



# CPU Cooler *High performance thermal solutions*

Choosing the wrong CPU cooler for a system can lead to serious overheating, resulting in system shutdown and potential damage to CPUs.

For industrial applications, the following CPU coolers fit the needs of various operating environments, where different levels of cooling are required.



| IEI Special Desktop Core™ CPU Cooler |  |                    |   |  |                    |
|--------------------------------------|--|--------------------|---|--|--------------------|
|                                      |  |                    |   |  |                    |
| Where Used                           | For spacial models: SPCIE-C2260, PCIE-Q870, PCIE-H810, WSB-H810, KINO-AQ870        |                    |   |  |                    |
| Model Name                           | CF-1150SA-R10  | CF-1150SB-R11      | CF-1150SC-R20   | CF-1150SE-R11                                      | CF-1150SF-R10      |
| Description                          | IEI customized cooler for LGA1150 Intel® CPU, RoHS                                 |                    | IEI customized cooler for LGA1150 Intel® CPU, 1U chassis compatible, RoHS | IEI customized cooler for LGA1150 Intel® CPU, RoHS |                    |
| CPU Solution                         | Intel® Core™ i7/i5   | Intel® Core™ i7/i5 | Intel® Core™ i7/i5  | Intel® Core™ i7/i5                                 | Intel® Core™ i7/i5 |
| Socket Solution                      | LGA1150/LGA1151  | LGA1150/LGA1151    | LGA1150/LGA1151   | LGA1150/LGA1151                                    | LGA1150/LGA1151    |
| Dimensions (mm)                      | 83 x 83 x 57   | 96 x 82 x 60       | 105 x 80 x 23.7   | 107 x 70 x 60                                      | 107 x 70 x 35      |
| Material                             | Al   | Al                 | Cu  | Cu   | Al                 |
| Bearing Type                         | Ball And sleeve  | Two-ball           | Two-ball  | Two-ball   | Two-ball           |
| Capability (Watt)                    | <b>95 W</b>  | <b>65 W</b>        | <b>65 W</b>   | <b>95 W</b>  | <b>54 W</b>        |
| Fan Speed (RPM)                      | 4200   | 3500               | 5500  | 4200   | 4500               |
| Noise Level (dBA)                    | 40   | 41                 | 55  | 36   | 39                 |
| Life Expectancy (hrs)                | 40,000   | 50,000             | 50,000  | 50,000   | 50,000             |
| Weight                               | 330 g  | 286 g              | 406 g   | 812 g  | 220 g              |




| Intel® Standard Desktop Core™ CPU Cooler |  |  |                       |   |   |
|--|--|--|-----------------------|---|---|
|  |  |  |                       |   |   |
|  | LGA115X (LGA1150/LGA1151/LGA1155/LGA1156)  |  |                       |   |   |
| Model Name                               | CF-115XA-R10   | CF-115XC-R10                               | CF-115XD-R10          | CF-115XE-R10                                      | CF-115XF-R10                                      |
| Description                              | High performance LGA1155/LGA1156 cooler kit, 1U chassis compatible                   | Low power LGA1155/LGA1156 cooler Kit, RoHS |                       | High performance LGA1155/LGA1156 CPU cooler, RoHS | High performance LGA1155/LGA1156 CPU cooler, RoHS |
| CPU Solution                             | Intel® Core™ i5/i3   | Intel® Core™ i5/i3                         | Intel® Core™ i7/i5/i3 | Intel® Xeon®/Core™ i7/i5/i3                       | Intel® Xeon®/Core™ i7/i5/i3                       |
| Socket Solution                          | LGA115X (LGA1150/LGA1151/LGA1155/LGA1156)  |  |                       |   |   |
| Dimensions (mm)                          | 89 x 92.6 x 27.4   | 94.34*94.34*43.4                           | 94.34*94.34*43.4      | 91 x 91 x 84                                      | 90 x 90 x 69.3                                    |
| Material                                 | Cu   | Al   | Cu+Al                 | Al  | Al  |
| Bearing Type                             | Two-ball   | Two Ball                                   | Two Ball              | Ball and Sleeve                                   | Two Ball  |
| Capability (Watt)                        | <b>73 W</b>  | <b>45W</b>                                 | <b>65W</b>            | <b>95 W</b>                                       | <b>95 W</b>                                       |
| Fan Speed (RPM)                          | 5500   | 3600                                       | 3600                  | 4200  | 4200  |
| Noise Level (dBA)                        | 51   | 40   | 40                    | 40  | 48  |
| Life Expectancy (hrs)                    | 50,000   | 70000                                      | 70000                 | 40,000  | 50,000  |
| Weight                                   | 422 g  | 226g                                       | 260g                  | 301 g   | 432   |

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For industrial applications, the following CPU coolers fit the needs of various operating environments, where different levels of cooling are required.

| Desktop CPU Cooler    |   |   |
|-----------------------|---|---|
|                       |  |  |
| LGA775 Cooler         |   |   |
| Model Name            | CF-775B-RS-R11  | CF-520-RS-R11   |
| Description           | High performance 1U LGA 775 CPU cooler, with 7010 fan, RoHS                       | High performance LGA 775 CPU cooler, RoHS   |
| CPU Solution          | Intel® Core™2 Duo   | Intel® Core™2 Duo   |
| Socket Solution       | LGA 775   | LGA 775   |
| Dimensions (mm)       | 80.5 x 81 x 28.2  | 115 x 115 x 67  |
| Material              | Cu  | Aluminum alloy  |
| Bearing Type          | Two-ball  | Two-ball  |
| Capability (Watt)     | <b>90 W</b>   | <b>115 W</b>  |
| Fan Speed (RPM)       | 4250  | 4500  |
| Noise Level (dBA)     | 40  | 47.5~51.5   |
| Life Expectancy (hrs) | 50,000  | 70,000  |
| Weight                | 600 g   | 635 g   |

| CPU Cooler            |   | Mobile Core™ i7 CPU Cooler  |   |
|-----------------------|---|---|---|
|                       |  |  |  |
| Blower                |   | PGA989  |   |
| Model Name            | BF-02-RS  | CF-989A-RS-R12  | CF-989B-RS-R11  |
| Description           | Bracket cooling fan, RoHS   | High performance Socket-G (PGA989) smart fan CPU cooler, RoHS                       | High performance Socket-G (PGA989) CPU cooler, aluminum, RoHS                         |
| CPU Solution          | Bracket cooling fan   | Intel® Core™ i7/i5/i3   | Intel® Core™ i7/i5/i3   |
| Socket Solution       |   | PGA989  | PGA989  |
| Dimensions (mm)       | 112 x 90 x 21   | 60 x 60 x 27.5  | 60 x 60 x 27.5  |
| Material              | Plastic   | Cu  | Al  |
| Bearing Type          | One-ball  | Two-ball  | Two-ball  |
| Capability (Watt)     |   | <b>55 W</b>   | <b>50 W</b>   |
| Fan Speed (RPM)       | 2800  | 4800  | 4800  |
| Noise Level (dBA)     | 28  | 40  | 40  |
| Life Expectancy (hrs) | 45,000  | 50,000  | 50,000  |
| Weight                | 107.5 g   | 255 g   | 26 g  |

# Industrial SATADOM Series

## ■ The world's smallest high-speed SATADOM

The revolutionary form factor of SATADOM has been widely adopted by industrial and embedded system makers across the globe. With in-house designed SATA 6Gb/s controller, the SATADOM provides you not only the fastest read/write speed but also stable data transfer. Moreover, to address customer's challenging requirements, we have released a series of the smallest SATADOM which fits various kinds of compact systems. Here, we recommend five models by different heights. For the low-profile 1U system use, you can choose SL 3SE, SH 3SE, and SH 3ME.

## ■ SATA 6Gb/s Solutions

### Powerful Performance

SATA 6Gb/s devices have 191% higher performance than SATA 3Gb/s devices.

### Less Power Consumption






The advanced idle mode helps to save up to 35% of energy when system stays in idle, therefore the battery runtime increases and the system requests less power consumption than SATA 3Gb/s.

### Greater Reliability

The in-house designed SATA 6Gb/s controller offers an excellent signal quality during data transfer, enhancing the system compatibility and stability.

