



Flowcode: Anyone can program μ Controllers

Graphical programming language for AVR®, PIC® and ARM® microcontrollers

Flowcode is one of the world's most advanced, yet easiest to use graphical programming languages for microcontrollers.

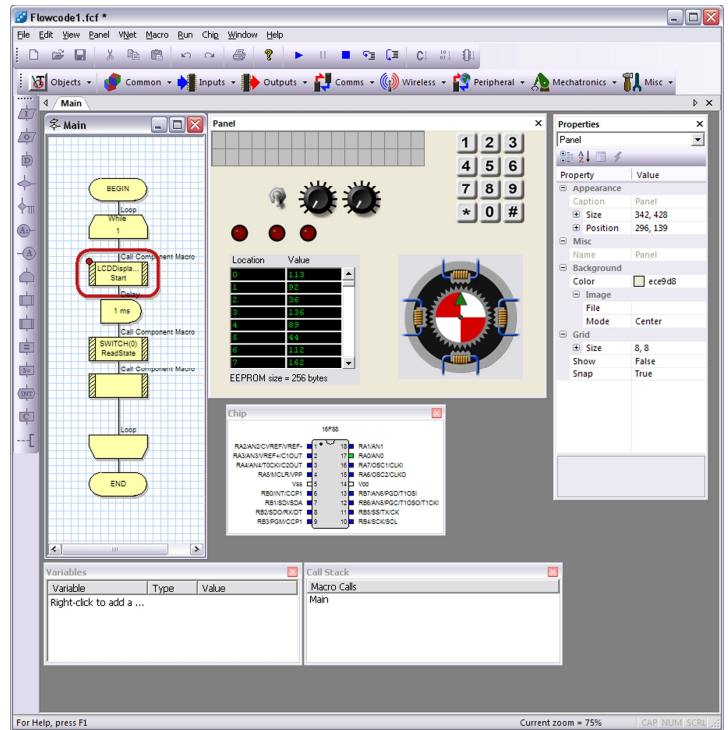
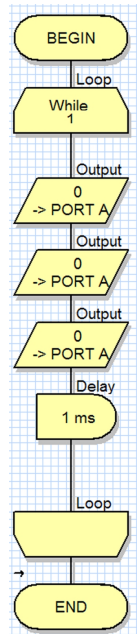
The great advantage of Flowcode is that it allows users with little or no experience to create complex electronic and robotic systems.

Flowcode is a powerful language that uses flowcharts and macros to facilitate control of complex devices such as 7-segment LED displays, motor controllers, LCD displays and many others. Use of macros allows students and engineers to control complex electronic devices without getting bogged down in understanding the details of programming.

Flowcode is used in education as a means of introducing students to the concepts of programming.

Flowcode is used in the industry for rapid development and for managing large projects.

Flowcode Example



Flowcode Features:

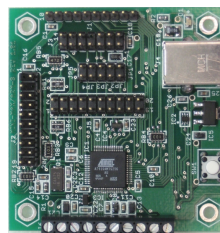
- Easy programming using flowcharts and macros
- Built-in Simulator, In-circuit Debugging
- Built-in flowchart objects: Input, Output, Decision, Delay, Loop, Connection, Formula, String, Interrupt, C Code, Macro
- Supports AVR®, PIC® and ARM® (AT91) microcontrollers
- Predefined components for RS232, I2C, SPI, Zigbee, CAN, IrDA, LIN, Bluetooth, TCP/IP communications and Web Server
- Predefined components for LCD, LED, 7-Segment Displays, Keypad, Switches, ADC, EEPROM, PWM, Motor and many others
- Fully supported by BiPOM MINI-MAX Boards
- Underlying C code for advanced capabilities, C Code Customization
- Floating Point support

FLOWCODE4
NO CODING, NO LIMITS...
for AVR®
microcontrollers

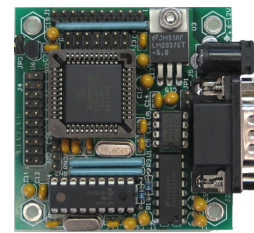
Now, everyone can develop powerful electronics systems

Now available from BiPOM distributors & affiliated stores

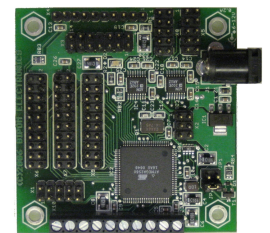
- Microcontroller development software
- Easy to use graphical interface
- Fast & flexible



MINI-MAX/ARM-S
Supports Flowcode for ARM



MINI-MAX/P18
Supports Flowcode for PIC



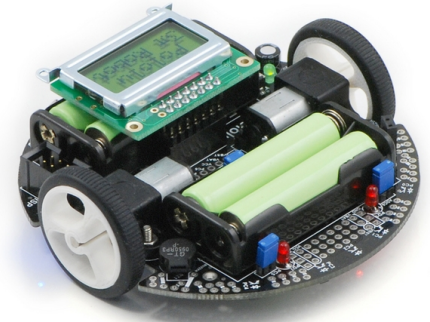
MINI-MAX/AVR-C
Supports Flowcode for AVR



Flowcode is also Great for Robotics!

