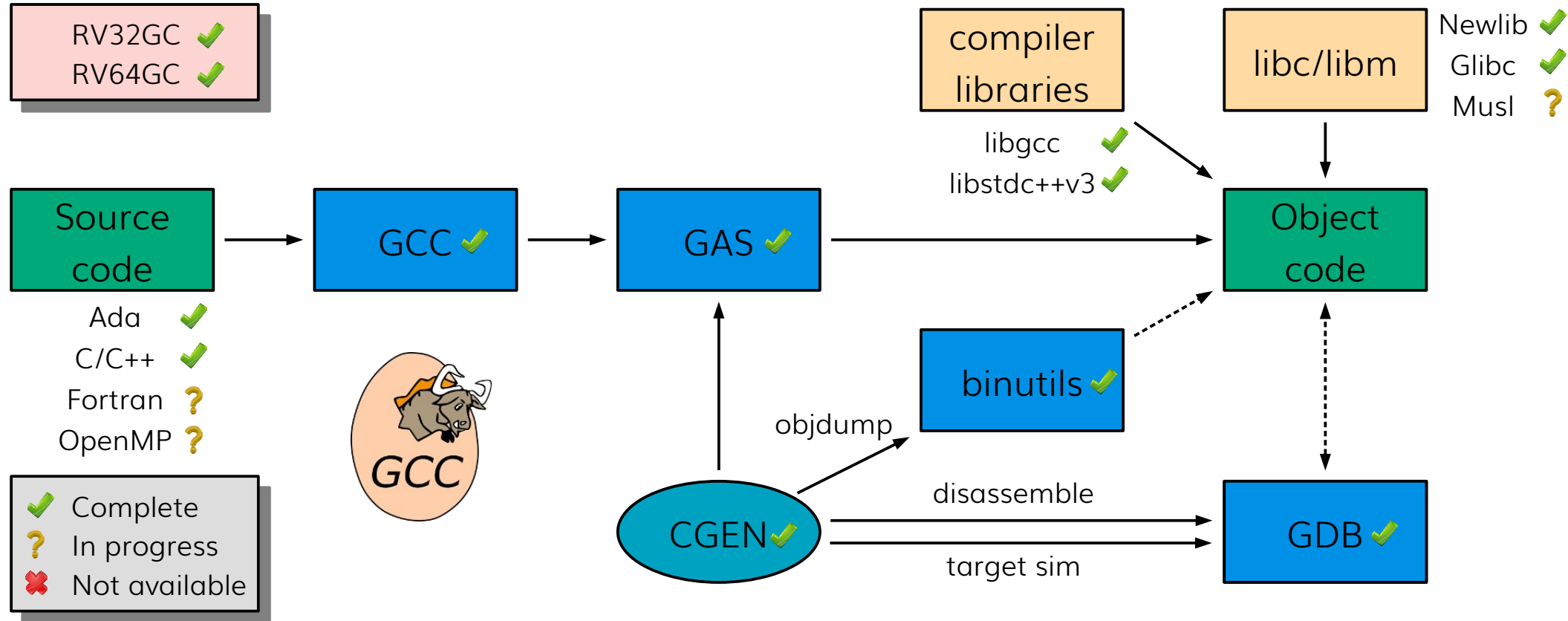
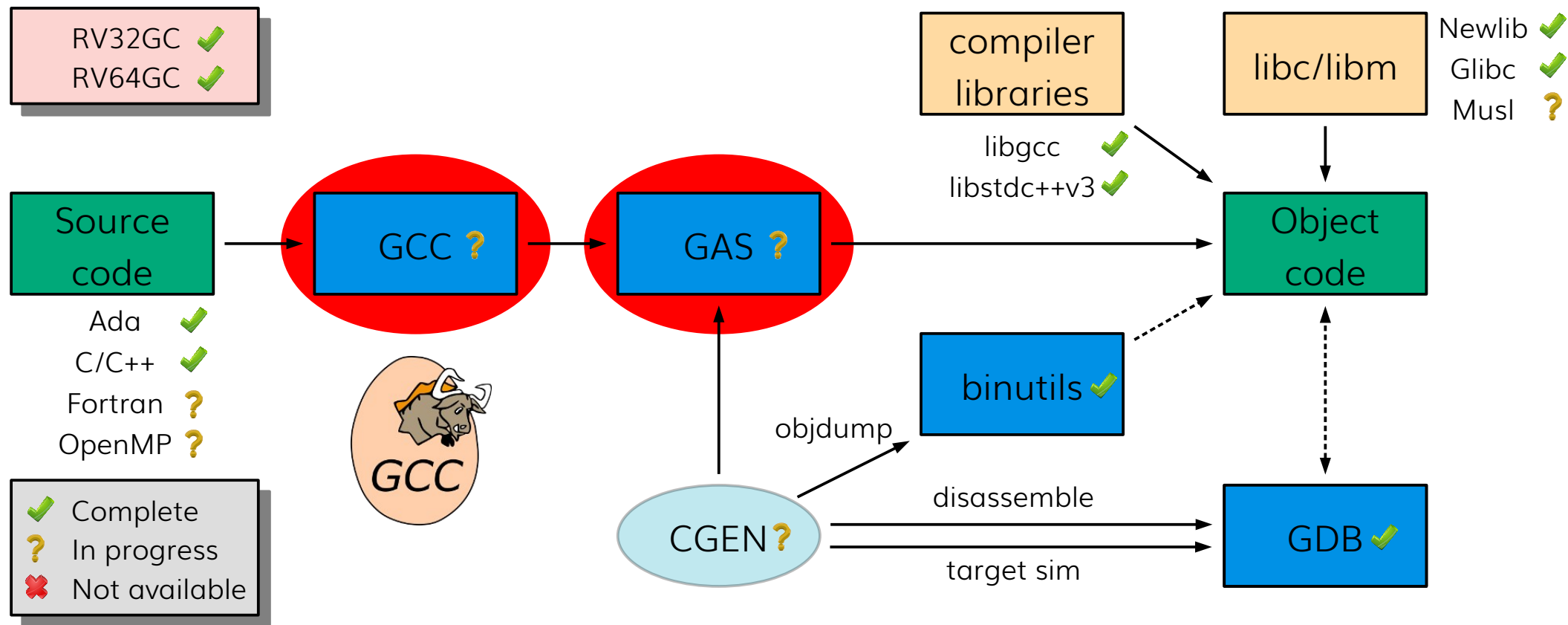


