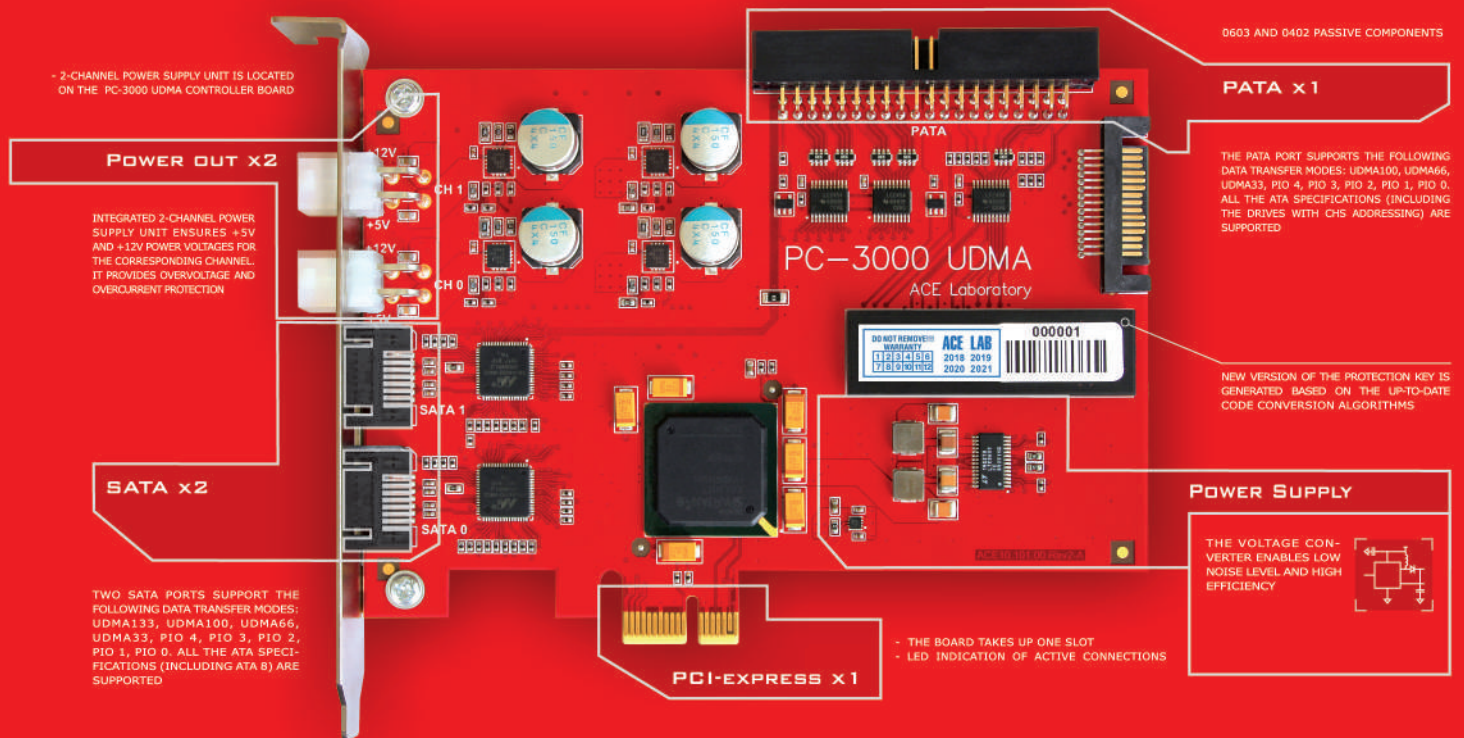




PC-3000 UDMA Systems



The optimal choice for daily tasks in a data recovery facility

3-port*
tester-board

2 HDD/SSD/RAID
members

2 SATA
ports
with speed up to
150 MB/s

+

1 PATA
ports
with speed up to
133 MB/s

can be connected to the PC-3000 UDMA at the same time. Thus, you can restore either 2 SATA drives or 1 SATA and 1 PATA drives simultaneously.

The total number of connected RAID members can be increased with motherboard ports and image files.