### Easier Use

Along with upgrading to SATA 6Gb/s, the one-touch activation mode of iSMART 3.2 can save hours of setup and maintenance time.

| Model Name             | IFM-3010V  | IFM-3320M  | IFM-3010L   | IFM-3010H  | IFM-3020-HM  |   |
|------------------------|--|--|---|--|--|---|
| Picture                |                           |    |   |   |                             |   |
| Key Features           | <ol style="list-style-type: none"> <li>Vertical version</li> <li>Anti-vibration mechanical design</li> </ol> | <ol style="list-style-type: none"> <li>Vertical version</li> <li>Writing protection</li> <li>Anti-vibration mechanical design</li> </ol> | <ol style="list-style-type: none"> <li>SATA 6Gb/s interface</li> <li>iSMART disk health monitoring</li> <li>Intelligent error recovery system</li> <li>Excellent data transfer speed</li> <li>Zero mechanical interference</li> <li>Anti-vibration mechanical design</li> </ol> | <ol style="list-style-type: none"> <li>Horizontal version</li> <li>Only exposes 12mm height on the motherboard after installation</li> </ol> | <ol style="list-style-type: none"> <li>Low profile horizontal design</li> <li>High IOPS</li> </ol>               |   |
| Interface              | SATA 6Gb/s   | SATA 6Gb/s   | SATA 6Gb/s  | SATA 6Gb/s   | SATA 6Gb/s   |   |
| Flash Type             | SLC  | MLC  | SLC   | SLC  | MLC  |   |
| Capacity (GB)          | 1GB~32GB   | 8GB~128GB  | 1GB~32GB  | 1GB~32GB   | 8GB~128GB  |   |
| Sequential R/W         | 300/130  | 355/135  | 300/130   | 300/130  | 200/75   |   |
| Max. Power Consumption | 0.65W (5V x 130mA)   | 1W (5V x 200mA)  | 0.65A (5V x 130mA)  | 0.65W (5V x 130mA)   | 1.8W (5V x 370mA)  |   |
| Thermal Sensor         | Wide temperature model only  | Wide temperature model only  | Wide temperature model only   | Wide temperature model only  | Wide temperature model only  |   |
| ATA Security           | Yes  | Yes  | Yes   | Yes  | Yes  |   |
| S.M.A.R.T              | Yes  | Yes  | Yes   | Yes  | Yes  |   |
| Dimensions (mm)        | 20.9 x 39.5 x 7.9  | 25.3 x 41.5 x 6.8  | 32.5 x 29.5 x 8.0   | 18.1 x 30.5 x 12   | 18.0 x 30.3 x 12.5   |   |
| Environment            | Vibration: 20G@7~2000Hz, Shock: 1500G@0.5ms, Storage Temperature: -55°C ~ +95°C, MTBF: >3 million hours      |  |   |  |  |   |
| P/N                    | Standard (0°C~+70°C)   | IFM-3010IS-1GB<br>IFM-3010IS-2GB<br>IFM-3010IS-4GB<br>IFM-3010IS-8GB<br>IFM-3010IS-16GB<br>IFM-3010IS-32GB                               | IFM-3320IM-8GB-R21<br>IFM-3320IM-16GB-R21<br>IFM-3320IM-32GB-R21<br>IFM-3320IM-64GB-R21<br>IFM-3320IM-128GB-R21   | IFM-3010IL-1GB<br>IFM-3010IL-2GB<br>IFM-3010IL-4GB<br>IFM-3010IL-8GB<br>IFM-3010IL-16GB<br>IFM-3010IL-32GB                                   | IFM-3010IPS-1GB<br>IFM-3010IPS-2GB<br>IFM-3010IPS-4GB<br>IFM-3010IPS-8GB<br>IFM-3010IPS-16GB<br>IFM-3010IPS-32GB | IFM-3020IPSM-8GB-R21<br>IFM-3020IPSM-16GB-R21<br>IFM-3020IPSM-32GB-R21<br>IFM-3020IPSM-64GB-R21<br>IFM-3020IPSM-128GB-R21 |
|                        | Wide Temperature (-40°C~+85°C)   | IFM-3010WS-1GB<br>IFM-3010WS-2GB<br>IFM-3010WS-4GB<br>IFM-3010WS-8GB<br>IFM-3010WS-16GB<br>IFM-3010WS-32GB                               | IFM-3320WM-8GB-R21<br>IFM-3320WM-16GB-R21<br>IFM-3320WM-32GB-R21<br>IFM-3320WM-64GB-R21<br>IFM-3320WM-128GB-R21   | IFM-3010WL-1GB<br>IFM-3010WL-2GB<br>IFM-3010WL-4GB<br>IFM-3010WL-8GB<br>IFM-3010WL-16GB<br>IFM-3010WL-32GB                                   | IFM-3010WPS-1GB<br>IFM-3010WPS-2GB<br>IFM-3010WPS-4GB<br>IFM-3010WPS-8GB<br>IFM-3010WPS-16GB<br>IFM-3010WPS-32GB | IFM-3020WPSM-8GB-R21<br>IFM-3020WPSM-16GB-R21<br>IFM-3020WPSM-32GB-R21<br>IFM-3020WPSM-64GB-R21<br>IFM-3020WPSM-128GB-R21 |

# Industrial SSD Series

## Breakthrough Technology of IFD-2530ISM & IFD-2530ISMD

With the release of the brand-new designed firmware algorithm, IFD-2530ISM and IFD-2530ISMD offer outstanding read and write performance and extended lifespan, and are compliant with the JEDEC 219 specifications. In addition, with the iData Guard Technology, IFD-2530ISM and IFD-2530ISMD support data integrity in the event of abnormal power failure. The wide operating temperature ranges from -40 °C to 85 °C.



## Features of IFD-2530ISM & IFD-2530ISMD

IFD-2530ISM and IFD-2530ISMS provide a wide range demand of capacity. IFD-2530ISMD even supports large capacity up to 2TB.

|                                      | IFD-2530ISM                                | IFD-2530ISMD                               |
|--------------------------------------|--|--|
| DRAM-less Design                     | •  |  |
| Price                                | •  |  |
| Random Transfer Performance          | •<br>R: 31,000 IOPS/W: 40,000 IOPS (128GB) | •<br>R: 70,000 IOPS/W: 64,000 IOPS (128GB) |
| Easy to Design in Small Form Factors | •  |  |
| Low Power Consumption                | •  | •  |
| TRIM                                 | •  | •  |

| Model Name             | 2.5" SATA 6Gb/s IFD-2520IS  | 2.5" SATA 6Gb/s IFD-2530ISMD  | 2.5" SATA 6Gb/s IFD-2530AM  |
|------------------------|---|---|---|
| Picture                |   |   |   |
| Key Features           | <ol style="list-style-type: none"> <li>Intelligent error recovery system</li> <li>Excellent data transfer speed</li> <li>Enhanced power cycling management</li> </ol> | <ol style="list-style-type: none"> <li>EverGreen L<sup>2</sup> architecture</li> <li>7mm height mechanical design</li> <li>Excellent random performance</li> </ol>                                    | <ol style="list-style-type: none"> <li>7mm height mechanical design</li> <li>Low power consumption</li> <li>Budget-friendly MLC-based solution</li> </ol>   |
| Interface              | SATA 6Gb/s  | SATA 6Gb/s  | SATA 6Gb/s  |
| Flash Type             | SLC   | MLC   | MLC   |
| Capacity (GB)          | 8GB~128GB   | 8GB~1TB   | 8GB~256GB   |
| Sequential R/W         | 510/340   | 520/450   | 430/190   |
| Max. Power Consumption | 2.2W (5V x 450mA)   | 5W (5V x 1A)  | 1.7W (5V x 335 mA)  |
| Thermal Sensor         | Wide temperature model only   | Wide temperature model only   | Wide temperature model only   |
| ATA Security           | Yes   | Yes   | Yes   |
| S.M.A.R.T              | Yes   | Yes   | Yes   |
| Dimensions (mm)        | 69.8 x 100.1 x 9.3  | 70.0 x 100.0 x 6.8  | 69.8 x 100.1 x 7.0  |
| Environment            | Vibration: 20G@7~2000Hz, Shock: 1500G@0.5ms, Storage Temperature: -55°C ~ +95°C, MTBF: >3 million hours   |   |   |
| P/N                    | Standard (0°C~+70°C)  | IFD-2530ISMD-8GB-R20<br>IFD-2530ISMD-16GB-R20<br>IFD-2530ISMD-32GB-R20<br>IFD-2530ISMD-64GB-R20<br>IFD-2530ISMD-128GB-R20<br>IFD-2530ISMD-256GB-R20<br>IFD-2530ISMD-512GB-R20<br>IFD-2530ISMD-1TB-R20 | IFD-2530AM-8GB-R20<br>IFD-2530AM-16GB-R20<br>IFD-2530AM-32GB-R20<br>IFD-2530AM-64GB-R20<br>IFD-2530AM-128GB-R20<br>IFD-2530AM-256GB-R20   |
|                        | Wide Temperature (-40°C~+85°C)  | IFD-2520WT-8GB<br>IFD-2520WT-16GB<br>IFD-2520WT-32GB<br>IFD-2520WT-64GB<br>IFD-2520WT-128GB   | IFD-2530WTMD-8GB-R20<br>IFD-2530WTMD-16GB-R20<br>IFD-2530WTMD-32GB-R20<br>IFD-2530WTMD-64GB-R20<br>IFD-2530WTMD-128GB-R20<br>IFD-2530WTMD-256GB-R20<br>IFD-2530WTMD-512GB-R20<br>IFD-2530WTMD-1TB-R20 |

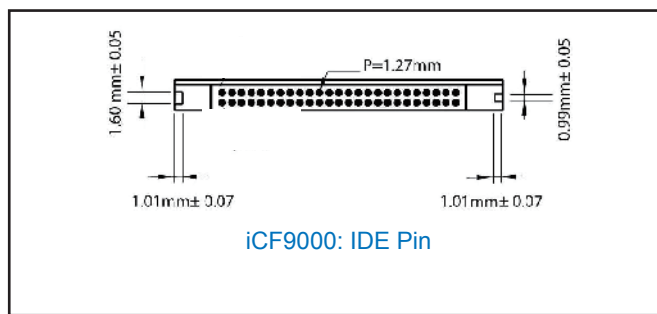
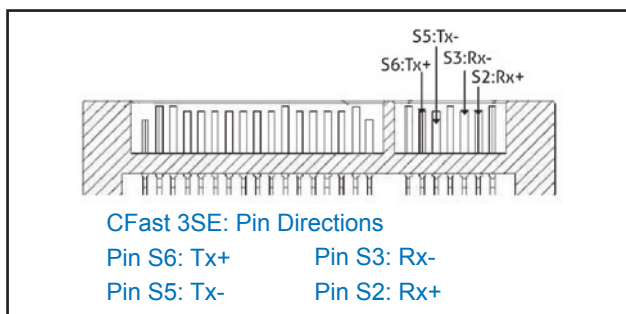
# Industrial CFast & CF Card Series

## ■ Similar size, different read and write speeds

With a similar size, CFast is mainly different from CF card in its interface, connector, and most importantly, faster read and write speeds. CFast, with SATA 6Gb/s interface and 7-pin plus 17-pin connector, offers data transfer rates of sequential reads up to 470 MB/sec and of sequential writes up to 250 MB/sec. CF card, with PATA interface and 50-pin CF connector, offers data transfer rates of sequential reads up to 100 MB/sec and of sequential writes up to 95 MB/sec.

