

Technical Data Sheet



Forensic Recovery of Evidence Device – μFRED

μFRED (MicroFRED) is micro Forensic Recovery of Evidence Device. uFRED includes the UltraBay 4 Write Protected Imaging Bay.

The uFRED offers a third drive (SSD) upgrade to use for your Forensic Software's Cache or Database.

μFRED: The Smallest, Full-Powered, Forensic Workstation

The μFRED system has much of the processing power of a full size FRED system but in a package only a fraction of the size (9" x 8" x 13"). μFRED systems utilize an ultra-compact i7 motherboard and include a full 16 GB of DDR4 memory. This system includes the very best features of the standard FRED system but in a much smaller package. All uFRED systems include the UltraBay and a removable drive tray so there is no need to open up the processing system to install drives or crawl around the back of the unit to attach devices. This compact package provides processing and acquisition capabilities far in excess of any laptop or generic "shoebox" computer system!

The UltraBay 4 - Integrated IDE, SATA, SAS, USB, Firewire and PCIe drives Write Blockers

**2X FASTER THAN THE EARLIER VERSIONS
WITH SPEEDS UPTO 15.4GB PER MINUTE!**

The Digital Intelligence UltraBay+ is included in the uFRED and can be used to acquire a forensically sound image of IDE, SATA, SAS, USB, Firewire and PCIe drives using your choice of Forensic Imaging software. Your drives may be connected and removed from the UltraBay 4 without having to shut down the workstation. The UltraBay 4 is available on Digital Intelligence uFRED and FREDDIE systems.



Hot-Swap Removable Evidence Drive

The uFRED includes one internal hard drive to support the Operating Systems and Application Software. It also includes a second hard drive in a shock-mounted Hot Swap bay to be used for the storage and processing of case work and digital evidence. The evidence drive in the Hot Swap bay can be inserted, removed, or replaced without powering down the system.

An external high-speed USB3 port is also available for the connection of additional equipment. The uFRED comes pre-installed with Windows 10 Professional (64-bit) on the Primary Drive. Additionally, a fully-loaded, pre-configured Suse Linux installation image is also included on Blu-ray restoration disk for installation if desired.

Network Functionality Built In

The uFRED systems have an integrated Gigabit Ethernet (10/100/1000 Mb) for network connectivity.

This can be used for connection to laboratory forensic network such as our FREDC or also for connection in the field to a suspect or target network for data acquisition.

Baseline μFRED Specifications:

- Intel Core i7-6770 Quad Core Processor, 3.4 GHz, 8MB L3 Cache
- 16 GB DDR4-1600 Dual Channel Memory
- 1 x 256 GB Solid State SATA III Drive (Internal) OS Drive
- 1 x 128 GB Solid State SATA III Hard Drive - Temp/Cache/DB Drive
- 1 x 2 TB 7200 RPM 3.0 Gb/s SATA Hard Drive in Shock-Mounted tray - Data Drive
- **Windows 10 Professional (64 bit)**

Also includes: DOS (Win98 Standalone), SUSE Professional Linux (64 bit)

- **Hardware Write Blocking:**

Digital Intelligence UltraBay 4 Hardware Write-Blocker:

- Integrated IDE Drive Write Blocker
- Integrated SATA Drive Write Blocker
- Integrated SAS Drive Write Blocker
- Integrated USB 3.0/2.0 Write Blocker
- Integrated FireWire IEEE 1394b Write Blocker
- Integrated PCIe Write Blocker
- Write-Block and Read/Write visibility via Lock/Unlock LEDs

- Detailed System Specifications:

Micro-FRED Chassis (9in wide x 8 in tall x 13 in deep) with 450 watt ATX power supply

LGA 1151 Intel Z170 Mini ITX Motherboard

Intel Integrated HD Graphics 530 Controller w/ Dual Monitor Support (1 HDMI, 1 DisplayPort) 10/100/1000 Mbs Gigabit Ethernet

Network Adapter; 802.11a/b/g/n/ac WiFi + + Bluetooth 4.0

1 PCI-Express 3.0(x16)Slot; 2 6 Gb/s SATA Ports

1 x M.2 Socket 3 with M Key design (Supports both SATA & PCIE SSD)

8 Channel SupremeFX High Definition Audio CODEC

Digital Optical S/PDIF audio output

4 USB 2.0 ports - 2 Back Mounted, 2 Front Mounted

6 USB 3.0 ports - 4 Back Mounted, 2 Front Mounted

3 USB 3.1 ports - Back Mounted

1 USB 3.1 Type C port - Back Mounted

1 Write Blocked USB 3.0/2.0 port - Front Mounted

1 FireWire IEEE 1394b (800 MB/s) port - Front Mounted(Write Blocked)

1 PS/2 Mouse/Keyboard Combo Port

- Other Software included: Symantec Ghost

- **Accessories**

- **CD Case:** Containing system restore media
- **System Keys:** For removeable hard drive bays

Toolbox Containing

- Adapters and Cables: Cables and adapters to image and process internal/external drives including SAS, SATA, IDE, microSATA, SATA LIF, MacBook Air Blade Type SSDs, mini/micro SSD cards, 1.8 inch IDE (iPod) and 2.5 inch IDE (laptop).
- Security Screwdriver Set: A varied assortment of popular security bits for opening computer enclosures that may have been locked down in a corporate environment.
- Digital Camera: Useful to document your suspects environment and hardware.

Software

- Microsoft Windows 10 Professional 64 Bit
- Suse Linux Professional (Pre-Configured).
- Symantec GHOST, Original OEM Software/Hardware Installation Manuals