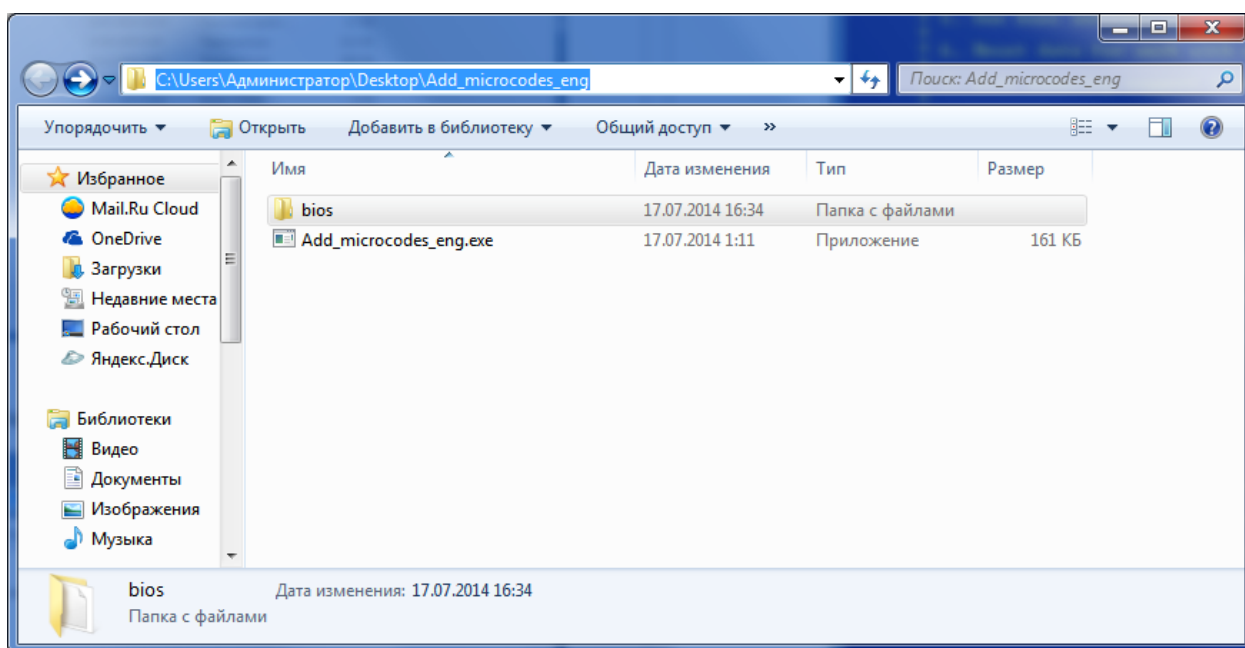
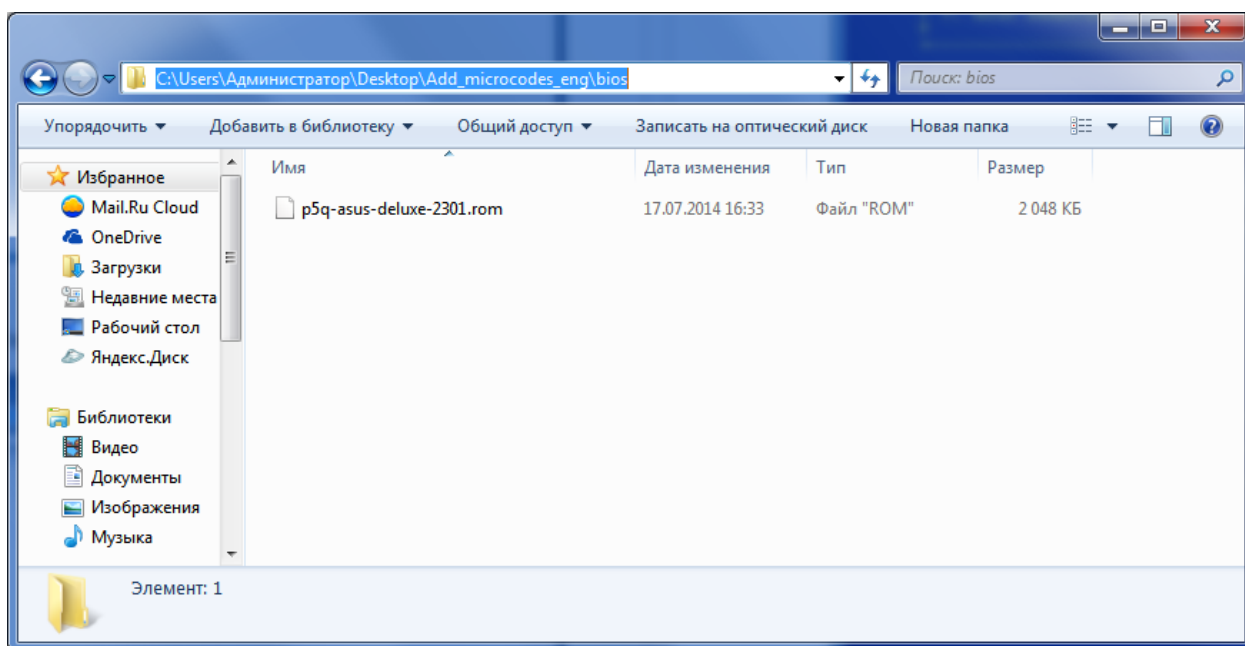