# RISC-V GNU Tool Chain Components



# CORE-V GNU Tool Chain Components



# CORE-V GNU Tools Project

- ISA extensions to be supported on latest GNU tools (in order)
  - hardware loops
  - multiply accumulate
  - post-increment and register indexed load/store
  - direct branches
  - ALU extensions
- How it will work
  - target **riscv32-corev-elf**
  - additional **-march** architecture specifications **Xcorev** and **Xcorevyyy**
  - instructions will be have the prefix **cv.**
    - **cv.starti, cv.endi, cv.count, cv.counti, cv.setup, cv.setupi**

# Getting Involved

- As a user
  - download the latest development tool chains
  - [embecosm.com/resources/tool-chain-downloads](https://embecosm.com/resources/tool-chain-downloads)
  - pre-built binaries, source code, scripts and test results
- As a developer
  - join the OpenHW Mattermost SW : GNU Tools channel
  - sign up the OpenHW SW mailing list and attend the monthly meeting
  - submit your pull requests against the **development** branch
    - [github.com/openhwgroup/corev-binutils-gdb](https://github.com/openhwgroup/corev-binutils-gdb)
    - [github.com/openhwgroup/corev-gcc](https://github.com/openhwgroup/corev-gcc)



# Thank You

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# Supplementary: Mary's Commands

```
riscv32-corev-elf-as -march=rv32imac_xcorev -o mymemcpy.o mymemcpy.s
```

```
riscv32-corev-elf-gcc -march=rv32imac -Os -c demo.c
```

```
riscv32-corev-elf-gcc -march=rv32imac -o demo demo.o mymemcpy.o
```