-2GSF6C06
2GB	667MHz	128Mx8	Samsung	M2SK-2GSF6CJ6
2GB	533MHz	128Mx8	Samsung	M2SK-2GSF6CH4

Long-DIMM

DDR2 UDIMM

Density	Data Rate	IC	IC Brand	Part No.
512MB	800MHz	64Mx16	Hynix	M2UK-12HD1C06
512MB	667MHz	64Mx16	Hynix	M2UK-12HD1CJ6
512MB	533MHz	64Mx16	Hynix	M2UK-12HD1CH4
512MB	800MHz	64Mx8	Samsung	M2UK-12SC7C06
512MB	667MHz	64Mx8	Samsung	M2UK-12SC7CJ6
512MB	533MHz	64Mx8	Samsung	M2UK-12SC7CH4
1GB	800MHz	64Mx16	Hynix	M2UK-1GHD1C06
1GB	667MHz	64Mx16	Hynix	M2UK-1GHD1CJ6
1GB	533MHz	64Mx16	Hynix	M2UK-1GHD1CH4
1GB	800MHz	128Mx8	Hynix	M2UK-1GHF7C06
1GB	667MHz	128Mx8	Hynix	M2UK-1GHF7CJ6
1GB	533MHz	128Mx8	Hynix	M2UK-1GHF7CH4
1GB	800MHz	64Mx8	Samsung	M2UK-1GSCQC06
1GB	667MHz	64Mx8	Samsung	M2UK-1GSCQCJ6
1GB	533MHz	64Mx8	Samsung	M2UK-1GSCQCH4
2GB	800MHz	128Mx8	Hynix	M2UK-2GHFQC06
2GB	667MHz	128Mx8	Hynix	M2UK-2GHFQCJ6
2GB	533MHz	128Mx8	Hynix	M2UK-2GHFQCH4

SO-DIMM

DDR3 SO-DIMM

Density	Data Rate	IC	IC Brand	Part No.
1GB	1333MHz	128Mx8	Hynix	M3SN-1GHFCC09
1GB	1066MHz	128Mx8	Hynix	M3SN-1GHFCCM7
1GB	800MHz	128Mx8	Hynix	M3SN-1GHFCCL6
2GB	1333MHz	128Mx8	Hynix	M3SN-2GHFDC09
2GB	1066MHz	128Mx8	Hynix	M3SN-2GHFDCM7
2GB	800MHz	128Mx8	Hynix	M3SN-2GHFDCL6
2GB	1333MHz	256Mx8	Hynix	M3SN-2GHJCC09
2GB	1066MHz	256Mx8	Hynix	M3SN-2GHJCCM7
2GB	800MHz	256Mx8	Hynix	M3SN-2GHJCCL6
4GB	1333MHz	256Mx8	Hynix	M3SN-4GHJDC09
4GB	1066MHz	256Mx8	Hynix	M3SN-4GHJDCM7
4GB	800MHz	256Mx8	Hynix	M3SN-4GHJDCL6

Long-DIMM

DDR3 UDIMM

Density	Data Rate	IC	IC Brand	Part No.
1GB	1333MHz	128Mx8	Hynix	M3UN-1GHFBC09
1GB	1066MHz	128Mx8	Hynix	M3UN-1GHFBCM7
1GB	800MHz	128Mx8	Hynix	M3UN-1GHFBCL6
2GB	1333MHz	128Mx8	Hynix	M3UN-2GHFAC09
2GB	1066MHz	128Mx8	Hynix	M3UN-2GHFACM7
2GB	800MHz	128Mx8	Hynix	M3UN-2GHFACL6
2GB	1333MHz	256Mx8	Hynix	M3UN-2GHJBC09
2GB	1066MHz	256Mx8	Hynix	M3UN-2GHJBCM7
2GB	800MHz	256Mx8	Hynix	M3UN-2GHJBCL6
4GB	1333MHz	256Mx8	Hynix	M3UN-4GHJAC09
4GB	1066MHz	256Mx8	Hynix	M3UN-4GHJACM7
4GB	800MHz	256Mx8	Hynix	M3UN-4GHJACL6

Low-Profile

Low-Profile Long-DIMM

SDRAM DIMM

Density	Data Rate	IC	IC Brand	Part No.
128MB	133MHz	16Mx16	Promos	M0UB-28PA1C03
128MB	100MHz	16Mx16	Promos	M0UB-28PA1CA2
256MB	133MHz	16Mx16	Promos	M0UB-56PA1C03
256MB	100MHz	16Mx16	Promos	M0UB-56PA1CA2