The Pololu 3pi robot, available from BiPOM, is a complete, high-performance mobile platform featuring two micro metal gear motors, five reflectance sensors, an 8x2 character LCD, a buzzer, and three user pushbuttons, all connected to a ATmega328 microcontroller. Capable of speeds exceeding 3 feet per second, 3pi is a great first robot for ambitious beginners and a perfect second robot for those looking to move up from non-programmable or slower beginner robots.

3pi can be easily programmed with Flowcode. BiPOM offers a library which provides macros for main Pololu 3pi Robot features: Calibrate and read sensors, control buttons, print to LCD, control LED's and motors. You only need to insert a few Macro Calls into your flowchart to get it working.



Pololu 3pi Robot

Flowcode Licensing, Versions and Upgrades (see www.bipom.com for prices)

	Free version	Home	Flowcode Pro	Flowcode 10 concurrent users	Flowcode 50 concurrent users	Annual student rental for site license holders
Unlimited icons	N	Y	Y	Y	Y	Y
Code size limit*	2K	4K	-	-	-	-
All devices	N	N	Y	Y	Y	Y
All components	N	N	Y	Y	Y	Y
In Circuit Debug	N	N	Y	Y	Y	Y
Virtual networks	N	N	Y	Y	Y	Y
Code customization	N	N	Y	Y	Y	Y
License for commercial use	N	N	Y	N	N	N
Multi-user license for education	N	N	N	Y	Y	N

*Code size limit only applies to PIC® versions. Other versions use limited icon numbers to limit functionality.

Code size limits

For the AVR version of Flowcode there are no code size limits for any version. For the Free PIC® version the code will limit to 2KB of compiled and assembled code (18 series PIC® limit is 4K). For the PIC® Student version the code will limit to 4KB of compiled and assembled code (18 series PIC® limit is 8K).

Limited components

Free and home versions do not have all the components. Limited component versions all have LED, LED array, Switch, Switchbank, ADC, LCD, 7-segment display, Keypad, Quad 7-segment display and PWM. These versions cannot have more components added to them as free downloads. Other versions include all components.

Free version

This well featured version allows you to verify that Flowcode will provide the functions you need. This is a fully working version of Flowcode that has some limitations. Flowcode for PIC® demo version will produce hex code for only the following: 16F628A, 16F690, 16F88, 16F84A, 16F877, 18F2220, 18F4431. Free versions are limited to around 50 usable icons and also have code size limitations for PIC® microcontrollers.

Home version

The Home version is limited in the compiled code size it can produce and in the number of Flowcode components provided: Communications functions are not supported. The AVR home version is limited in Flowcode components but has no code size limit. Home versions are not licensed for use in institutions.

Pro version

The Pro version includes all functions, components, full code compilation size and is licensed for commercial use. Industrial users who need more than one license will need to purchase each license separately.

Multiuser education

Multiuser versions are fully functional like the Pro version, but these are for educational (non-commercial) use only. Only 10 and 50 user versions are available. Those requiring between 10 and 20 users will need to purchase two off 10 user versions.

Upgrading licenses

Upgrades from one type of license (e.g. Student to Pro) to another are simply the price difference.

Versions 3 to Version 4 upgrade

Upgrades from version 3 to version 4 will be charged at 50% of the version 4 price.

Version 2 to version 4 upgrade

Upgrades from version 2 to version 4 will be charged at 70% of the version 4 price.

Crossgrade

Customers who have a version of Flowcode for one microcontroller will be charged at 50% of the price of Flowcode for each subsequent microcontroller family.

Upgrade procedure

Please contact BiPOM Electronics with your old serial number which is found on the inside of your CD ROM case.

Buying online

The only downloadable version available is the free version. Copies of Flowcode for purchase are only available in CD ROM form from BiPOM Electronics.

Activation

Each product will need activation with a code issued by BiPOM. An internet connection is recommended for this.

Upgrade rights

A version of Flowcode 3 is bundled with MIAC and various other packages. This version has no upgrade rights and customers will need to pay the full price for version 4.