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Configuring the Size and Footprint of the ROM-DOS Kernel

Overview

Changing the size and footprint of ROM-DOS is accomplished primarily through the “BUILD” utility. The following chart contains some common sizes based upon fairly standard build selections and default configurations using ROM-DOS version 4.11.1497:

Kernel Type	Hard Drive Space	Exact bytes	Memory Footprint	Exact bytes
7.1 with LFN	76K	77760	66K	68208
6.22 with LFN	70K	71392	60K	61872
6.22 no LFN	57K	57472	46K	48016
6.22 ROM	44K	44944	46K	48016

The ROM-DOS build utility prompts developers to answer questions regarding the configuration and use of ROM-DOS. Build uses this information to select the corresponding paths within the ROM-DOS OBJ and LIB files thus resulting in a customized ROM-DOS kernel. The preceding table was produced using the follow build options:

7.1 with LFN

Would you like DOS 7.1 compatibility? Y
Would you like to enable LFN support? Y
Will ROM-DOS boot from Floppy/Hard disk? Y
Would you like to enable SuperBoot support? N
Always believe the BPB information? N
Include the built-in ROM-DISK driver in ROM-DOS? N
Include the Custom Memory Disk Driver? N
Do you want ROM-DOS boot diagnostics? Y
Include the Boot Menu? N
Use Real Time Clock Exclusively? N

6.22 with LFN

Would you like DOS 7.1 compatibility? N
Would you like to enable LFN support? Y
Will ROM-DOS boot from Floppy/Hard disk? Y
Would you like to enable SuperBoot support? N
Always believe the BPB information? N
Include the built-in ROM-DISK driver in ROM-DOS? N
Include the Custom Memory Disk Driver? N

Do you want ROM-DOS boot diagnostics?	Y
Include the Boot Menu?	N
Use Real Time Clock Exclusively?	N

6.22 no LFN

Would you like DOS 7.1 compatibility?	N
Would you like to enable LFN support?	N
Will ROM-DOS boot from Floppy/Hard disk?	Y
Would you like to enable SuperBoot support?	N
Always believe the BPB information?	N
Include the built-in ROM-DISK driver in ROM-DOS?	N
Include the Custom Memory Disk Driver?	N
What level of CONFIG.SYS processing (None, 3, 5, 6)?	6
Do you want ROM-DOS boot diagnostics?	N
Include the Boot Menu?	N
Use Real Time Clock Exclusively?	N

6.22 ROM

Would you like DOS 7.1 compatibility?	N
Would you like to enable LFN support?	N
Will ROM-DOS boot from Floppy/Hard disk?	N
Copy ROM-DOS to RAM?	N
Where shall ROM-DOS data reside	70
Can a floppy disk superscede ROM-DOS in ROM?	Y
Do you want to include the Floppy/Hard disk driver?	N
Include the Custom Memory Disk Driver?	N
Do you want to change the default ROM-DISK search segment?	N
Read CONFIG.SYS from a specific drive letter?	N
Read CONFIG.SYS from which device (ROM, Floppy, Hard)?	R
What level of CONFIG.SYS processing (None, 3, 5, 6)?	N
Do you want ROM-DOS boot diagnostics?	N
Include the Boot Menu?	N
Use Real Time Clock Exclusively?	N
Create Binary or Intel HEX file(s) as output (B/H):	B
Split the output into Odd byte and Even byte files?	N

Minicmd

Further size reductions are possible by replacing the complete command interpreter (command.com) with minicmd that is configurable to the exact DOS kernel commands you wish to support. Minicmd can provide space savings up to 40K.

Minicmd is provided in the ROM-DOS Software Development Kit. The default installation of ROM-DOS creates a subdirectory within the ROM-DOS directory called "Minicmd". Within this directory is the file MINICMD.H. By modifying this Header file the exact commands supported can be specified and the overhead from unnecessary or unwanted commands is removed.