Low-Profile Long-DIMM

DDR UDIMM

Density	Data Rate	IC	IC Brand	Part No.
512MB	400MHz	32Mx16	Hynix	M1UF-12HBRC03
512MB	333MHz	32Mx16	Hynix	M1UF-12HBRCDB

Low-Profile SO-DIMM

DDR2 SO-DIMM

Density	Data Rate	IC	IC Brand	Part No.
512MB	667MHz	32Mx16	Promos	M2SJ-12PBHC05
512MB	533MHz	32Mx16	Promos	M2SJ-12PBHCH4
512MB	800MHz	32Mx16	Hynix	M2SK-12HBHC06
512MB	667MHz	32Mx16	Hynix	M2SK-12HBHCJ6
512MB	533MHz	32Mx16	Hynix	M2SK-12HBHCH4
1GB	800MHz	64Mx16	Hynix	M2SK-1GHDHC06
1GB	667MHz	64Mx16	Hynix	M2SK-1GHDHCJ6
1GB	533MHz	64Mx16	Hynix	M2SK-1GHDHCH4

Low-Profile Long-DIMM

DDR2 UDIMM

Density	Data Rate	IC	IC Brand	Part No.
1GB	800MHz	128Mx8	Hynix	M2UK-1GHFMC06
1GB	667MHz	128Mx8	Hynix	M2UK-1GHFMCJ6
1GB	533MHz	128Mx8	Hynix	M2UK-1GHFMCH4
1GB	800MHz	64Mx8	Samsung	M2UK-1GSC3C06
1GB	667MHz	64Mx8	Samsung	M2UK-1GSC3CJ6
1GB	533MHz	64Mx8	Samsung	M2UK-1GSC3CH4
2GB	800MHz	128Mx8	Hynix	M2UK-2GHF3C06
2GB	667MHz	128Mx8	Hynix	M2UK-2GHF3CJ6
2GB	533MHz	128Mx8	Hynix	M2UK-2GHF3CH4

Low-Profile Long-DIMM

DDR3 UDIMM

Density	Data Rate	IC	IC Brand	Part No.
1GB	1333MHz	128Mx8	Hynix	M3UN-1GHFNC09
1GB	1066MHz	128Mx8	Hynix	M3UN-1GHFNCM7
1GB	800MHz	128Mx8	Hynix	M3UN-1GHFNCL6
2GB	1333MHz	128Mx8	Hynix	M3UN-2GHFGC09
2GB	1066MHz	128Mx8	Hynix	M3UN-2GHFGCM7
2GB	800MHz	128Mx8	Hynix	M3UN-2GHFGCL6
2GB	1333MHz	256Mx8	Hynix	M3UN-2GHJNC09
2GB	1066MHz	256Mx8	Hynix	M3UN-2GHJNCM7
2GB	800MHz	256Mx8	Hynix	M3UN-2GHJNCL6
4GB	1333MHz	256Mx8	Hynix	M3UN-4GHJGC09

W/ECC Series

W/ECC Long-DIMM

DDR DIMM

Density	Data Rate	IC	IC Brand	Part No.
256MB	400MHz	32Mx8	Samsung	M1CF-56SHWC03
256MB	333MHz	32Mx8	Samsung	M1CF-56SHWCDB
1GB	400MHz	64Mx8	Hynix	M1CF-1GHC2C03
1GB	333MHz	64Mx8	Hynix	M1CF-1GHC2CDB

W/ECC SO-DIMM

DDR2 SO-DIMM

Density	Data Rate	IC	IC Brand	Part No.
2GB	667MHz	128Mx8	Promos	M2PJ-2GPF8W05
2GB	533MHz	128Mx8	Promos	M2PJ-2GPF8WH4

W/ECC Long-DIMM

DDR2 DIMM

Density	Data Rate	IC	IC Brand	Part No.
1GB	800MHz	128Mx8	Hynix	M2CK-1GHFRC06
1GB	667MHz	128Mx8	Hynix	M2CK-1GHFRCJ6
1GB	533MHz	128Mx8	Hynix	M2CK-1GHFRCH4
1GB	800MHz	128Mx8	Promos	M2CK-1GPFRW06
1GB	667MHz	128Mx8	Promos	M2CK-1GPFRWJ6
1GB	533MHz	128Mx8	Promos	M2CK-1GPFRWH4
2GB	800MHz	128Mx8	Hynix	M2CK-2GHF9C06
2GB	667MHz	128Mx8	Hynix	M2CK-2GHF9CJ6
2GB	533MHz	128Mx8	Hynix	M2CK-2GHF9CH4