- I. Unpack the «Add_microcodes_eng» folder from archive for example in root of disk C:, on a desktop or in any other place on your discretion:

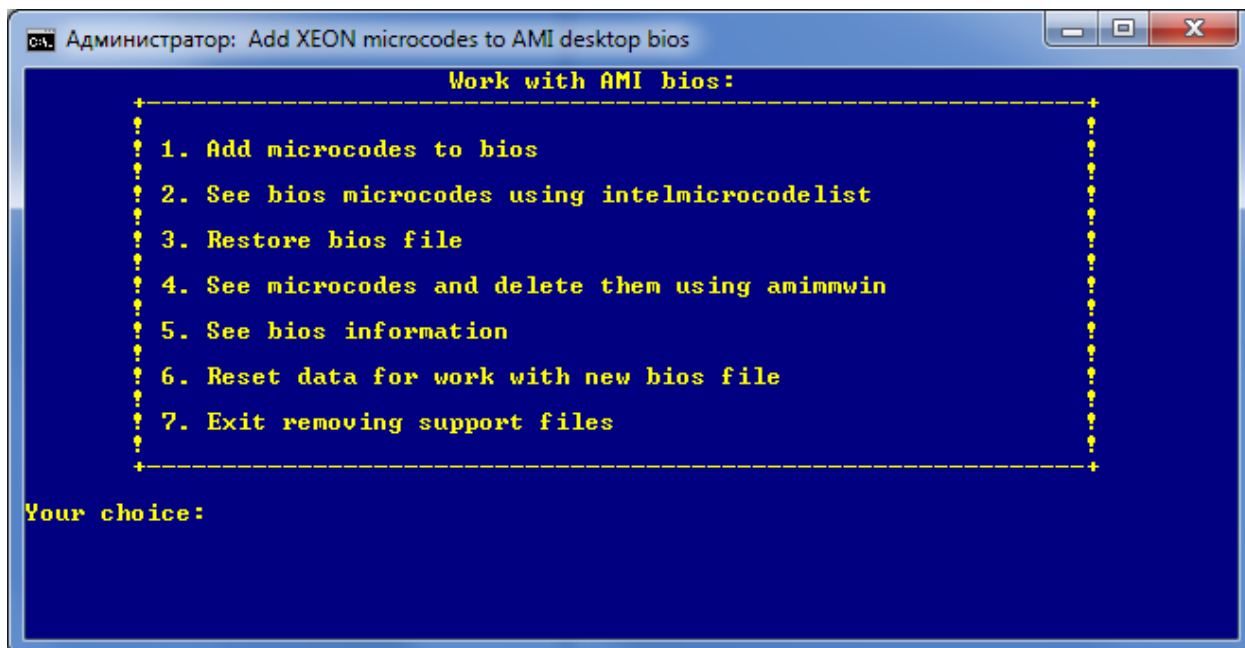


- II. Copy the bios file into the BIOS folder:

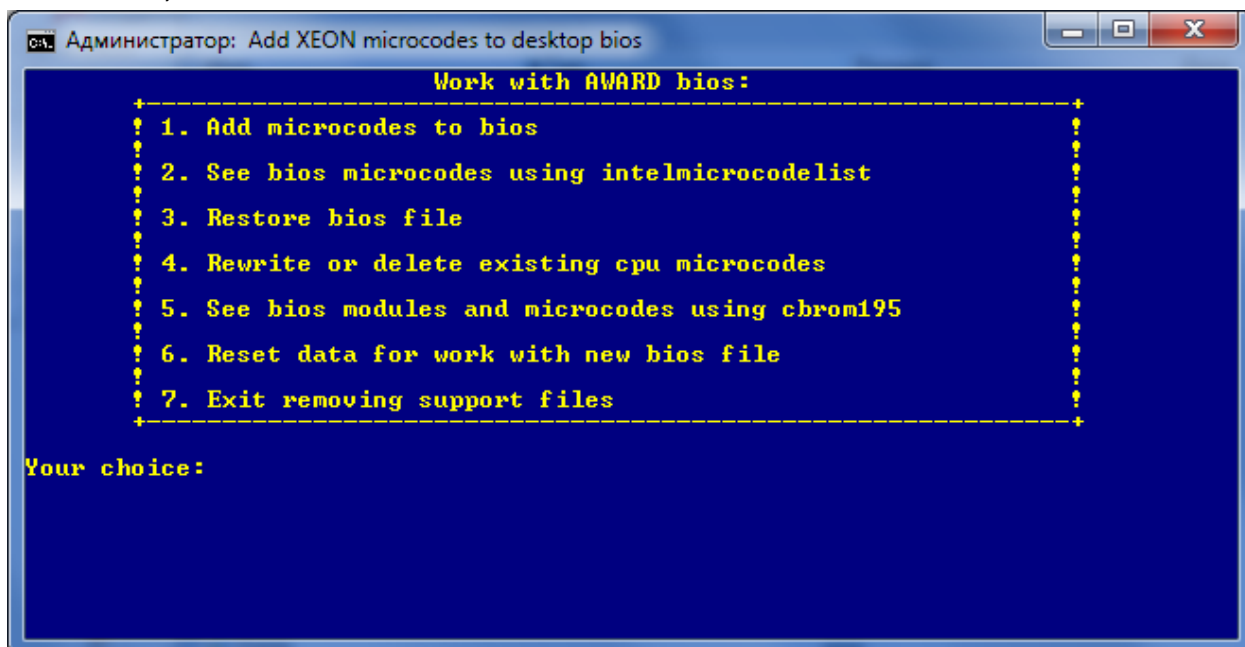


- III. Run file [Add_microcodes_eng.exe](#) :

At start in an automatic mode bios accessory, i.e. AMI or AWARD will be checked. In case of AMI bios detection, the menu for work with this bios type will be offered:



Otherwise, the menu for work with AWARD bios will be offered:



Commands in the presented menus:

1. «Add microcodes to bios» – adds XEON LGA771 microcodes in the bios file;
2. «See bios microcodes using intelmicrocodelist» – after addition of microcodes it is necessary to be convinced that they are added.

