Glitch

A Visual Compiler

Document Version 1.0

Table of Contents

Introduction....3
Arduino Special Functions....4
Creating New Diagrams....5
Document Changes....6
    Version 1.00....6
Editing Diagrams....7
Operating Systems....8
SQL Injections....9
Wiring Objects....10

Introduction

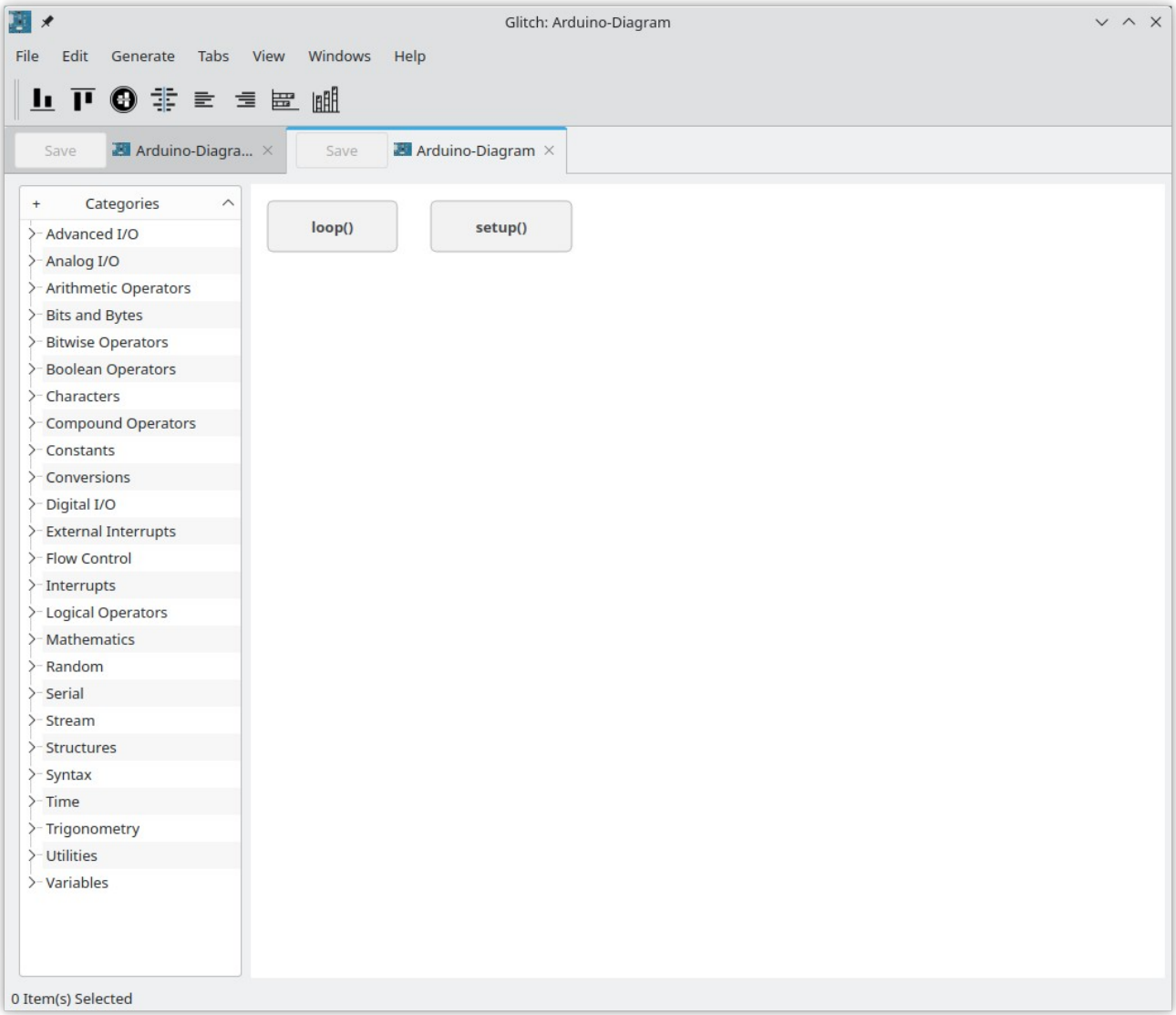
Glitch is a visual compiler. The software translates block diagrams (blueprints) into Arduino intermediate source. Glitch is also extensible with other frameworks, for example the C programming language.

Glitch should be functional on any operating system where Qt 5 LTS or Qt 6 LTS is supported. Qt 4.8.x is considered obsolete and is not supported. Qt 5.5.1 is supported for PowerPC and other operating systems.

The source of Glitch is available at https://github.com/textbrowser/glitch.