W/ECC SO-DIMM

DDR3 SO-DIMM

Density	Data Rate	IC	IC Brand	Part No.
1GB	1333MHz	128Mx8	Hynix	M3DN-1GHF2C09
1GB	1066MHz	128Mx8	Hynix	M3DN-1GHF2CM7
1GB	800MHz	128Mx8	Hynix	M3DN-1GHF2CL6
1GB	1333MHz	128Mx8	Micron	M3DN-1GMF2W09
1GB	1066MHz	128Mx8	Micron	M3DN-1GMF2WM7
1GB	800MHz	128Mx8	Micron	M3DN-1GMF2WL6
2GB	1333MHz	256Mx8	Hynix	M3DN-2GHJ2C09
2GB	1066MHz	256Mx8	Hynix	M3DN-2GHJ2CM7
2GB	800MHz	256Mx8	Hynix	M3DN-2GHJ2CL6
2GB	1333MHz	256Mx8	Micron	M3DN-2GMJ2W09
2GB	1066MHz	256Mx8	Micron	M3DN-2GMJ2WM7
2GB	800MHz	256Mx8	Micron	M3DN-2GMJ2WL6
4GB	1333MHz	256Mx8	Hynix	M3DN-4GHJ6C09
4GB	1066MHz	256Mx8	Hynix	M3DN-4GHJ6CM7
4GB	800MHz	256Mx8	Hynix	M3DN-4GHJ6CL6
4GB	1333MHz	256Mx8	Micron	M3DN-4GMJ6W09
4GB	1066MHz	256Mx8	Micron	M3DN-4GMJ6WM7
4GB	800MHz	256Mx8	Micron	M3DN-4GMJ6WL6

W/ECC Long-DIMM

DDR3 DIMM

Density	Data Rate	IC	IC Brand	Part No.
1GB	1333MHz	128Mx8	Hynix	M3CN-1GHF1C09
1GB	1066MHz	128Mx8	Hynix	M3CN-1GHF1CM7
1GB	800MHz	128Mx8	Hynix	M3CN-1GHF1CL6
2GB	1333MHz	128Mx8	Hynix	M3CN-2GHFHC09
2GB	1066MHz	128Mx8	Hynix	M3CN-2GHFHCM7
2GB	800MHz	128Mx8	Hynix	M3CN-2GHFHCL6
2GB	1333MHz	256Mx8	Hynix	M3CN-2GHJ1C09
2GB	1066MHz	256Mx8	Hynix	M3CN-2GHJ1CM7
2GB	800MHz	256Mx8	Hynix	M3CN-2GHJ1CL6
4GB	1333MHz	256Mx8	Hynix	M3CN-4GHJHC09
4GB	1066MHz	256Mx8	Hynix	M3CN-4GHJHCM7
4GB	800MHz	256Mx8	Hynix	M3CN-4GHJHCL6

Wide Temperature Series

-40℃~+85℃ SO-DIMM 30um Gold Finger

SDRAM SO-DIMM

Density	Data Rate	IC	IC Brand	Part No.
128MB	133MHz	16Mx16	Promos	M0SB-28PA4I03
128MB	100MHz	16Mx16	Promos	M0SB-28PA4IA2
256MB	133MHz	16Mx16	Promos	M0SB-56PA4I03
256MB	100MHz	16Mx16	Promos	M0SB-56PA4IA2

-40℃~+85℃ Long-DIMM 30um Gold Finger

SDRAM UDIMM

Density	Data Rate	IC	IC Brand	Part No.
256MB	133MHz	16Mx16	Promos	M0UB-56PA1I03
256MB	100MHz	16Mx16	Promos	M0UB-56PA1IA2

-40℃~+85℃ SO-DIMM 30um Gold Finger

DDR SO-DIMM

Density	Data Rate	IC	IC Brand	Part No.
128MB	400MHz	16Mx16	Promos	M1SF-28PA3I03
128MB	333MHz	16Mx16	Promos	M1SF-28PA3IDB
256MB	400MHz	32Mx16	Promos	M1SF-56PB3I03
256MB	333MHz	32Mx16	Promos	M1SF-56PB3IDB
512MB	400MHz	32Mx16	Promos	M1SF-12PB3I03
512MB	333MHz	32Mx16	Promos	M1SF-12PB3IDB
512MB	400MHz	64Mx8	Promos	M1SF-12PC4I03
512MB	333MHz	64Mx8	Promos	M1SF-12PC4IDB
1GB	400MHz	64Mx8/BGA	Promos	M1SF-1GPCXI03
1GB	333MHz	64Mx8/BGA	Promos	M1SF-1GPCXIDB