before adding microcodes:

```

CPUID=10676 Rev=60C 2008/01/19 CRC=FBAC0F6C Off=5B630 Size=1000 Plat=0
CPUID=10676 Rev=60C 2008/01/19 CRC=FBAC0F5D Off=5C630 Size=1000 Plat=4
CPUID=10677 Rev=705 2008/04/28 CRC=A6DB99DD Off=5D630 Size=2000 Plat=4
CPUID=1067A Rev=A07 2008/04/09 CRC=83067F5A Off=5F630 Size=2000 Plat=0,4
CPUID=106C1 Rev=109 2007/12/03 CRC=349F67A3 Off=61630 Size=1400 Plat=0
CPUID=106C2 Rev=208 2008/03/14 CRC=142E2509 Off=62E30 Size=1400 Plat=2
CPUID=106C2 Rev=20D 2008/07/10 CRC=8B6B9648 Off=64630 Size=1400 Plat=3
Press any key to exit

```

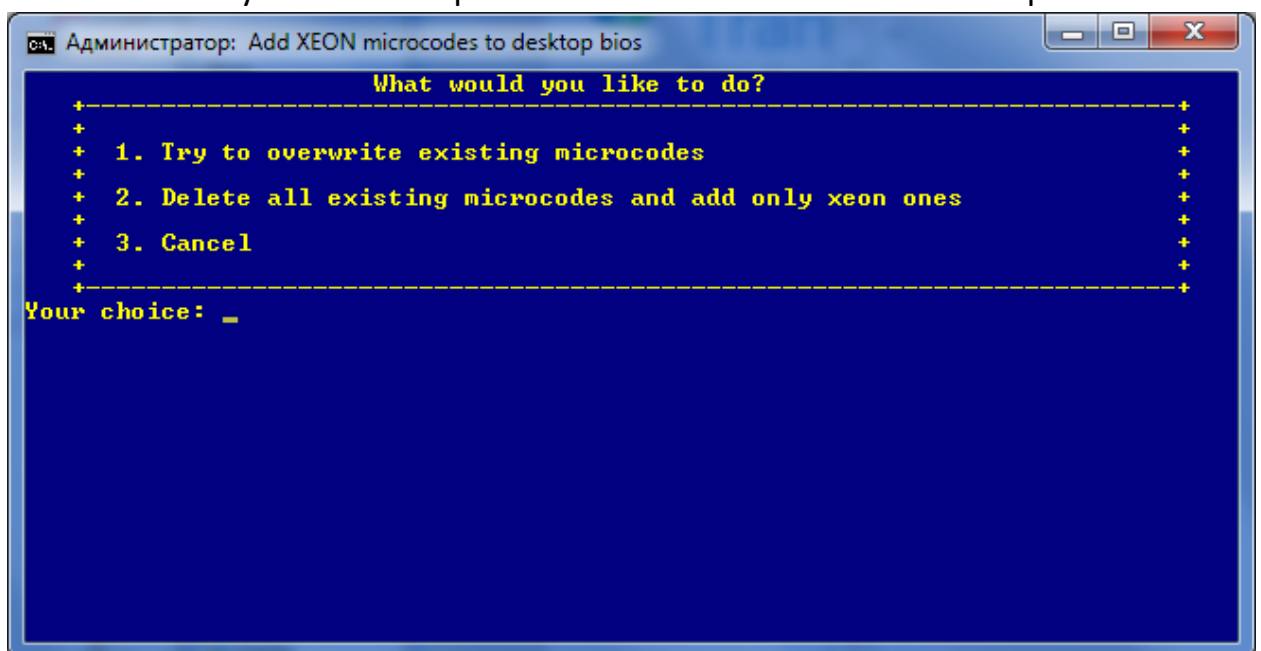
after adding microcodes:

```
CPUID=10676 Rev=60C 2008/01/19 CRC=FBAC0F6C Off=5B630 Size=1000 Plat=0
CPUID=10676 Rev=60C 2008/01/19 CRC=FBAC0F5D Off=5C630 Size=1000 Plat=4
CPUID=10677 Rev=705 2008/04/28 CRC=A6DB99DD Off=5D630 Size=2000 Plat=4
CPUID=1067A Rev=A07 2008/04/09 CRC=83067F5A Off=5F630 Size=2000 Plat=0,4
CPUID=106C1 Rev=109 2007/12/03 CRC=349F67A3 Off=61630 Size=1400 Plat=0
CPUID=106C2 Rev=208 2008/03/14 CRC=142E2509 Off=62E30 Size=1400 Plat=2
CPUID=106C2 Rev=20D 2008/07/10 CRC=8B6B9648 Off=64630 Size=1400 Plat=3
CPUID=10676 Rev=60F 2010/09/29 CRC=8FE1A243 Off=65E30 Size=1000 Plat=2
CPUID=10676 Rev=60F 2010/09/29 CRC=8FE1A207 Off=66E30 Size=1000 Plat=6
CPUID=1067A Rev=A0B 2010/09/28 CRC=B007E7B0 Off=67E30 Size=2000 Plat=2,6
Press any key to exit
```

