

## e4thcom 0.9.0 64 : A Serial Terminal for Embedded Forth Systems

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**Usage:** /path/to/e4thcom-x.y.z/e4thcom [options]

### Options:

**-b** [B1200,B2400,B4800,B9600,B19200,B38400,B57600,B115200,B230400,  
B460800,B500000,B576000,B921600,B1000000]

The baudrate. Default is B9600.

**-d** [Device] Serial device to be used.

Default is ttyACM0.

**-h** Display this help and exit.

**-p** [dir1:dir2:dir3] Set the path cwd:cwd/dir1:cwd/dir2:cwd/dir3 for Forth source code look-up.

Default is cwd:cwd/mcu:cwd/target:cwd/lib

cwd = current working directory.

**-t** [<target>] The target to connect to. Loads the **target specific plug-in** file <target>.efc from the e4thcom-x.y.z directory.

```
4e4th[-xas]
328eforth[-xas]
430camelforth[-xas]
430eforth[-xas]
amforth[-xas]
anyforth          simple file upload without error checking
mecrisp[-msp430xas]
mecrisp-qs
mecrisp-st
noforth
noforth-xas       for MSP430
stm8ef
swapforth-j1sc
```

(xas = with cross-assembler/-disassembler support)

No -t option = simple terminal function, no file upload.

**--hdm** Enable the half-duplex transmission mode. Default is full-duplex.

**--idm** Inverse display mode (black or colored letters on white background).

**--rln** Enable readline command line buffering.

**The terminal input is buffered.** Editable command line with history and [TAB] selection. The [TAB] selection is based on the first character in the command line buffer. [Shift]+[TAB] clears the command line buffer, [Enter] sends the

command line to the target or interprets it as a terminal directive.

### **Supported terminal directives:**

**#ls** [OPTION]... [FILE]...

List project directory content (see ls man page).

**#e[dit]** [<name>]

Edit the file <name>. After an upload error #e[dit] opens the uploaded file.

**#i[nclude]** <name>

Upload the file <name> to the target.

**#r[equire]** <name>

Upload the file <name> to the target, if <name> does not already exist in the (current search order) of targets dictionary.

*The default file search order is cwd:cwd/mcu:cwd/target:cwd/lib. It may be changed with the -p option.*

*The short version of a directive is for the command line only. In source code files the long version must be used, one directive per line. The rest of the line is silently discarded.*

### **Conditional execution:**

**#ifdef** <name> ...

If the word <name> is found in the targets actual dictionary search order, then the rest of the line is executed as a terminal directive or as target code. Otherwise its ignored.

Supported terminal directives are: #include , #require , \res and \\ .

**#ifndef** <name> ...

If the word <name> is not found in the targets actual dictionary search order, then the rest of the line is executed as a terminal directive or as target code. Otherwise its ignored.

Supported terminal directives are: #include , \res and \\ .

***Concerning cross assembler, cross disassembler and resource file support please look at the e4thcom-x.y.z/doc directory.***

Annotation: e4thcom is based on MINFORTH Plus, a MINFORTH 1.5 derivative.