## ■ ATA security for CF card

The optional ATA Security Mode feature set is a password system that restricts access to user data stored on a device. The purpose is to prevent unauthorized access or a virus.



| Model Name                         | ICT-2000 AS   | ICT-2000 AM   | ICF-9000   | ICF-2000   | ICF-1000  |  |  |
|------------------------------------|---|---|--|--|---|--|--|
| Picture                            |   |   |  |  |   |  |  |
| Capacity                           | 2GB~64GB  | 8GB~128GB   | 4GB~32GB   | 512MB~8GB  | 128MB~8GB   | 128MB~16GB   |  |
| Sequential R/W (Max.)              | 285/260 MB/sec  | 310/240 MB/sec  | 110/100 MB/sec   | 40/30 MB/sec   | 40/28 MB/sec  | 30/15 MB/sec   |  |
| Flash Type                         | SLC   | MLC   | SLC  | SLC  | SLC   | SLC  |  |
| IDE Transfer Mode                  | Yes   | Yes   | PIO mode 0-6<br>MwDMA mode 0-4<br>UltraDMA mode 0-7  | PIO mode 0-4<br>MwDMA mode 0-4<br>UltraDMA mode 0-4                    | PIO mode 0-4<br>MwDMA mode 0-4<br>UltraDMA mode 0-4   | PIO mode 0-6<br>MwDMA mode 0-4<br>UltraDMA mode 0-4                                      |  |
| Operating Temp.                    | 0°C~+70°C (Standard)/-40°C~+85°C (Industrial)             |   |  |  |   |  |  |
| Storage Temp.                      | -40°C~+100°C  |   | -55°C~+95°C  |  |   | -40°C~+100°C   |  |
| Vibration/Shock (7/2000Hz)/(0.5ms) | Vibration: 15 (G), 10~2000 (Hz)<br>Shock: 1,500 G, 0.5 ms |   | 1500G/0.5ms  |  |   | 1500G/0.5ms  |  |
| DC Power Input                     | Supply voltage: 3.3V                                      |   | ICF: +3.3V~+5V single power supply operation   |  |   | Supply voltage: 3.3V & 5V  |  |
| Power Consumption (Max.)           | 390mA   | 525mA   | 0.75W (5V x 125mA@210mA)   |  |   | 95 mA  |  |
| Dimensions (mm)                    | 42.8 x 36.4 x 3.6   |   | 42.8 x 36.4 x 3.3  |  |   | 42.8 x 36.4 x 3.3  |  |
| ATA Security                       | Yes   | Yes   | Yes  | Yes  | Yes   | Yes  |  |
| S.M.A.R.T                          | Yes   | Yes   | Yes  | Yes  | Yes   | No   |  |
| P/N                                | STD (0°C~+70°C)   | ICT-2000IA-2GB<br>ICT-2000IA-4GB<br>ICT-2000IA-8GB<br>ICT-2000IA-16GB<br>ICT-2000IA-32GB<br>ICT-2000IA-64GB | ICT-2000IAM-8GB<br>ICT-2000IAM-16GB<br>ICT-2000IAM-32GB<br>ICT-2000IAM-64GB<br>ICT-2000IAM-128GB | ICF-9000CD-4GB<br>ICF-9000CD-8GB<br>ICF-9000CD-16GB<br>ICF-9000CD-32GB | ICF-2000IPD-512MB<br>ICF-2000IPD-1GB<br>ICF-2000IPD-2GB<br>ICF-2000IPD-4GB<br>ICF-2000IPD-8GB | ICF-1000IPD-1GB-R20<br>ICF-1000IPD-2GB-R20<br>ICF-1000IPD-4GB-R20<br>ICF-1000IPD-8GB-R20 | ICF-1000IA-128MB-R20<br>ICF-1000IA-256MB-R20<br>ICF-1000IA-512MB-R20<br>ICF-1000IA-1GB-R20<br>ICF-1000IA-2GB-R20<br>ICF-1000IA-4GB-R20<br>ICF-1000IA-8GB-R20 |
|                                    | WT (-40°C~+85°C)  | ICT-2000WA-2GB<br>ICT-2000WA-4GB<br>ICT-2000WA-8GB<br>ICT-2000WA-16GB<br>ICT-2000WA-32GB<br>ICT-2000WA-64GB | ICT-2000WAM-8GB<br>ICT-2000WAM-16GB<br>ICT-2000WAM-32GB<br>ICT-2000WAM-64GB<br>ICT-2000WAM-128GB | ICF-9000WD-4GB<br>ICF-9000WD-8GB<br>ICF-9000WD-16GB<br>ICF-9000WD-32GB | ICF-2000WPD-512MB<br>ICF-2000WPD-1GB<br>ICF-2000WPD-2GB<br>ICF-2000WPD-4GB<br>ICF-2000WPD-8GB | ICF-1000WPD-1GB-R20<br>ICF-1000WPD-2GB-R20<br>ICF-1000WPD-4GB-R20<br>ICF-1000WPD-8GB-R20 | ICF-1000WA-128MB-R20<br>ICF-1000WA-256MB-R20<br>ICF-1000WA-512MB-R20<br>ICF-1000WA-1GB-R20<br>ICF-1000WA-2GB-R20<br>ICF-1000WA-4GB-R20<br>ICF-1000WA-8GB-R20 |

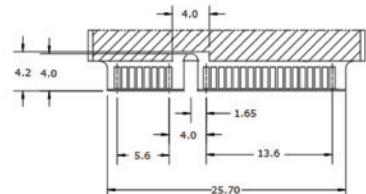
# Industrial Mini PCIe DOM & mSATA Series

## Co-layout design of Mini PCIe DOM and mSATA

For manufacturers or system integrators, the exciting benefit is they can have a circuit board with co-layout design of Mini PCIe DOM and mSATA. This feature allows users to enjoy wider applications by installing optional Mini PCIe DOM or mSATA in the same placement site.

## Mini PCIe DOM: For conventional main board, better performance than CF card

We have realized IPC customers need a steady supply for their design-in cases by using Mini PCIe DOM or CF card as boot drive or storage. However, Mini PCIe DOM obviously has better performance in read/write over 4 times than CF card. Boasting its easy use in plug-and-play and driverless (Windows XP and above) capabilities, the Mini PCIe DOM is no doubt the best choice for the conventional motherboard. In the following table, we recommend one cost-effective MLC model and one reliable SLC model.



**mini PCIe DOM 1ME: Pin Directions**

Pin33: PETp0

Pin31: PETn0

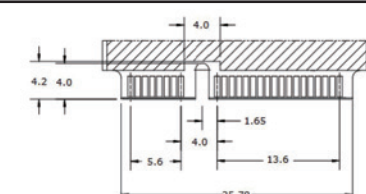
Pin23: PERn0

Pin25: PERp0

## mSATA: For space-limited main board, up to read/write speed of 470/220 MB/sec

Nowadays, more and more compact gadgets are designed to satisfy eager users. Smaller than a business card, the mSATA has become the must-have storage to deliver instant data transfer.

In the following table, we recommend five models categorized by the flash type and size.



