bbclib

An experimental clib. Code is taken from some of my (sometimes very) old applications.

A big work is done to use *literate programming* with `notangle` and `noweave` from the **noweb** package.

using `noweb`

To generate the code :

```
notangle rbuffer.nw > rbuffer.h
```

To generate the documentation :

```
noweave -delay -index rbuffer.nw > rbuffer.tex
```

make

On Linux or Cygwin, you can choose the compiler. A simple *make clean all* will use *gcc*. If you want to use *clang*, or any other compiler, just do :

```
make compiler=clang clean all
```

This is the list of available compilers :

- *gcc*, default,
- *clang*,
- *watcom*, for Open Watcom, version 1.9, with *Wine* on *Linux*,
- *bc5*, for Borlandc, version 5, with *Wine* on *Linux*.

This is the list of available target:

- *lib*, create the library,
- *exe*, create the library and the test program,
- *all*, the default target, build the target,
- *clean*, remove all the results of compilation,
- *tests*, build and run the tests,
- *analyze*, static analysis of the code.

debug_printf

This *printf* was done to get formatted output on RS232, from embedded software. I try to get a nice version which

does not use too much memory and which is safe to use.

Usage is very similar to *printf* with limitations.

- %s : to print a string (all modifiers are ignored).
- %c : to print a char (all modifiers are ignored).
- %[0][*n*][l]d : to print integers (*cf.* (1)) in decimal. Modifiers are :
  - [0] fill with 0 or spaces (default),
  - [*n*] length of filling, must be at most 32 (*cf.* (2)),
  - [l] long integer (*cf.* (1)).
- %[0][*n*][l]x : to print integers in hexadecimal. Modifiers are as above.
- %[0][*n*][l]b : to print integers in binary. Modifiers are as above.

I did not find bugs... well , it's not a great guaranty.

Notes:

- (1) Integers are 16 bits wide and long integers are 32 bits wide.
- (2) No control is done about field length.