

Name

pep9term -- Translate and run Pep/9 assembly language and microcode programs.

Usage

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pep9term [-h | --help] [-v | --version] [--about]
pep9term asm [-e error_file] -s source_file -o object_file
pep9term run [-i input_file] [-o output_file | --echo-output] [-m
execution_limit] -s source_file
pep9term cpuasm [-e error_file] [-d2 | --dbus-2-byte] [--full-control]
-s source_file
pep9term cpurun [-e error_file] [-d2 | --dbus-2-byte] [--full-control]
[-m execution_limit] [-p unit_test_file] -s source_file
```

Pep9Term is a command line tool utility for interacting with the Pep9 virtual machine. It assembles Pep/9 programs to object code and executes object code programs. Additionally, it checks microcode programs for errors and executes microcode programs with optional preconditions.

Options:

--help	Show help information for all subcommands and exit.
-v,--version	Display program version number.
--about	Display information about licensing, Qt, and developers.

Subcommands:

asm

```
pep9term asm [-e error_file] -s source_file -o object_file
```

Assemble a Pep/9 assembler source code program to object code. The source_file must be a .pep file. The object_file must be a .pepo file. If there are assembly errors an error log file named <source_file>_errLog.txt is created with the error messages. <source_file> is the name of source_file without the .pep extension. If there are no errors the error log file is not created.

Options:

-e TEXT	Override the default error log file, which contains assembly errors. If no errors are present, no data will be written to the file.
-s TEXT REQUIRED	Input Pep/9 source program for assembler.
-o TEXT REQUIRED	Output object code generated from source.

run

pep9term run [-i input_file] [-o output_file | --echo-output] [-m execution_limit] -s source_file

Run a Pep/9 object code program. The source_file must be a .pepo file.

Options:

-s TEXT REQUIRED Input Pep/9 object code program for simulator.
-i TEXT File which will be buffered behind the charIn.
-o TEXT File which charOut will be written to.
--echo-output Echo data written to charOut to the terminal.
-m UINT:POSITIVE=25000 The maximum number of assembly instructions executed before aborting. Defaults to 25000

cpuasm

pep9term cpuasm [-e error_file] [-d2 | --dbus-2-byte] [--full-control] -s source_file

Check a Pep/9 microcode program for syntax errors. The source_file must be a .pepcpu file. If there are micro-assembly errors an error log file named <source_file>_errLog.txt is created with the error messages. <source_file> is the name of source_file without the .pepcpu extension. If there are no errors the error log file is not created. Supports 1- and 2-byte data buses with the 1-byte data bus as the default. Supports the extended control section for running complete assembly language programs at the microcode level, with partial control using UnitPost tests as the default.

Options:

-e TEXT Override the default error log file, which contains assembly errors. If no errors are present, no data will be written to the file.
--mc TEXT REQUIRED Input Pep/9 microcode source program for microassembler.
--dbus-2-byte,--d2 Assemble the microcode program with a 2-byte data bus (default is 1-byte).
--full-control Needs: --dbus-2-byte Assemble the microprogram with the full control section (default is partial control section).

cpurun

pep9term cpurun [-e error_file] [-d2 | --dbus-2-byte] [--full-control] [-m execution_limit] [-p unit_test_file] -s source_file

Assemble and run a Pep/9 microcode program. The source_file must be a .pepcpu file. If there are micro-assembly errors or UnitPost errors an error log file named <source_file>_errLog.txt is created with the error messages. <source_file> is the name of source_file without the .pepcpu extension. If there are no errors the error log file is not created. Supports 1- and 2-byte data buses with the 1-byte data bus as the default. Supports the extended control section for running complete assembly language programs at the microcode level, with

partial control using UnitPost tests as the default.

Options:

-e TEXT Override the default error log file, which contains assembly or postcondition errors. If no errors are present, no data will be written to the file.

--mc TEXT REQUIRED Input Pep/9 microcode source program for microassembler.

--dbus-2-byte,--d2 Assemble the microcode program with a 2-byte data bus (default is 1-byte).

--full-control Needs: --dbus-2-byte Assemble the microprogram with the full control section (default is partial control section).

-m UINT:POSITIVE=250000 Needs: --full-control The maximum number of CPU cycles executed before aborting. Defaults to 250000

-p TEXT Pep/9 Microcode file containing pre- and post-conditions. Using this flag overrides and skips any pre- and post-conditions in the microcode source file provided with (--mc).