They should look like this (note the red text selection):

```
CPUID=10676 UpdateRev=60F 2010/09/29 Checksum=8FE1A243 PlatformID=2
CPUID=10676 UpdateRev=60F 2010/09/29 Checksum=8FE1A207 PlatformID=6
CPUID=1067A UpdateRev=A0B 2010/09/28 Checksum=B007E7B0 PlatformID=2,6 ;
```

3. «Restore bios file» – at start of the program the backup copy of the bios file is created, with this command file can be restored from the backup (till an exit from the program since after an exit the backup copy is removed);
4.
 - a. «See microcodes and delete them using amimmwin» - **!only for AMI bios!** - there is a probability of shortage of a place in the bios file therefore addition of microcodes is impossible. For addition of new microcodes in files with shortage of a place it is necessary to remove from them already existing microcodes by means of this point of the menu. Further it is necessary to choose first command of the menu for the subsequent addition of microcodes of XEON LGA771;
 - b. «Rewrite or delete existing cpu microcodes» - **!only for AWARD bios!** - by a call of this point of the menu the submenu will open:



where you can try to replace the existing microcode xeon to newer, or in the case of a failed replacement, remove all existing microcode, and add only the microcode xeon;

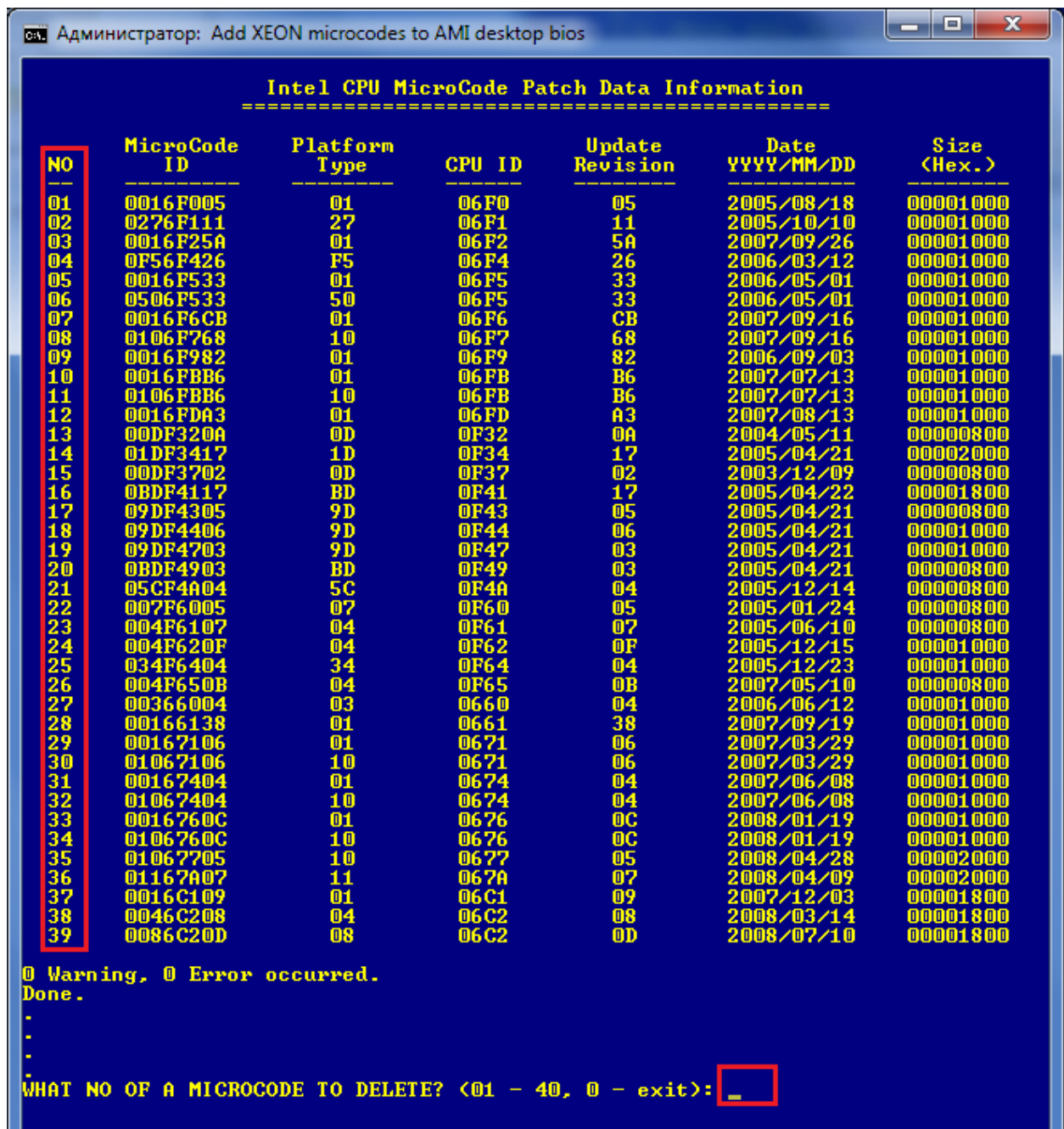
5.