**mSATA 3SE: Pin Directions**

Pin33: Rx+

Pin31: Rx-

Pin23: Tx+

Pin25: Tx-

| Model Name             | IPE-5300IM/WM   | IPE-5320IM/WM  | IPE-5320AM/AWM  | IPE-5200IP/WP   | IPE-5210IPM/WPM  |   |
|------------------------|---|--|---|---|--|---|
| Picture                |   |  |   |   |  |   |
| Key Features           | 1. Excellent data transfer speed<br>2. High quality SLC-based solution                                  | 1. Excellent data transfer speed and IOPS<br>2. Budget-friendly MLC-based solution                         | 1. Excellent data transfer speed and IOPS<br>2. Budget-friendly MLC-based solution  | 1. PCI Express interface<br>2. Driverless<br>3. Multi OS supported  | 1. PCI Express interface<br>2. Driverless<br>3. Multi OS supported                                       |   |
| Interface              | SATA 6Gb/s  | SATA 6Gb/s   | SATA 6Gb/s  | PCI Express Gen 1 x1  | PCI Express Gen 1 x1   |   |
| Flash Type             | SLC   | MLC  | MLC   | SLC   | MLC  |   |
| Capacity (GB)          | 2GB~32GB  | 8GB~512GB  | 8GB~256GB   | 4GB~64GB  | 8GB~256GB  |   |
| Sequential R/W         | 470/250   | 340/200  | 430/170   | 170/120   | 130/100  |   |
| Max. Power Consumption | 1.2 W (3.3V x 360 mA)   | 1.3W (3.3V x 390 mA)   | 1.3W (3.3V x 390 mA)  | 1.2W (3.3V x 370mA)   | 1.2W (3.3V x 370mA)  |   |
| Thermal Sensor         | Wide temperature model only   | Wide temperature model only  | Wide temperature model only   | Wide temperature model only   | Wide temperature model only  |   |
| ATA Security           | Yes   | Yes  | Yes   | Yes   | Yes  |   |
| S.M.A.R.T              | Yes   | Yes  | Yes   | Yes   | Yes  |   |
| Dimensions (mm)        | 29.8 x 50.8 x 4.4   | 29.8 x 50.8 x 4.4  | 29.8 x 50.8 x 4.4   | 30 x 50.95 x 4.4  | 30 x 50.95 x 4.4   |   |
| Environment            | Vibration: 20G@7~2000Hz, Shock: 1500G@0.5ms, Storage Temperature: -55°C ~ +95°C, MTBF: >3 million hours |  |   |   |  |   |
| P/N                    | Standard (0°C~+70°C)  | IPE-5300IM-1GB<br>IPE-5300IM-2GB<br>IPE-5300IM-4GB<br>IPE-5300IM-8GB<br>IPE-5300IM-16GB<br>IPE-5300IM-32GB | IPE-5320IM-8GB-R21<br>IPE-5320IM-16GB-R21<br>IPE-5320IM-32GB-R21<br>IPE-5320IM-64GB-R21<br>IPE-5320IM-128GB-R21<br>IPE-5320IM-256GB-R21<br>IPE-5320IM-512GB-R21 | IPE-5320AM-8GB-R20<br>IPE-5320AM-16GB-R20<br>IPE-5320AM-32GB-R20<br>IPE-5320AM-64GB-R20<br>IPE-5320AM-128GB-R20<br>IPE-5320AM-256GB-R20       | IPE-5200IP-4G-R21<br>IPE-5200IP-8G-R21<br>IPE-5200IP-16G-R21<br>IPE-5200IP-32G-R21<br>IPE-5200IP-64G-R21 | IPE-5210IPM-8GB-R10<br>IPE-5210IPM-16GB-R10<br>IPE-5210IPM-32GB-R10<br>IPE-5210IPM-64GB-R10<br>IPE-5210IPM-128GB-R10<br>IPE-5210IPM-256GB-R10 |
|                        | Wide Temperature (-40°C~+85°C)  | IPE-5300WM-1GB<br>IPE-5300WM-2GB<br>IPE-5300WM-4GB<br>IPE-5300WM-8GB<br>IPE-5300WM-16GB<br>IPE-5300WM-32GB | IPE-5320WM-8GB-R21<br>IPE-5320WM-16GB-R21<br>IPE-5320WM-32GB-R21<br>IPE-5320WM-64GB-R21<br>IPE-5320WM-128GB-R21<br>IPE-5320WM-256GB-R21<br>IPE-5320WM-512GB-R21 | IPE-5320AWM-8GB-R20<br>IPE-5320AWM-16GB-R20<br>IPE-5320AWM-32GB-R20<br>IPE-5320AWM-64GB-R20<br>IPE-5320AWM-128GB-R20<br>IPE-5320AWM-256GB-R20 | WPE-5200WP-4G-R21<br>WPE-5200WP-8G-R21<br>WPE-5200WP-16G-R21<br>WPE-5200WP-32G-R21<br>WPE-5200WP-64G-R21 | IPE-5210WPM-8GB-R10<br>IPE-5210WPM-16GB-R10<br>IPE-5210WPM-32GB-R10<br>IPE-5210WPM-64GB-R10<br>IPE-5210WPM-128GB-R10<br>IPE-5210WPM-256GB-R10 |

# M.2-SATA (NGFF)

M.2-SATA (NGFF) stands for Next Generation Form Factor, which is comprised of several interfaces, and interconnects with the corresponding systems basing on the 67-pin edge card connectors. The Innodisk M.2-SATA (NGFF) offers wide range of capacities in several standard form factors to fulfill different applications, including type 2242, type 2260, type 2280, and 22110.

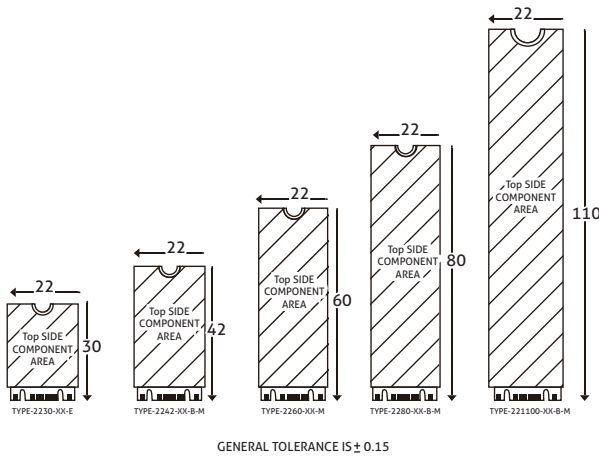
## Features

- Adopted SATA 6Gb/s interface, complaint with M.2 (NGFF) type 2242 and 2280
- Excellent data transfer speed in small form factor
- iCell technology for data protection
- Supports iSMART disk health monitoring

## Benefits

- The small form factor of M.2 (S42) saves about 40% of PCB dimension, comparing to the Mini PCIe form factor
- Innodisk's exclusive iData Guard ensures reliable data transfer in the event of an abnormal power failure
- Fully compliant with industrial standard
- Suitable for ultra-thin or compact system

## M.2 form factor used on SSD



- Key A version is intended to support Wi-Fi+BT+NFC and/or WiGig Combo solution
- Key B is intended to support WWAN+GNSS, SSD and other add-in solutions
- Key E is intended to support Wi-Fi+BT+NFC or GNSS solution
- Key M is intended for SSD devices only

| Model Name             | IM2SE-2242   |
|------------------------|--|
| Picture                |  |
| Key Features           | 1. Type 2242-D1-B-M<br>2. High IOPS with DRAM-less design<br>3. Budget-friendly MLC-based solution   |
| Interface              | SATA 6Gb/s   |
| Flash Type             | MLC  |
| Capacity (GB)          | 16GB~256GB   |
| Sequential R/W         | 500/80   |
| Max. Power Consumption | 1.09W (3.3V x 330 mA)  |
| Thermal Sensor         | Standard: Yes, Wide Temperature: Yes   |
| ATA Security           | Yes  |
| S.M.A.R.T              | Yes  |
| Dimensions (mm)        | 22 x 42 x 3.2  |
| Environment            | Vibration: 20G@7~2000Hz, Shock: 1500G@0.5ms, Storage Temperature: -55°C ~ +95°C, MTBF: >3 million hours  |
| P/N                    | Standard (0°C~+70°C)   |
|                        | Wide Temperature (-40°C~+85°C)   |
|                        | IM2SE-2242IM-16GB-R10<br>IM2SE-2242IM-32GB-R10<br>IM2SE-2242IM-64GB-R10<br>IM2SE-2242IM-128GB-R10<br>IM2SE-2242IM-256GB-R10<br>IM2SE-2242WM-16GB-R10<br>IM2SE-2242WM-32GB-R10<br>IM2SE-2242WM-64GB-R10<br>IM2SE-2242WM-128GB-R10<br>IM2SE-2242WM-256GB-R10 |

# Intel® 2.5" SSD Solution



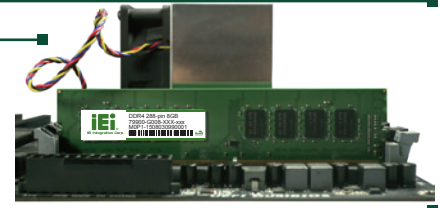
|                |   |                        |                |
|----------------|---|------------------------|----------------|
| Key Features   | 1. 7mm height mechanical design<br>2. Low power consumption   | Max. Power Consumption | 165mw(5V*33mA) |
| Interface      | SATA 6Gb/s  | Thermal Sensor         | 0° C~70° C     |
| Flash Type     | MLC   | ATA Security           | Yes            |
| Capacity (GB)  | 60GB~480GB  | S.M.A.R.T              | Yes            |
| Sequential R/W | 540/490   | Dimensions (mm)        | 70 x 100 x 7   |
| Environment    | Vibration: 2.17 G@5-700 Hz, Shock: 1500G@0.5ms, Storage Temperature: 0° C~70° C, MTBF: ≥1.2 million hours |                        |                |

# Ensuring the Best System Performance

IEI provide complete product line of industrial

### Features

- Refresh → TREFI=7.8ms from -40°C~+85°C
- 30μ" Gold Finger
- Stern Test of Parameter
- High Reliability