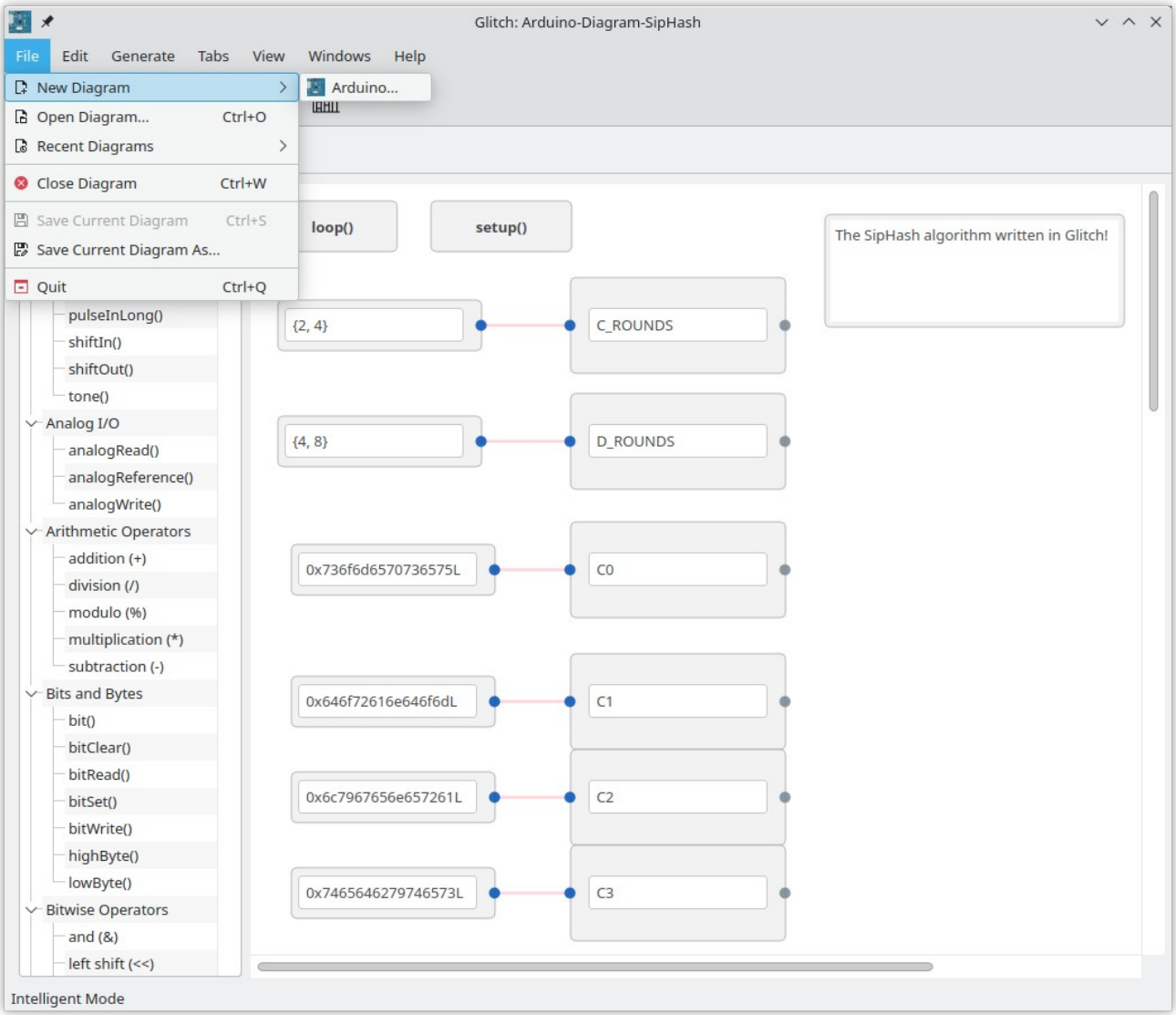
Arduino Special Functions

The Arduino programming interface requires two special functions, loop() and setup(). The functions are automatically assigned to all Arduino block diagrams.



Creating New Diagrams

New diagrams may be created via File → New Diagram → Arduino. After a diagram is initialized, editing may begin. To add an object, simply drag-and-drop it from the left-hand Categories tree widget.



