



Micromega Corporation

Release Notes

uM-FPU V3 IDE

Release 333 beta 1

Bug Fixes

- fixed problem with code generation for `#ASM FWRITE,reg` and `#ASM LWRITE,reg`
- fixed problem with assignment of PICAXE variables by compiler

Changes

- updated PICAXE support files
- added target description file for PICAXE

New Features

- TARGET_OPTIONS command added to target files
- TARGET_OPTIONS directive added to compiler
- added support for PICAXE target options
- added compiler support for additional PICAXE registers
- added support for selecting the PICAXE variable used by the FPU support routines

Target Options

A target description file can include a `TARGET_OPTIONS=<...>` command to set the default target options for a target. FPU source files can also include a `#TARGET_OPTIONS, ...` directive to set the target options for an individual file.

PICAXE Target Options

In target description file:

```
TARGET_OPTIONS=<PICAXE, {X | M2 | X1 | X2}, {B0...B55}>
```

In FPU source file:

```
#TARGET_OPTIONS, PICAXE, {X | M2 | X1 | X2}, {B0...B55}
```

Where:

<code>{X M2 X1 X2}</code>	specifies the type of PICAXE chip used
<code>{B0...B55}</code>	specifies the PICAXE variable used by the FPU support routines

The following directive specifies PICAXE X2 chips as the target.

```
#TARGET_OPTIONS, PICAXE, X2
```

The FPU support routines use PICAXE variable B13 by default. If target options are used to change this register, the definitions for the following symbols must also be changed in the support routines.

```
'----- uM-FPU variables -----
symbol dataByte = b13      ' data byte
symbol format = b13       ' format (same as dataByte)
symbol statusByte = b13   ' status byte (same as dataByte)
```

PICAXE Chip Support

IDE version	-	-	-	Previous	Release 333	Release 333	Release 333
Interface Commands	-	-	-	i2cslave writei2c readi2c	hi2csetup hi2cout hi2cin	hi2csetup hi2cout hi2cin	hi2csetup hi2cout hi2cin
PICAXE chips	08		08M		08M2		
			14M		14M2		
	18	18A	18M	18X	18M2		
			20M		20M2		20X2
		28A		28X		28X1	28X2
				40X		40X1	40X2
PICAXE registers	-	-	-	B0-B13	B0-B27	B0-B27	B0-B55
Interface Register				B13	B13	B13	B13