## DDR4 DIMM

### Features

- Low Power
- Major on Third
- Thermal Sensor Design Ready
- 100% System Level Test

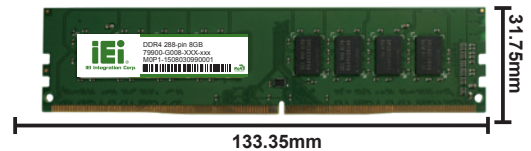
### DDR4 DIMM

| Module Speed | DIMM    | SO-DIMM | CAS Latency |
|--------------|---------|---------|-------------|
| 2133 MHz     | 288-pin | 260-pin | CL13        |

### SO-DIMM



### Long-DIMM



### Ordering Information



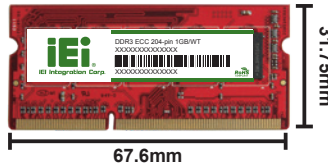
| DDR4 SO-DIMM | Description                       |
|--------------|-----------------------------------|
|              | DDR4 2400 4GB SO-DIMM CL17 512M*8 |
|              | DDR4 2400 8GB SO-DIMM CL17 512M*8 |
|              | DDR4 2400 8GB SO-DIMM CL17 1G*8   |
|              | DDR4 2400 16GB SO-DIMM CL17 1G*8  |
|              | DDR4 2666 4GB SO-DIMM CL17 512M*8 |
|              | DDR4 2666 8GB SO-DIMM CL17 512M*8 |
|              | DDR4 2666 8GB SO-DIMM CL17 1G*8   |
|              | DDR4 2666 16GB SO-DIMM CL17 1G*8  |

| DDR4 Long-DIMM | Description                         |
|----------------|-------------------------------------|
|                | DDR4 2400 4GB Long-DIMM CL17 512M*8 |
|                | DDR4 2400 8GB Long-DIMM CL17 512M*8 |
|                | DDR4 2400 8GB Long-DIMM CL17 1G*8   |
|                | DDR4 2400 16GB Long-DIMM CL17 1G*8  |
|                | DDR4 2666 4GB Long-DIMM CL17 512M*8 |
|                | DDR4 2666 8GB Long-DIMM CL17 512M*8 |
|                | DDR4 2666 8GB Long-DIMM CL17 512M*8 |
|                | DDR4 2666 16GB Long-DIMM CL17 1G*8  |

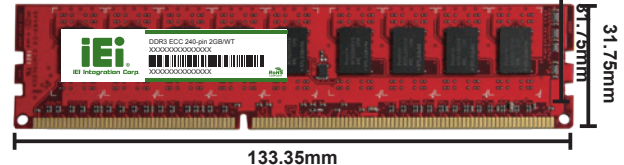
## DDR3 W/T & Commercial ECC Thermal Sensor Solution

| Module Speed | 1600 MHz |
|--------------|----------|
| DIMM         | 240-pin  |
| SO-DIMM      | 204-pin  |
| CAS Latency  | CL11     |

### DDR3 ECC SO-DIMM



### DDR3 ECC Long-DIMM



### Ordering Information

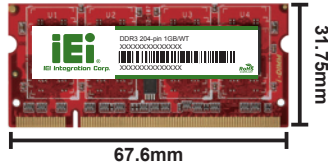
| DDR3 SO-DIMM W/T | Description                           |
|------------------|---------------------------------------|
|                  | DDR3 1600 1GB ECC SO-DIMM CL11 128M*8 |
|                  | DDR3 1600 2GB ECC SO-DIMM CL11 256M*8 |
|                  | DDR3 1600 4GB ECC SO-DIMM CL11 256M*8 |
|                  | DDR3 1600 8GB ECC SO-DIMM CL11 256M*8 |

| DDR3 DIMM W/T | Description                     |
|---------------|---------------------------------|
|               | DDR3 1600 2GB DIMM CL11 256M*8  |
|               | DDR3 1600 4GB DIMM CL11 256M*8  |
|               | DDR3 1600 8GB DIMM CL11 256M*8  |
|               | DDR3 1600 16GB DIMM CL11 256M*8 |

## DDR3 W/T Solution

| Module Speed | 1600 MHz |
|--------------|----------|
| DIMM         | 240-pin  |
| SO-DIMM      | 204-pin  |
| CAS Latency  | CL11     |

### DDR3 SO-DIMM



### DDR3 Long-DIMM



### Ordering Information

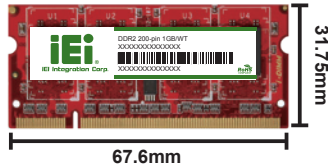
| DDR3 SO-DIMM W/T | Description                           |
|------------------|---------------------------------------|
|                  | DDR3 1600 1GB SO-DIMM, ProMOS, 128M*8 |
|                  | DDR3 1600 2GB SO-DIMM, ProMOS, 128M*8 |
|                  | DDR3 1600 2GB SO-DIMM, Micron, 256M*8 |
|                  | DDR3 1600 4GB SO-DIMM, Micron, 256M*8 |
|                  | DDR3 1600 4GB SO-DIMM, ProMOS, 512M*8 |
|                  | DDR3 1600 8GB SO-DIMM, ProMOS, 512M*8 |

| DDR3 DIMM W/T | Description                        |
|---------------|------------------------------------|
|               | DDR3 1600 2GB DIMM, ProMOS, 128M*8 |
|               | DDR3 1600 2GB DIMM, Micron, 256M*8 |
|               | DDR3 1600 4GB DIMM, Micron, 256M*8 |
|               | DDR3 1600 4GB DIMM, ProMOS, 512M*8 |
|               | DDR3 1600 8GB DIMM, ProMOS, 512M*8 |

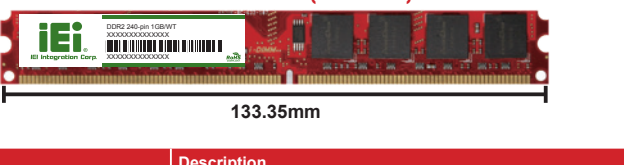
## DDR2 W/T Solution

| Module Speed | 800 MHz |
|--------------|---------|
| DIMM         | 240-pin |
| SO-DIMM      | 200-pin |
| CAS Latency  | CL6     |

### DDR2 SO-DIMM



### DDR2 DIMM (Low Profile)



### Ordering Information

| DDR2 SO-DIMM W/T | Description                          |
|------------------|--------------------------------------|
|                  | DDR2 667 1GB SO-DIMM, ProMOS, 128M*8 |
|                  | DDR2 800 1GB SO-DIMM, ProMOS, 128M*8 |
|                  | DDR2 800 2GB SO-DIMM, ProMOS, 128M*8 |

| DDR2 DIMM W/T | Description                       |
|---------------|-----------------------------------|
|               | DDR2 800 1GB DIMM, ProMOS, 128M*8 |
|               | DDR2 800 2GB DIMM, ProMOS, 128M*8 |

| DDR SO-DIMM W/T | Description                       |
|-----------------|-----------------------------------|
|                 | DDR400 1GB SO-DIMM, ProMOS, 64M*8 |



# Lifespan Evaluation of Flash Products From Endurance to iSMART

## Endurance of different flash types - SLC and MLC

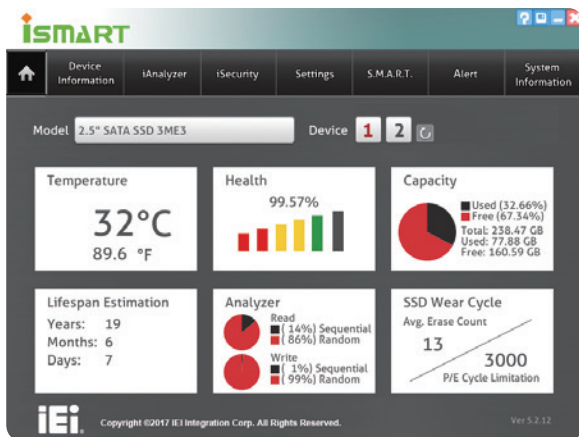
SLC is more reliable and has longer endurance than MLC.

MLC is cost-saving alternative to SLC to replace the traditional HDD.

## iSMART, the proprietary disk health monitoring tool, provides easy access, in-depth information for embedded applications

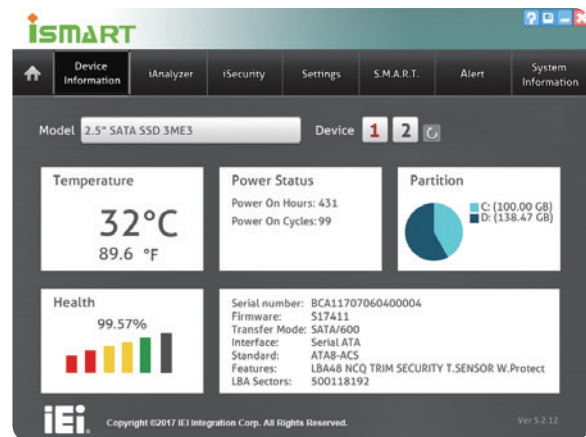
iSMART can monitor all our flash products in a system. It provides clear and easy to understand warnings, numbers, charts and graphics to enable system integrators and users to check storage device health, performance, temperature, free space, and status at a glance. Also, it can alert users with the remaining service lifetime of Innodisk drives, so that they can replace a device in plenty of time to avoid any potential issues.