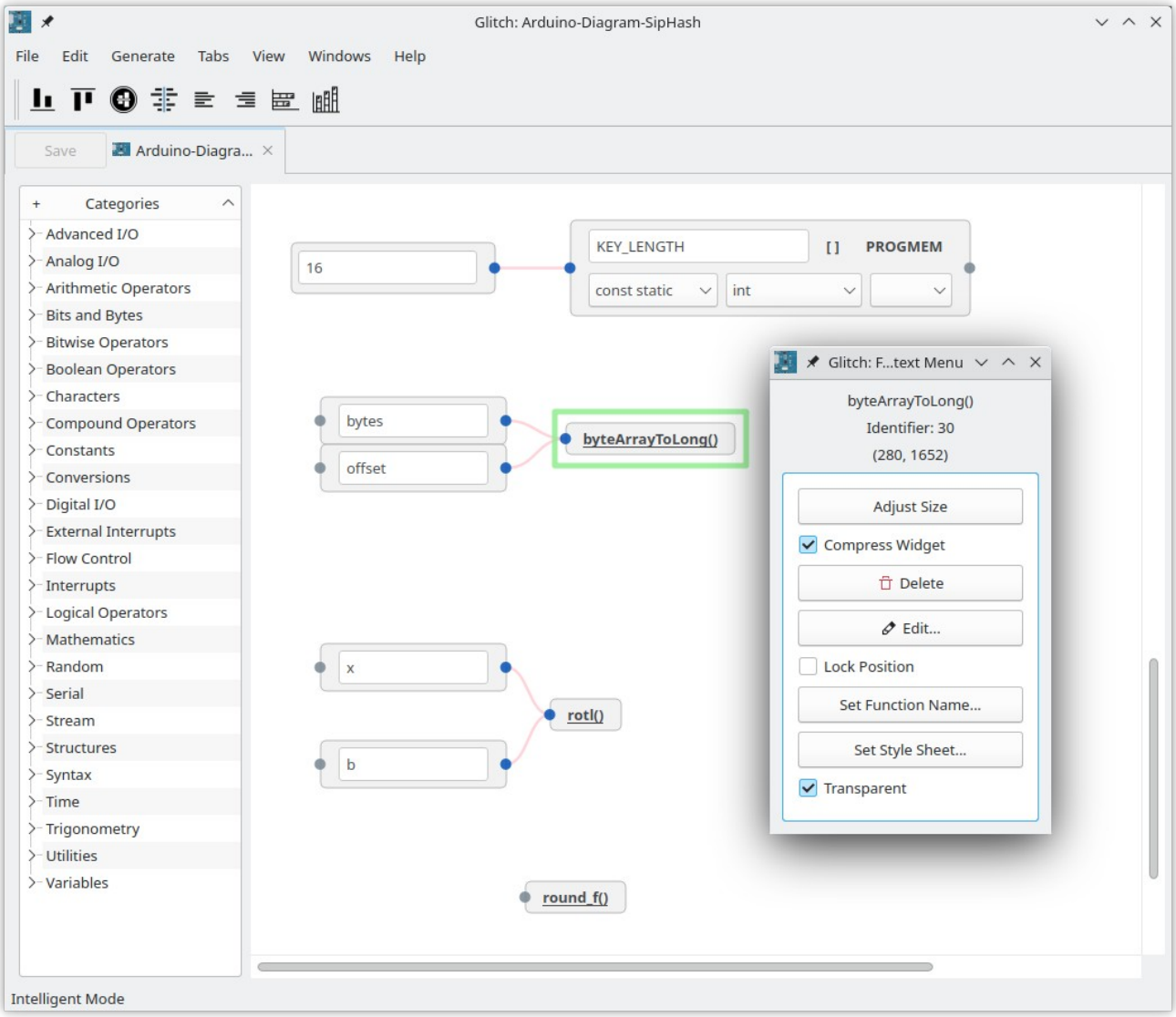
Document Changes

Version 1.00

- Initial version.

Editing Diagrams

Existing objects may be edited via direct interactions. Context menus are also available for each object. Copying and pasting objects are also allowed. A single redo / undo stack provides rich redo / undo behavior.



Operating Systems

Glitch supports Android, FreeBSD, Linux, Mac OS X, OS/2, OpenBSD, and Windows. Generally, the application should be compatible with any operating system where a modern Qt is supported. The software has also been tested on a variety of architectures, including AMD, ARM, PowerPC, and UltraSparc.

SQL Injections

All Glitch SQL queries are parameterized. Prepared SQL statements are resilient against SQL injections.

Wiring Objects

Wired objects designate a graphical relationship between the wired objects. For example, a variable object wired to a function object suggest one of two things. For a main-diagram function, a wired variable connected to it imply that the function has one parameter. For a non-main-diagram function, a wired variable (or another object type) suggest that the function be issued with the wired input.


```
long rotl(long x, long b)
{
 return(((((x) << (b))) | (((x) >> (((64L) - (b)))))));
}
```

Index

AMD....8
Android....8
Arduino....3 f.
ARM....8
block diagrams....3
blueprints....3
Categories....5
Context menus....7
Copying....7
FreeBSD....8
Glitch....3
Linux....8
loop()....4
Mac OS X....8
OpenBSD....8
OS/2....8
pasting....7
PowerPC....8
Qt....8
Qt 5 LTS....3
Qt 5.5.1....3
Qt 6 LTS....3
redo / undo stack....7
setup()....4
SQL....9
UltraSparc....8
visual compiler....3
Windows....8