





## PC-3000 Flash Data Recovery Basic Online Training Program



1. How NAND-Flash drives work.



7. How to diagnose a non-working device. Physical recovery using the chip-off method.



2. The main things you should keep in mind when recovering data from NAND-Flash drives.



8. Creating a new task in the PC-3000 Flash and reading out the microchip.



3. Types of NAND microchips and the PC-3000 Flash adapters to suit your data recovery needs.



9. How to use the ECC correction to fix issues.



4. How to get info on a NAND-Flash device after disassembling: the controller and the memory chip.



10. Executing a graph and correcting the ECC. Reading out the dump.



5. Possible issues with NAND-Flash drives and their causes.



11. How to read out the dump and use the ReadRetry option.



6. Diagnosing a non-working device. Logical recovery without the chip-off. The RAW recovery.



12. Improving the quality of the dump by reading out the uncorrected sectors.







13. How to convert the controller:

- the XOR
- the Page Transformation
- the Interleave
- the External Interleave

The RAW Recovery: a method of research and recovery.



18. The PC-3000 Flash Solution Center to solve cases in a few clicks. How to find a solution by controller type and memory chip ID. Automatic search for a solution. Implementing solutions, automatic transformations and building the logical image.



14. How to assemble the image.



19. Implementing solutions for a task that was read out before. Using the PC-3000 Flash Solution Center.



15. The transformations. PS2251-67 - the XOR, the Page Transformation.



20. Using methods to get extra data. The PC-3000 Flash Solution Center + AU6989 + the partition recovery. The RAW recovery on the graph and image, disk analysis, and search for partitions.



16. The transformations. SM3257EN - the XOR, the Page Transformation, the Interleave.



21. Saving data, exporting the file system to another drive, saving the image into a file for a further analysis with third-party (e.g. forensic) tools.



17. The transformations. IS902 - the XOR, the Page Transformation, the Interleave, the Ext Interleave.



22. The ACE Lab Technical Support Service. How to create a ticket when you face a difficult case or have a question.