Besides providing critical disk information, iSMART also offers convenience through e-mail alerts and one-touch feature. Additionally, iSMART provides dynamic power management, advancing green design goals for lower power consumption, such as with a 35% of power saving in idle mode.



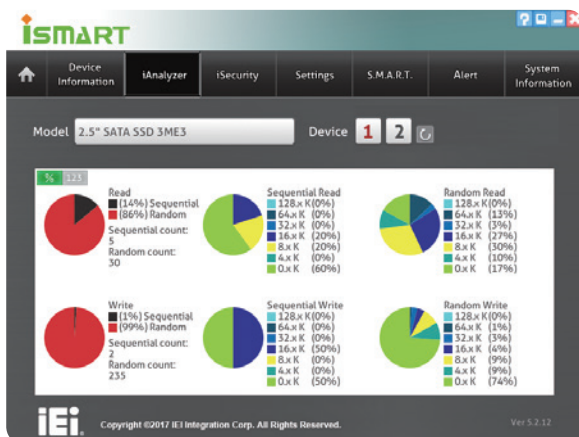
**Dashboard**

The Dashboard's home tab aims to provide a summary or quick snapshot of each installed disks in the system. This page offers accurate data information regarding Temperature, Health, Capacity, Lifespan, iAnalyzer, and Notifications.



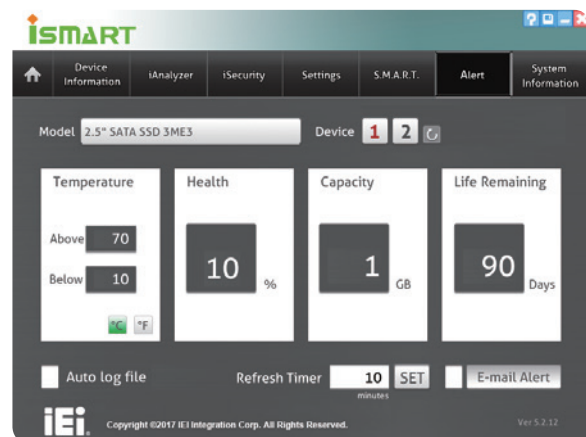
**Device Information**

The Device Information page provides additional functions, such as Power Status, Partitions, and detailed information of the device such as Serial Number, Firmware Version, Interface, and Features. To learn more about SMART information, go to SMART values and refer to the SMART tab.



**iAnalyzer**

When activated, the iAnalyzer tab displays the read/write behaviors of the SSD in real time. This allows the user to understand their application usage of the SSD. Sequential and Random I/Os are easily broken down into percentages making them easy to read.







**Alert**

The Alert tab helps the user set trigger points with Temperature, Health percentage, Remaining Capacity or Life Remaining. If these trigger points exceed their boundaries, the iSMART utility can send a warning and email to the user notifying them that something may fail.

## Drive Cage *Standard 3.5" Device in 5.25" Drive Bay Solutions*

Following the traditional industrial system needs for stability, durability and toughness for storage drive operating condition, IEI provides various kinds of standard 3.5" device in 5.25" removable drive bay and modules for different demands.

|                                    | SATA / IDE / SSD Solution   |   | SATA Solution  |   |
|------------------------------------|---|---|--|---|
|                                    |  |  |  |  |
| <b>Model Name</b>                  | <b>XWC-410030507220-RS</b>  | <b>XWC-410030507230-RS</b>  | <b>RD-03A-R20</b>  | <b>RHD-302SATA-R20</b>  |
| <b>Dimensions (L x W x H) (mm)</b> | 150 x 146 x 42  | 150 x 146 x 42  | 186 x 146 x 42   | 202 x 146 x 86  |
| <b>Material</b>                    | Aluminum  | Aluminum  | Aluminum alloy   | Aluminum alloy  |
| <b>Interface</b>                   | SATA / IDE / SSD  | SATA / IDE / SSD  | SATA III / SAS 2.0   | SATA III / SAS 2.0  |
| <b>Data Transfer Rate</b>          |   |   | SAS 2.0 / SATA III 6Gbps   | SAS 2.0 / SATA III 6Gbps  |
| <b>Drive Bay Space</b>             | One 5.25" drive bay   | One 5.25" drive bay   | 1 x 5.25" Device Bay for 1 x 2.5" or 3.5" Hard Drive                               | 2 x 5.25" Device Bay for 3 x 2.5" or 3.5" Hard Drive                                |
| <b>HDD Type</b>                    | Internal 3.5" device bay  | Internal 3.5" device bay  | 2.5" or 3.5" Hard Drive  | 2.5" or 3.5" Hard Drive   |
| <b>Cooling Fan</b>                 |   |   | 8CM  | 8 cm  |
| <b>Hot Swap</b>                    | No  | No  | Yes  | Yes   |
| <b>Keylock</b>                     | No  | No  | No   | No  |
| <b>Signal Out</b>                  | No  | No  | SATA III 7-Pin   | SATA III 7-Pin  |
| <b>Color</b>                       | Black   | White   | Black  | Black   |
| <b>Gross Weight</b>                | 0.2 kg  | 0.2 kg  | 0.85kg   | 1.3kg   |

|                                    | SATA Solution   |   |   |   |  |
|------------------------------------|---|---|---|---|--|
|                                    |  |  |  |  |   |
| <b>Model Name</b>                  | <b>RHD-102SATA-R20</b>  | <b>RHD-102DW-R20</b>  | <b>RHD-101SATA-R20</b>  | <b>RHD-104SATA-R20</b>  | <b>RHF-21-SATA-R10</b>   |
| <b>Dimensions (L x W x H) (mm)</b> | 140 x 101.6 x 25  | 153 x 146 x 42  | 140 x 101.6 x 25  | 149.6 x 146 x 42.1  | 151.5 x 102 x 25.7   |
| <b>Material</b>                    | Aluminum & SPCC   | Aluminum  | Aluminum & SPCC   | Full Metal  | SECC   |
| <b>Interface</b>                   | SATA 7 + 15 Pin   | SATA  | SATA 7 + 15 Pin   | SATA III  | SATA   |
| <b>Data Transfer Rate</b>          | up to 6Gb/Sec   | up to 6Gb/Sec   | Up to 6Gb/Sec   | SATA III 6Gbps  | No   |
| <b>Drive Bay Space</b>             | One 3.5" drive bay  | One 5.25" drive bay   | One 3.5" drive bay  | 1 x 5.25" Device Bay for 4 x 2.5" Hard Drive  | Internal 3.5" drive bay  |
| <b>HDD Type</b>                    | 2.5" SATA/SAS<br>2 x HDD/SSD  | 2.5" SATA<br>2 x HDD/SSD  | 2.5" SATA/SAS<br>1 x HDD/SSD  | 2.5" Hard Drive   | 2.5" SATA HDD  |
| <b>Cooling Fan</b>                 | No  | Yes   | No  | 4CM   | No   |
| <b>Hot Swap</b>                    | Yes   | Yes   | Yes   | Yes   | Yes  |
| <b>Keylock</b>                     | Yes   | Yes   | Yes   | Yes   | Yes  |
| <b>Signal Out</b>                  | SATA 7 Pin  | SATA 7 Pin  | SATA 7 Pin  | SATA III 7-Pin  | 1 x Female connector<br>1 x SATA LED signal connector<br>1 x Power LED connector<br>1 x Key on/off connector<br>1 x Power/SATA LED connector<br>1 x Male connector |
| <b>Color</b>                       | Black   | Black   | Black   | Black   | Black  |
| <b>Gross Weight</b>                | 0.304 Kg  | 0.534 Kg  | 0.236 Kg  | 0.56kg  | 0.3 kg   |

## FCD-301



| Pin 1 | Pin 2 | Pin 3 | Pin 4 |
|-------|-------|-------|-------|
| +5V   | Data- | Data+ | GND   |

3.5" compact drive bay with USB port

- The most suitable USB cable for IEI's CPU boards
- Support standard 3.5" drive bay, 4-pin female connector to CPU boards' pin header, length: 60cm
- RoHS compliant
- Pin definition

### Ordering Information

| Part No.      | Description  |
|---------------|--|
| FCD-301[C]-RS | 3.5" compact drive bay with USB port, RoHS<br>Color Code: B=Black, W=White |

## AS-35A / AS-25A / AS-25C



AS-35A

AS-25A

Anti-vibration Drive Kit



AS-25C

- Resistant to shocks and vibrations from all directions
- Support 2.5" HDD into 3.5" drive bay (AS-25A/ 25C)  
Support 3.5" HDD into 5.25" drive bay (AS-35A)
- Meets the following standards:
  - » MIL-SLD-810F 514.5C-1 standard
  - » 5-20Hz, 1G peak to peak
  - » 60-200Hz, 3G peak to peak
- RoHS compliant

### Ordering Information

| Part No.  | Description                                  |
|-----------|--|
| AS-35A-RS | 3.5" drive anti-vibration kit, RoHS          |
| AS-25A-RS | 2.5" drive anti-vibration kit, RoHS          |
| AS-25C-RS | Enhanced 2.5" drive anti-vibration kit, RoHS |

