



Digital Intelligence μFRED™

## Our Mission

At Digital Intelligence, we combine the knowledge gained from years of providing digital forensics and eDiscovery services with a deep understanding of digital technology to build and deliver solutions that *Give Voice to Digital Evidence™*.



Digital Intelligence UltraBay 4™

# μFRED™

## MICRO FORENSIC RECOVERY OF EVIDENCE DEVICE

### μFRED™: The Portable, Full-Powered FRED Forensic Workstation

The μFRED system has all the processing power of a full-size FRED™ with a form factor the fraction of the size (9" x 8" x 13"). The μFRED is built around a powerful Intel® i7-8700, 3.2 GHz (4.6 GHz turbo mode), six Core CPU with 12 MB of Intel SmartCache. All μFREDs include the integrated UltraBay 4™ write blocker and a removable drive tray which facilitates easy hard-drive insertion and removal. The compact μFRED is built for forensic acquisition and processing with features simply not found in generic laptops or small form factor computer systems.

### DI UltraBay 4™ Hardware Write Blocking

Using modern forensic imaging software, the UltraBay 4™ acquires forensically sound images of IDE, SATA, SAS, PCIe (server class, PCIe M.2, and MacBook® mid 2013-2016) drives as well as USB 3.0/2.0/1.1 and FireWire storage devices. Storage devices may be connected and removed from the UltraBay 4 without powering off the μFRED.

### Hard Drive Options for Any Forensic Use Case

μFRED supports up to seven (7) hard drives: Two (2) on board NVMe slots, four SATA in 4 x 2.5" drive bay chassis, and one hot-swap bay. Standard μFRED's ship configured with three drives:

**Operating System:** one 512 GB NVMe on-board

**Temp/Cache:** 512 GB SSD SATA III in one 4 x 2.5" chassis locations

**Data:** 2 TB 7200 RPM SATA III in the USB 3.1 hot-swap drive tray

Four additional drive slots provide the storage flexibility required for all modern forensic imaging and analysis software.

### Rigorously Tested and Optimized for Leading Software Packages

All FRED system configurations are exhaustively tested using leading forensic software packages. This methodology produces systems optimized for exceptional performance when conducting digital forensic examinations.

FEATURE	μFRED™ - Forensic Recovery of Evidence Device Technical Specifications
Processor	Intel® Core i7-8700 3.2 GHz (4.6 turbo mode), six core, 12 MB Intel® Smart Cache
Memory	16 GB PC4-17000 DDR4 2133 MHz Memory (32 GB option available)
Chipset	Intel® Z370
Software	Microsoft Windows® 10 Professional 64-bit, open SUSE Linux 64-bit, Symantec® Ghost, CD/DVD authoring software
Graphics	Intel® Integrated HD Graphics 530 Controller
Hard-drive Storage	Two On-board NVMe slots: Slot 1: OS - 512 GB NVMe Slot 2: open 4 x 2.5" four bay chassis: Bay 1: Database/Cache/Temp - 512 GB SSD SATA III Bays 2-4: open HotSwap Bay: Case/DATA - 2 TB 7200 RPM SATA III Additional drive options are available
Drive Bays	1 x hot-swap USB 3.1 connected SATA, shock mounted, removable tray Optional IDE tray for legacy drives is available
DVD/CD/Blu-ray	Optional external USB 3.0 Blu-ray burner is available
Forensic Imaging /Write Blocking	DI UltraBay 4™ forensic bridge - write blocks SATA,SAS,USB3.0/2.0/1.1, IDE, FireWire, and PCI-express SSD storage devices Supports hot-swap device connection; UltraBay write-blocking products available exclusively with DI FRED systems
Networking	Intel® 10/100/1000 Mbps gigabit Ethernet adapter 802.11a/b/g/n/ac dual band WiFi + Bluetooth 4.1
External Ports and Connectors	4 USB 2.0 ports - 2 back access, 2 front access 6 USB 3.0 ports - 4 back access, 2 front access 3 USB 3.1 ports - back access 1 USB 3.1 Type C - back access 1 write blocked SATA port - front access on UltraBay 4 1 write blocked SATA or SAS port - front access on UltraBay 4 1 write blocked PCIe port - front access on UltraBay 4 1 write blocked USB 3.0/2.0/1.1 port - front on UltraBay 4 1 write blocked IDE port - front access on UltraBay 4 1 write blocked FireWire 1394 A/B (400/800 MB/s) port - front access on UltraBay 4
Storage Controller	2 ports Intel® 6 Gb/s SATA controller, 1 x Intel® SATA Express port, 1 x Intel® M.2 x 4 PCIe socket
Adapters and Accessories	SATA, SAS, IDE, FireWire, USB, and PCIe power / signal cables. PCIe SSD m.2 NVMe, PCIe MacBook Pro (2013 and newer), PCIe server class SSD, and FireWire adapters.
Audio	Supreme FX 8-channel high definition audio CODEC
Keyboard / Mouse	Optional Microsoft wireless desktop keyboard and mouse combination available
Display	Optional 22" (21.5" Vis) ergonomic LED monitor, 1920 x 1080 full HD resolution, height adjust, tilt and swivel functions with built-in speakers
Power	650 Watt power supply
Warranty and Support	Hardware warranty is 36 months from date of purchase. Extended warranty options available. Lifetime technical support
Dimensions	8" High x 9" Wide x 13" Deep