-40℃~+85℃ Long-DIMM 30um Gold Finger

DDR UDIMM

Density	Data Rate	IC	IC Brand	Part No.
128MB	400MHz	16Mx16	Promos	M1UF-28PA1I03
128MB	333MHz	16Mx16	Promos	M1UF-28PA1IDB
256MB	400MHz	32Mx16	Promos	M1UF-56PB1I03
256MB	333MHz	32Mx16	Promos	M1UF-56PB1IDB
512MB	400MHz	32Mx16	Promos	M1UF-12PB1I03
512MB	333MHz	32Mx16	Promos	M1UF-12PB1IDB
512MB	400MHz	64Mx8	Promos	M1UF-12PC2I03
512MB	333MHz	64Mx8	Promos	M1UF-12PC2IDB
1GB	400MHz	64Mx8	Promos	M1UF-1GPC2I03
1GB	333MHz	64Mx8	Promos	M1UF-1GPC2IDB

-40℃~+85℃ SO-DIMM 30um Gold Finger

DDR2 SO-DIMM

Density	Data Rate	IC	IC Brand	Part No.
512MB	667MHz	32Mx16	Promos	M2SJ-12PBHI05
512MB	533MHz	32Mx16	Promos	M2SJ-12PBHIH4
512MB	667MHz	64Mx8	Promos	M2SJ-12PC5I05
512MB	533MHz	64Mx8	Promos	M2SJ-12PC5IH4
1GB	667MHz	64Mx8	Promos	M2SJ-1GPC6I05
1GB	533MHz	64Mx8	Promos	M2SJ-1GPC6IH4
1GB	800MHz	64Mx16	Promos	M2SK-1GPDHI06
1GB	667MHz	64Mx16	Promos	M2SK-1GPDHIJ6
1GB	533MHz	64Mx16	Promos	M2SK-1GPDHIH4
1GB	800MHz	128Mx8	Promos	M2SK-1GPF5I06
1GB	667MHz	128Mx8	Promos	M2SK-1GPF5IJ6
1GB	533MHz	128Mx8	Promos	M2SK-1GPF5IH4
1GB	800MHz	128Mx8	Micron	M2SK-1GMF5I05
1GB	667MHz	128Mx8	Micron	M2SK-1GMF5IJ5
1GB	533MHz	128Mx8	Micron	M2SK-1GMF5IH4
2GB	800MHz	128Mx8	Promos	M2SK-2GPF2I06
2GB	667MHz	128Mx8	Promos	M2SK-2GPF2IJ6
2GB	533MHz	128Mx8	Promos	M2SK-2GPF2IH4
2GB	800MHz	128Mx8	Micron	M2SK-2GMF6I05
2GB	667MHz	128Mx8	Micron	M2SK-2GMF6IJ5
2GB	533MHz	128Mx8	Micron	M2SK-2GMF6IH4
4GB	800MHz	256Mx8	Micron	M2SK-4GMJ6I05
4GB	667MHz	256Mx8	Micron	M2SK-4GMJ6IJ5
4GB	533MHz	256Mx8	Micron	M2SK-4GMJ6IH4

-40℃~+85℃ Long-DIMM 30um Gold Finger

DDR2 UDIMM

Dens ity	Data Rate	IC	IC Brand	Part No.
512MB	667MHz	64Mx8	Promos	M2UJ-12PC7I05
512MB	533MHz	64Mx8	Promos	M2UJ-12PC7IH4
1GB	667MHz	64Mx8	Promos	M2UJ-1GPCQI05
1GB	667MHz	64Mx8	Promos	M2UJ-1GPCQIJ5
1GB	667MHz	64Mx8	Promos	M2UJ-1GPC3I05
1GB	533MHz	64Mx8	Promos	M2UJ-1GPC3
1GB	800MHz	128Mx8	Promos	M2UK-1GPF7I06
1GB	667MHz	128Mx8	Promos	M2UK-1GPF7IJ6
1GB	533MHz	128Mx8	Promos	M2UK-1GPF7IH4
1GB	800MHz	128Mx8	Micron	M2UK-1GMF7I05
1GB	667MHz	128Mx8	Micron	M2UK-1GMF7IJ5
1GB	533MHz	128Mx8	Micron	M2UK-1GMF7IH4
2GB	800MHz	128Mx8	Promos	M2UK-2GPFQI06
2GB	667MHz	128Mx8	Promos	M2UK-2GPFQIJ6
2GB	533MHz	128Mx8	Promos	M2UK-2GPFQIH4
2GB	800MHz	128Mx8	Micron	M2UK-2GMFQI05
2GB	667MHz	128Mx8	Micron	M2UK-2GMFQIJ5
2GB	533MHz	128Mx8	Micron	M2UK-2GMFQIH4