## Industrial Keyboard Series

### MK-KTP5A







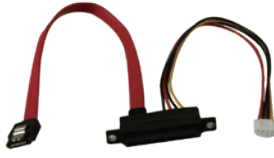


|            |                    |                 |                            |
|------------|--------------------|-----------------|----------------------------|
| Model Name | MK-KTP5AW-R20      |                 |                            |
| Key Number | 105-key            | Color           | White                      |
| Mouse      | Touchpad           | Waterproof      | NA                         |
| Connector  | 2 x PS/2 for KB/MS | Dimensions (mm) | 485 (D) x 380 (W) x 44 (H) |



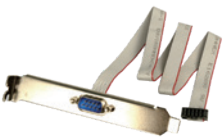

### Ordering Information

| Part No.      | Description                                 |
|---------------|---|
| MK-KTP5AW-R20 | 1U rackmount keyboard/touchpad drawer, RoHS |

## Cables and Connectors *FDD / HDD Cable*





| SATA HDD Cable    |   |  |   |
|-------------------|---|--|---|
|                   |  |  |  |
| <b>Model Name</b> | <b>32801-000703-400-RS</b>  | <b>32102-000100-100-RS</b>   | <b>32000-080700-RS</b>  |
| Cable Type        | SATA HDD cable  | SATA power cable   | SATA + Power cable  |
| Connector         | SATA 7-pin  | 4-pin + 2 x SATA 15-pin  | SATA 7-pin + 4-pin  |
| Connector Type    | Lockable  | SATA power connector   |   |
| Length            | 50 cm   | 15 cm  | SATA cable 20 cm<br>Power cable 10 cm   |




| SATA HDD Cable    |  | IDE HDD Cable  |   |  |
|-------------------|--|--|---|--|
|                   |  |  |  |  |
| <b>Model Name</b> | <b>32801-000201-300-RS</b>   | <b>32801-000100-300-RS</b>   | <b>CB-HD32-RS</b>   | <b>32200-000009-RS</b>   |
| Cable Type        | SATA + Power cable   | SATA + Power cable   | IDE HDD flat cable  | IDE HDD flat cable   |
| Connector         | SATA 7-pin + 2-pin wafer (P=2 mm)  | SATA 7-pin + 4-pin wafer (P=2.54 mm)   | 40p-44p   | 44p-44p  |
| Connector Type    | 2-pin PH 2.0   | 4-pin PH 2.54 mm   | 2.54mm-2.0mm  | 2.0mm -2.0mm   |
| Length            | SATA cable 15 cm<br>Power cable 15 cm  | SATA cable 20 cm<br>Power cable 20 cm  | IDE cable: 39 cm<br>Power cable: 20 cm  | 40 cm  |




| Serial cable      |   |   |  |   |
|-------------------|---|---|--|---|
|                   |  |  |  |  |
| <b>Model Name</b> | <b>45002-008103-RS</b>  | <b>19800-000300-100-RS</b>  | <b>19800-010900-200-RS</b>   | <b>19800-000051-RS</b>  |
| Cable Type        | Serial port   | Serial port cable   | Serial port cable  | Serial port cable   |
| Board Side        | N/A   | 10-pin (2x5) connector (2.0 mm)   | 10-pin (2x5) connector (2.54 mm)   | 2 x 10-pin (2x5) connector (2.54 mm)  |
| Board Side Pitch  | 2.54 mm   | 2.0 mm  | 2.54 mm  | 2.54 mm   |
| Device Side       | 2 x DE9M  | DE9M  | DE9M   | 2 x DE9M  |
| Bracket           | Yes   | Yes   | Yes  | Yes   |
| Length            | 9 cm  | 30 cm   | 50 cm  | 23 cm   |

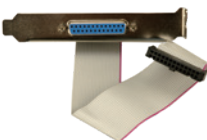


Part numbers listed in the product catalog are for reference purposes. IEI reserves the right to implement substitution parts when the function is not affected.

# Cables and Connectors *Paralle / Serial Cable*

| Serial cable      |   |   |  |   |
|-------------------|---|---|--|---|
|                   |  |  |  |  |
| <b>Model Name</b> | <b>19800-003600-100-RS</b>  | <b>19800-000112-RS</b>  | <b>32205-000702-100-RS</b>   | <b>32200-000049-RS</b>  |
| Cable Type        | Serial port cable   | Serial port cable   | Serial port cable  | Serial port cable   |
| Board Side        | 2 x 10-pin (2x5) connector (2.54mm)   | 2 x 10-pin (2x5) connector (2.0 mm)   | 10-pin (2x5) connector (2.54 mm)   | 10-pin (2x5) connector (2.0 mm)   |
| Board Side Pitch  | 2.54 mm   | 2.0 mm  | 2.54 mm  | 2.0 mm  |
| Device Side       | 2 x DE9M  | 2 x DE9M  | DE9M   | DE9M  |
| Bracket           | Yes   | Yes   | No   | No  |
| Length            | 40 cm   | 30 cm   | 23 cm  | 20 cm   |





| Serial cable      |   |   |   |  |
|-------------------|---|---|---|--|
|                   |  |  |  |  |
| <b>Model Name</b> | <b>32205-001203-200-RS</b>  | <b>32200-025401-RS</b>  | <b>19800-004400-200-RS</b>  |  |
| Cable Type        | Serial port cable   | Serial port cable   | RS-232 & RS-422/485 cable   |  |
| Board Side        | 40-pin (2x20) connector (2.54 mm)   | 40-pin (2x20) connector (2.0 mm)  | 14-pin (2x7) connector (2.54 mm)  |  |
| Board Side Pitch  | 2.54 mm   | 2.0 mm  | 2.54 mm   |  |
| Device Side       | 4 x DE9M  | 4 x DE9M  | 2 x DE9M  |  |
| Bracket           | No  | No  | Yes   |  |
| Length            | 40/40/40/40 cm  | 30 cm   | 25.5 cm   |  |





| Serial cable      |   |   |   |  |
|-------------------|---|---|---|--|
|                   |  |  |  |  |
| <b>Model Name</b> | <b>19800-004300-100-RS</b>  | <b>32200-026500-RS</b>  | <b>32205-003800-300-RS</b>  |  |
| Cable Type        | RS-232 & RS-422/485 cable   | RS-232 & RS-422/485 cable   | RS-422/485 cable  |  |
| Board Side        | 14-pin (2x7) connector (2.0 mm)   | 14-pin (2x7) connector (2.0 mm)   | 4-pin (1x4) connector (2.0 mm)  |  |
| Board Side Pitch  | 2.0 mm  | 2.0 mm  | 2.0 mm  |  |
| Device Side       | 2 x DE9M  | 2 x DE9M  | DE9M  |  |
| Bracket           | Yes   | No  | No  |  |
| Length            | 25 cm   | 29 cm   | 20 cm   |  |





| Paralle cable     |   |   |   |  |
|-------------------|---|---|---|--|
|                   |  |  |  |  |
| <b>Model Name</b> | <b>19800-000049-RS</b>  | <b>19800-003500-100-RS</b>  | <b>32223-000700-100-RS</b>  |  |
| Cable Type        | Parallel port cable   | Parallel and serial port cable  | Parallel port cable   |  |
| Board Side        | 26-pin (2x13) connector (2.54 mm)   | 26-pin (2x13) connector (2.0 mm)<br>10-pin (2x5) connector (2.0 mm)                 | 26-pin (2x13) connector (2.0 mm)  |  |
| Board Side Pitch  | 2.54 mm   | 2.0 mm  | 2.0 mm  |  |
| Device Side       | DB25F   | DB25F + DE9M  | DB25F   |  |
| Bracket           | Yes   | Yes   | No  |  |
| Length            | 24 cm   | 24 cm   | 28 cm   |  |

Part numbers listed in the product catalog are for reference purposes. IEL reserves the right to implement substitution parts when the function is not affected.

# Cables and Connectors *USB / Keyboard / Mouse / Power Cable*

|                   | USB cable   |   |  |   |
|-------------------|---|---|--|---|
|                   |  |  |  |  |
| <b>Model Name</b> | <b>32001-010800-100-RS</b>  | <b>32001-006404-100-RS</b>  | <b>19800-000100-200-RS</b>   | <b>19800-003100-300-RS</b>  |
| Cable type        | USB cable   | USB cable   | USB cable  | USB cable   |
| Board side        | 2 x 4-pin connector (2.54 mm)   | 2 x 4-pin connector (2.0 mm)  | 2 x 8-pin (2x4) connector (2.54 mm)  | 2 x 4-pin (1x4) connector (2.54 mm)   |
| Board side pitch  | 2.54 mm   | 2.00 mm   | 2.54 mm  | 2.54 mm   |
| Device side       | 2 x USB   | 2 x USB   | 4 x USB  | 2 x USB   |
| Bracket           | No  | No  | Yes  | Yes   |
| Length            | 20 cm   | 22 cm   | 30 cm  | 30 cm   |