The PC-3000 UDMA is a hardware-software solution intended for diagnosing and repairing damaged SATA/IDE HDDs. Together with other ACE Lab's software products, it represents the systems with optimal combination of high efficiency and reasonable price to recover data from SATA/IDE HDDs, RAID and SSD:

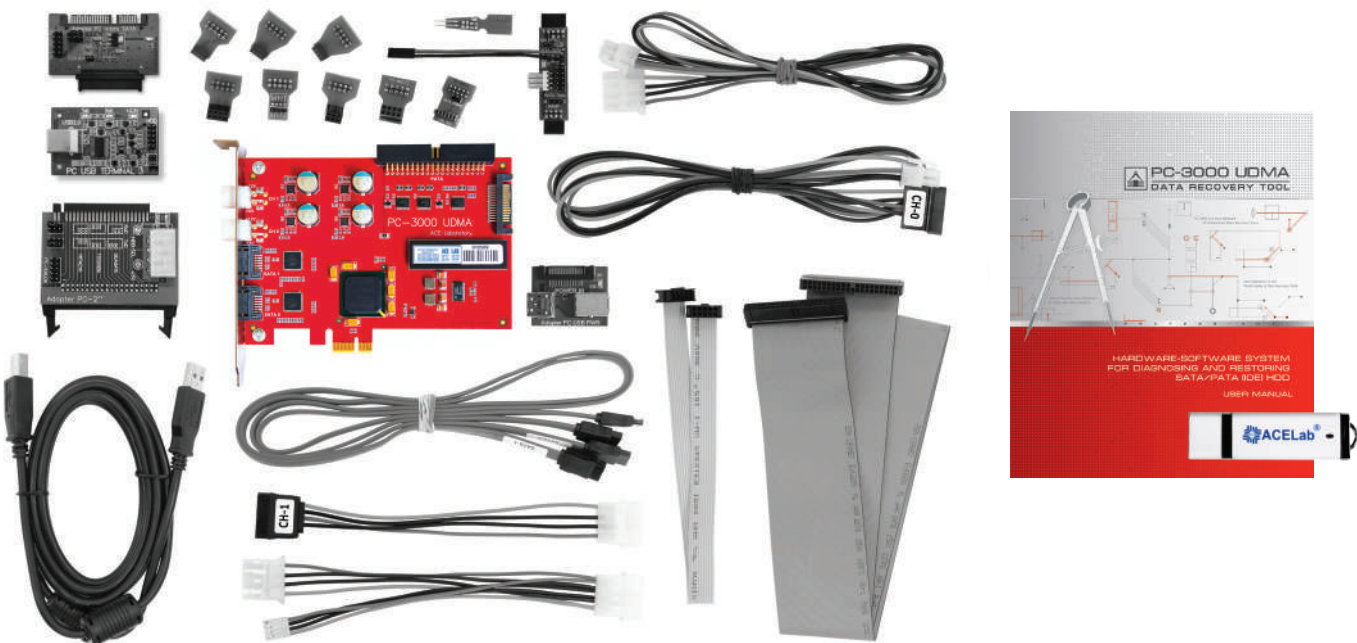
- ▶ PC-3000 UDMA System (PC-3000 UDMA + Data Extractor UDMA)
- ▶ PC-3000 UDMA RAID System (PC-3000 UDMA + Data Extractor UDMA RAID Edition)
- ▶ PC-3000 UDMA SSD System (PC-3000 UDMA + Data Extractor UDMA + PC-3000 SSD)
- ▶ PC-3000 UDMA Ultimate System (PC-3000 UDMA + Data Extractor UDMA RAID Edition + PC-3000 SSD)

*SATA0 is the primary port, SATA1 is switchable with the PATA port (PATA0).

What’s special about PC-3000 UDMA Rev. 2.0.

- ▶ Broad support of all generations of SATA/PATA HDD (500MB-8TB) with proven over time hardware platform
- ▶ The data transfer speed and the SATA ports stability is increased with the new 88SA8052-64 QFN Serial ATA 3.0 Gb/Sec bridge chipset
- ▶ The stability of power supply and electromagnetic compatibility is improved with jam-resistant package of coils with the 1.2V and 3.3V power supply regulator on Xilinx chipset. The connection of balanced capacitors is changed. The printed board of the adapter is improved for large currents with the enhanced circuitry of the power control adapter
- ▶ The safety and stability of HDD power supply is boosted with a highly reliable power supply connector – SATA POWER

The PC-3000 UDMA System Kit:



1. PC-3000 UDMA controller	– 1 pc.	14. PC-WD 2.5" adapter	– 1 pc.
2. PC-USB PWR adapter	– 1 pc.	15. ATCS, ATDA probe unlock	– 1 pc.
3. PC USB TERMINAL 3 adapter	– 1 pc.	16. USB 2.0 cable	– 1 pc.
4. PC-2" adapter	– 1 pc.	17. SATA RAID edition (100 cm) cable	– 2 pc.
5. SATA-micro SATA adapter	– 1 pc.	18. UDMA80 (80 cm) flat cable	– 1 pc.
6. MX-SAFE adapter	– 1 pc.	19. IDC10 (30 cm) cable	– 1 pc.
7. PC-FUJ.SATA adapter	– 1 pc.	20. MX-SAFE power cable	– 1 pc.
8. PC-QUANTUM adapter	– 1 pc.	21. SATA HDD (100 cm) power cable	– 1 pc.
9. PC-SAMSUNG adapter	– 1 pc.	22. PATA HDD (85 cm) power cable	– 1 pc.
10. PC-SEAG.SATA adapter	– 1 pc.	23. PATA-SATA (15 cm) power adapter	– 1 pc.
11. PC-SEAGATE adapter	– 1 pc.	24. PC-3000 UDMA software, resource database	– 1 pc.
12. PC-TOSH.SATA adapter	– 1 pc.	25. User manual	– 1 book
13. PC-WD 3.5" adapter	– 1 pc.		



Evidence recovery from HDD

```
0x0000: 46 49 54 20 20 20 20 20
0x0010: 41 30 09 00 9D 00 10 00
0x0020: B3 00 42 4F 4F 54 53 45
0x0030: 02 00 46 49 54 20 23 20
0x0040: 04 00 4D 4 9 53 54 20
0x0050: 00 00 46 53 49 20 20 20
0x0060: 9B 00 53 56 5F 54 42 4C
0x0070: B4 00 52 52 30 5F 54 42
0x0080: B5 00 52 45 53 4F 5F 54
0x0090: 68 00 46 44 54 5F 54 42
0x00A0: 0C 00 43 48 4E 5F 54 42
0x00B0: 06 00 43 4F 4E 46 49 47
```

DATA EXTRACTOR
THE BEST... EVER

Recovers more data than any other tool in the world

The Data Extractor professional software product is an essential part of the PC-3000 hardware-software systems intended for recovering data from SATA (Serial ATA), ATA (IDE) HDDs 3.5", 2.5", 1.8", 1.0", SAS (Serial Attached SCSI), SCSI, USB HDD, SSHD (Solid State Hybrid Drive), etc.

PC-3000 Systems allow reading only necessary data due to the powerful integrated functionality for logical analysis of file systems. This advanced technology greatly reduces the volume of the read data, the workload on damaged HDDs and the time required for data recovery. Thus, you can read the data even if a drive has considerable physical damage

Supported SATA/IDE HDDs:

Damaged (physically and logically), encrypted and healthy SATA/IDE HDDs of various vendors:

- ▶ Western Digital
- ▶ Seagate
- ▶ Samsung
- ▶ Maxtor
- ▶ Toshiba
- ▶ Quantum
- ▶ Fujitsu
- ▶ Hitachi

To recover data from HDD you need one of the following Systems:

- ▶ PC-3000 Express Systems
- ▶ PC-3000 UDMA Systems
- ▶ PC-3000 Portable Systems
- ▶ PC-3000 SAS Systems

Supported SAS/SCSI HDDs:

Damaged (physically and logically), encrypted and healthy SAS/SCSI HDDs of various vendors:

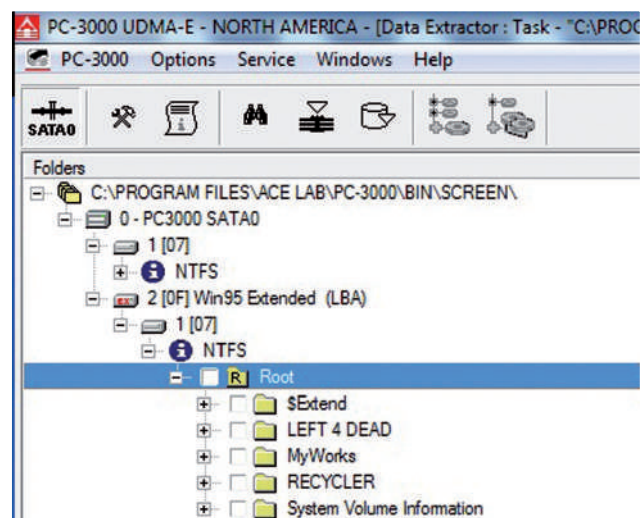
- ▶ IBM
- ▶ Seagate
- ▶ Hitachi GST
- ▶ Maxtor
- ▶ Fujitsu