DRAM Module Series

Wide Temperature Series

-40℃~+85℃ | SO-DIMM | 30um Gold Finger

DDR3 SO-DIMM

Density	Data Rate	IC	IC Brand	Part No.
1GB	1333MHz	128Mx8	Micron	M3SN-1GMFCI09
1GB	1066MHz	128Mx8	Micron	M3SN-1GMFCIM7
1GB	800MHz	128Mx8	Micron	M3SN-1GMFCIL6
2GB	1333MHz	128Mx8	Micron	M3SN-2GMFDI09
2GB	1066MHz	128Mx8	Micron	M3SN-2GMFDIM7
2GB	800MHz	128Mx8	Micron	M3SN-2GMFDIL6
2GB	1333MHz	256Mx8	Micron	M3SN-2GMJCI09
2GB	1066MHz	256Mx8	Micron	M3SN-2GMJCIM7
2GB	800MHz	256Mx8	Micron	M3SN-2GMJCIL6
4GB	1333MHz	256Mx8	Micron	M3SN-4GMJDI09
4GB	1066MHz	256Mx8	Micron	M3SN-4GMJDIM7
4GB	800MHz	256Mx8	Micron	M3SN-4GMJDIL6

-40℃~+85℃ | Long-DIMM | 30um Gold Finger

DDR3 UDIMM

Density	Data Rate	IC	IC Brand	Part No.
1GB	1333MHz	128Mx8	Micron	M3UN-1GMFBI09
1GB	1066MHz	128Mx8	Micron	M3UN-1GMFBIM7
1GB	800MHz	128Mx8	Micron	M3UN-1GMFBIL6
2GB	1333MHz	128Mx8	Micron	M3UN-2GMFAI09
2GB	1066MHz	128Mx8	Micron	M3UN-2GMFAIM7
2GB	800MHz	128Mx8	Micron	M3UN-2GMFAIL6
2GB	1333MHz	256Mx8	Micron	M3UN-2GMJBI09
2GB	1066MHz	256Mx8	Micron	M3UN-2GMJBIM7
2GB	800MHz	256Mx8	Micron	M3UN-2GMJBIL6
4GB	1333MHz	256Mx8	Micron	M3UN-4GMJAI09

32 Bit Series

SO-DIMM | 32 Bit

DDR2 SO-DIMM

Density	Data Rate	IC	IC Brand	Part No.
256MB	533MHz	32Mx16	Promos	M2BK-28PB4CH4
512MB	533MHz	32Mx16	Samsung	M2BK-28SB4CH4
1GB	800MHz	128Mx8	Promos	M2BK-1GHFOC06
1GB	800MHz	128Mx8	Promos	M2BK-1GHFWC06
1GB	800MHz	128Mx8	Promos	M2BK-1GPFWW06

Thermal Sensor Series

SO-DIMM | Thermal Sensor

DDR3 SO-DIMM

Density	Data Rate	IC	IC Brand	Part No.
2GB	1600MHz	256Mx8	Micron	M3SP-2GMJCL0C-(X)T
2GB	800MHz	256Mx8	Micron	M3SN-2GMJCIL6-(X)T
2GB	800MHz	128Mx8	Hynix	M3SN-2GHFDCL6-(X)T
2GB	1333MHz	256Mx8	Hynix	M3SN-2GHJCC09-(X)T
4GB	1333MHz	256Mx8	Hynix	M3SN-4GHJDC09-(X)T
4GB	1600MHz	256Mx8	Micron	M3SP-4GMJDL0C-(X)T

Long-DIMM | Thermal Sensor

DDR3 UDIMM

Density	Data Rate	IC	IC Brand	Part No.
1GB	1333MHz	128Mx8	Hynix	M3UN-1GHF1C09-(X)T
2GB	1333MHz	256Mx8	Hynix	M3UN-2GHJ1C09-(X)T
4GB	1333MHz	256Mx8	Hynix	M3UN-4GHJ3C09-(X)T
4GB	1333MHz	256Mx8	Hynix	M3CN-4GHJ3C09-(X)T

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