|                   | USB cable  |  |   | Power cable  |
|-------------------|--|--|---|--|
|                   |  |  |  |  |
| <b>Model Name</b> | <b>CB-USB02A-RS</b>  | <b>32000-044300-RS</b>   | <b>32001-008600-200-RS</b>  | <b>32100-087100-RS</b>   |
| Cable type        | USB cable  | USB cable  | USB cable   | 12V power cable  |
| Board side        | 1 x 8-pin (2x4) connector (2.0 mm)   | 1 x 8-pin (2x4) connector (2.54 mm)  | 1 x 8-pin (2x4) connector (2.0 mm)  | 1 x 4-pin (2x2) connector  |
| Board side pitch  | 2.0 mm   | 2.54 mm  | 2.0 mm  |  |
| Device side       | 2 x USB  | 2 x USB  | 2 x USB   | 2 x 4-pin (1x4) molex  |
| Bracket           | Yes  | No   | No  | No   |
| Length            | 30 cm  | 21 cm  | 21 cm   | 13 cm  |

|                   | Keyboard / Mouse cable  |   |  |   |
|-------------------|---|---|--|---|
|                   |  |  |  |  |
| <b>Model Name</b> | <b>19800-000066-RS</b>  | <b>19800-000075-RS</b>  | <b>32006-000300-100-RS</b>   | <b>32000-023800-RS</b>  |
| Cable type        | Keyboard and mouse cable  | Y-Cable   | Y-Cable  | Y-Cable   |
| Board side        | 2 x 5-pin (1x5) connector (2.54 mm)   | 1 x 6-pin (1x6) connector (2.0 mm)  | 1 x male PS/2  | 1 x 6-pin (1x6) connector (2.0 mm)  |
| Board side pitch  | 2.54 mm   | 2.0 mm  |  | 2.0 mm  |
| Device side       | 2 x Female PS/2   | 2 x Female PS/2   | 2 x Female PS/2  | 2 x Female PS/2   |
| Bracket           | Yes   | Yes   | No   | No  |
| Length            | 30 cm   | 22 cm   | 12 cm (KB) + 14 (MS)   | 13 cm   |

Part numbers listed in the product catalog are for reference purposes. IEI reserves the right to implement substitution parts when the function is not affected.

## Cables and Connectors *Audio / LAN / VGA / Adapter Cable*




|                   | Audio cable   |   |  | Bracket   |
|-------------------|---|---|--|---|
|                   |  |  |  | <b>New</b><br> |
| <b>Model Name</b> | <b>19800-000111-RS</b>  | <b>32007-002600-100-RS</b>  | <b>32000-028800-RS</b>   | <b>45002-0081C0-00-RS</b>   |
| Cable type        | Audio cable   | Audio cable   | Audio cable  | COM port bracket  |
| Board side        | 10-pin (2x5) connector (2.0 mm)   | 10-pin (2x5) connector (2.0 mm)   | 12-pin (2x6) connector (2.54 mm)   | -   |
| Board side pitch  | 2.0 mm  | 2.0 mm  | 2.54 mm  | -   |
| Device side       | 3 x Audio jacks   | 3 x Audio jacks   | 4 x Audio jacks  | -   |
| Bracket           | Yes   | No  | No   | Yes   |
| Length            | 30 cm   | 30 cm   | 25 cm  | -   |

Part numbers listed in the product catalog are for reference purposes. IEI reserves the right to implement substitution parts when the function is not affected.

## Rackmount Slide *Optional Chassis Accessories*

|                   | SLIDE   |  |
|-------------------|---|--|
|                   |  |  |
| <b>Model Name</b> | <b>SLIDE-18</b>   | <b>SLIDE-24</b>  |
| Specification     | 18" rackmount slide   | 24" rackmount slide  |
| Description       | For rackmount chassis w/ depth up to 500  | For rackmount chassis w/ depth up to 600   |

## DIN Rail Kit

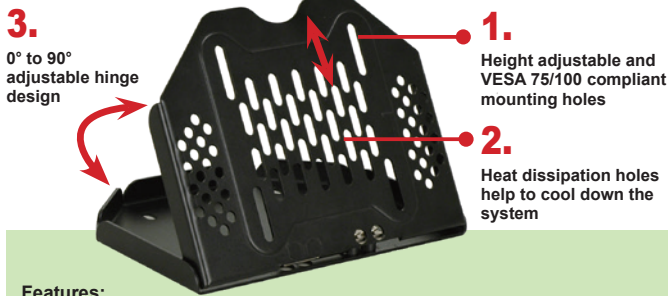
|                   | KIT   |   |   |
|-------------------|---|---|---|
|                   | <b>New</b><br> |  |  |
| <b>Model Name</b> | <b>DK-75-R10</b>  | <b>DK-100-R10</b>   | <b>DK-84MB</b>  |
| Specification     | 850 mm (W) x 75mm (D)   | 110 mm (W) x 100 mm (D)   | 168 mm (W) x 96 mm (D)  |
| Description       | VESA 75 to DIN-rail kit   | VESA 100 to DIN-rail kit  | DIN mount kit for ECW-281 series, black, RoHS   |

# V-STAND

## VESA Multi-Mounting Stand

IEI patented multi-mounting V-Stand allows wall, ceiling, desk, rear and side mounting to meet diverse applications. Its 0° to 90° adjustable hinge design provides optimal viewing in various environment, such as kitchen, room or shelf.

| VESA                          | Model          |
|-------------------------------|----------------|
| 75 mm x 75 mm                 | VSTAND-A07-R11 |
| 75 mm x 75 mm/100 mm x 100 mm | VSTAND-A10-R11 |
|                               | VSTAND-A12-R11 |



**Features:**

- 0° to 90° adjustable hinge design allows comfortable viewing
- Standard VESA 75/100 compliant
- Heat dissipation holes
- Compact size, easy to use in any places

### Space saving and easy installation

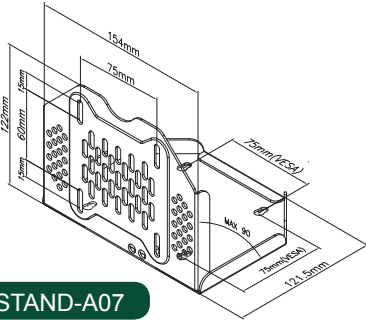


1: Tighten the screws in the rear of the system's VESA mounting holes

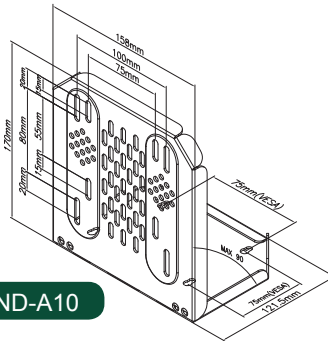
2: Select the position to mount the stand kit

3: Power up the system to operate

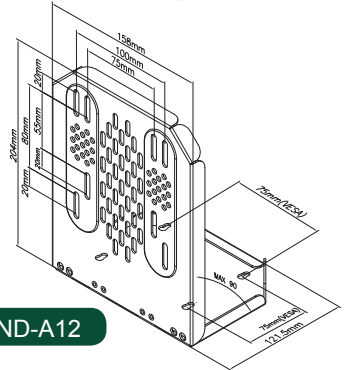
Compact size provides mobility



VSTAND-A07



VSTAND-A10



VSTAND-A12

## Ordering Information

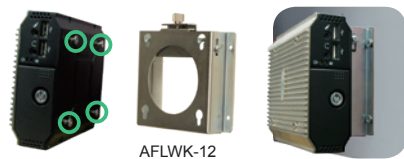
| Part No.       | Description   |
|----------------|---|
| VSTAND-A07-R11 | LCD monitor / PPC stand V type, for AFL series, VESA 75, 0~90 degree adjustable hinge, support up to 2.5 kg, RoHS     |
| VSTAND-A10-R11 | LCD monitor / PPC stand V type, for AFL series, VESA 75/100, 0~90 degree adjustable hinge, support up to 3 kg, RoHS   |
| VSTAND-A12-R11 | LCD monitor / PPC stand V type, for AFL series, VESA 75/100, 0~90 degree adjustable hinge, support up to 3.5 kg, RoHS |

## Wall Mounting

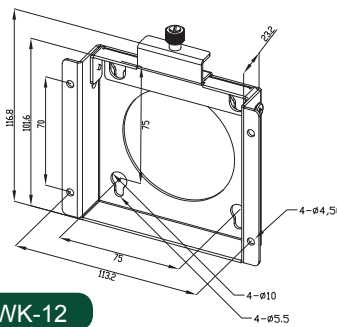
### VESA 75/100 Wall Mounting

Secure the panel by fastening the retention screw of the bracket.

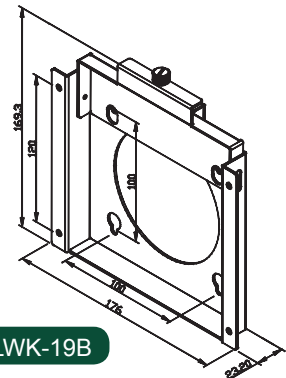
| VESA            | Model     |
|-----------------|-----------|
| 75 mm x 75 mm   | AFLWK-12  |
| 100 mm x 100 mm | AFLWK-19  |
|                 | AFLWK-19B |



AFLWK-12



AFLWK-12



AFLWK-19B

## Ordering Information

| Part No.  | Description  |
|-----------|--|
| AFLWK-12  | 5.6"~12" VESA 75 PPC/monitor wall mount kit with retention screw, silver color, RoHS |
| AFLWK-19B | 15"~19" VESA 100 PPC/monitor wall mount kit with retention screw, silver color, RoHS |