- a. «See bios information» - **!only for AMI bios!** - viewing of bios information with possibility of the subsequent preservation in the text file (coding dos). Preservation is made in the main folder.
- b. «See bios microcodes and modules using cbrom195» - **!only for AWARD bios!** – alternative view bios modules and CPUID microcodes;

6. «Reset data for work with new bios file» - if it is necessary to add microcodes in few bios files, there is an opportunity to add these files in the bios folder without closing the program (previously having removed from the bios folder the file which is already there);
7. "Exit removing support files" - for the operation of the program since its launch, and to call this menu item in the program folder are files that are required for proper performance of the functions of the program. These files are automatically deleted as "garbage" when calling the described item.

IV. How to add microcodes:

1. Enter 1, the program will issue the message on successful/unsuccessful addition of microcodes in the file;
2. Enter 2, to make sure that necessary microcodes were added / not added;
3. If microcodes added, and also in a case with AWARD bios enter 7, if not, see 4;
4. If microcodes is not added, enter 4, in the resulting window, select the required to remove microcode:



You can repeat the delete operation as long as the bios will be no microcode, then perform steps 1, 2 and 3.

V. Flash your motherboard bios with the received bios file.

Attention! It isn't recommended to modify this equipment of Asus AMI bios since boot block will be thus rewritten that will bring to not to correct work of motherboard.

P.S. It was tested on the MSI bios files by volume from 512Kb with expansion **.***** (** numbers, letters), on the Asus and Asrock bios files volume from 256Kb with the **.rom** expansion. And it was tested on the Gigabyte bios files by volume from 512Kb with the expansion **.f**** (** figure (number) + a letter (not necessarily)), and also on the Biostar bios files, also volume from 512Kb with the **.bs** expansion

P.P.S. For some bios files (volume 256, 512 and 1024Kb) requires to remove a little (usually 3) already present microcodes since this volume is filled completely and it isn't possible to add in it any byte of information. Since in award bios with it there are problems, the best way there will be a way of replacement of microcodes taken from the motherboard with approximately similar characteristics.

The other way to add microcodes is the HEX-editting, see here how to do it:

<http://donovan6000.blogspot.ru/2013/06/insyde-bios-modding-cpu-microcodes.html>

P.P.P.S. Excuse me for my English.