Supported file and storage systems:

File systems: FAT, exFAT, NTFS, ReFS, HFS+, APFS, EXT2/3/4, XFS, F2FS, ReiserFS, BtrFS, VMFS, UFS1/2, ZFS

DVR Files Systems: WFS0.4, DHFS4.1

Virtual drives: flat (raw image), vhd, vhdx, vmdk, dmg





Evidence recovery from RAID



	A	B	C	D
0	0	1	XOR	RS
1	3	XOR	RS	2
2	XOR	RS	4	5
3	RS	6	7	XOR

— The easiest, fastest and smartest systems to recover data and digital evidence from RAID

The Data Extractor RAID Edition software product is an essential part of the PC-3000 Systems intended for recovering data from RAID arrays. The hardware-software combination enables to solve the most complex RAID cases when one or several drives have not only logical (deleted partitions, virus attacks, etc.) but also serious physical damages. The Data Extractor RAID Edition contains all the features of the Data Extractor.

To recover data from RAID you need one of the following Systems:

- ▶ PC-3000 Express RAID/Ultimate System
- ▶ PC-3000 UDMA RAID/Ultimate System
- ▶ PC-3000 Portable RAID/Ultimate System
- ▶ PC-3000 SAS RAID System

— Supported virtual RAID levels

- ▶ 0 (Stripe), 1 (Mirror), 1E Offset and Adjacent, JBOD, 4, 5, 5E, 5EE, 6 and 6-Adaptec
- ▶ Various combined levels: 10, 50, 51, 60 and others (due to the possibility to use virtual RAID array as a member)
- ▶ Software-based RAID and multi-disk storage systems: LDM and mdadm structure analysis, WSS (Windows Storage Spaces), ZFS RAID-Z, Btrfs RAID, Apple Fusion Drive (HFS+, APFS)
- ▶ Custom configurations that are set by user with the tabular (matrix) presentation

0	1	XOR	2	3	XOR
5	XOR	4	7	XOR	6
XOR	8	9	XOR	10	11



Evidence Recovery from SSD

PC-3000 SSD DRIVE THE CHANGE

NAND CHIPS ID:

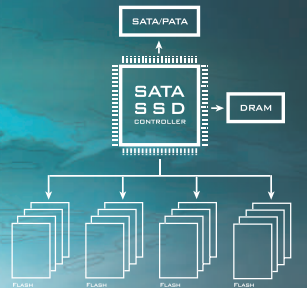
CHANNEL 0:
CE 0: LOGIC CHIP
CE 1: LOGIC CHIP
CE 2: LOGIC CHIP
CE 3: LOGIC CHIP

CHANNEL 3:
CE 0: 0x2C8B044B
CE 1: 0x2C8B044B
CE 2: 0x2C8B044B
CE 3: 0x2C8B044B
> ■

SSD DETECTED

TECHNOKEY : DETECTED!
CAPACITY : 256 GB
NUMBER OF CHANNELS : 8

CHANNEL 0:
CE 0: LOGIC CHIP
CE 1: LOGIC CHIP
CE 2: LOGIC CHIP
CE 3: LOGIC CHIP



The leading-edge unique solution for recovering SSD in technological mode

The PC-3000 SSD Software is a professional product intended for restoring SSD and recovering data from them.

To recover evidence from SSD you need one of the following Systems:

- ▶ PC-3000 Express SSD/Ultimate System
- ▶ PC-3000 UDMA SSD/Ultimate System
- ▶ PC-3000 Portable SSD/Ultimate System

Key Features for SSD Diagnosis, Repair and Data Recovery

- ▶ Diagnose an SSD in technological mode
- ▶ View the logs of hidden defects (P-page, G-page)
- ▶ Perform low-level formatting to hide the discovered defects
- ▶ Reset the logs and S.M.A.R.T. parameters
- ▶ Search for the damaged memory chips
- ▶ Provide direct access to the content of memory chips so that you do not need to unsolder the chips
- ▶ Emulate the translator operation in order to get an access to user data
- ▶ Load the microcode into the drives RAM
- ▶ Read and write the content of the SSD ROM
- ▶ Verify and restore the SSD service information
- ▶ View the password and reset the password that was earlier set on the SSD
- ▶ Turn off background processes in the SSD to prevent data damage
- ▶ Work with the Data Extractor

