# Embecosm working repos

- https://github.com/pietraferreira/corev-binutils-gdb
- https://github.com/pietraferreira/corev-gcc

# Binutils work

- `c.lbu <r>,<const>` → `cm.lbu <r>, <const>`
  - `<const>` in the range 4-15, not 0-3
- `c.jt <offset>` would accept `<offset>` of 64 (should be <= 63)
- added `-march-accept` and `-march-reject` tests for each Z extension
- added `jvt` to the CSR tests (needs `Zicsr`)
- made `Zca` and `C` explicitly equivalent in the instruction class
  - believed you can never have both
  - but mailing list discussion says you can have both, `Zca` is subset of `C`
    - `C` includes float/double instructions
    - But `C` float instructions requires `F` to be specified
  - See https://github.com/riscv/riscv-code-size-reduction/issues/145
  - and https://github.com/riscv/riscv-code-size-reduction/issues/144

# Linker work

- Jump Tables
- implemented in the linker
  - but relaxation never creates them
  - jump table created in `.text`, not `.rodata`
  - Nandni, Charlie, Pietra to try to solve

# GCC

- only test that Zc* is passed to assembler
- no builtin functions proposed for Zc*

# Next steps

- Charlie & Nandni to join the RISC-V code-size task group
- merge combined work to date into `core-v-binutils-gdb`
- merge Zc* arch tests in `core-v-gcc`
- fix jump tables and merge into `core-v-binutils-gdb`
- rebase `core-v-binutils-gdb` and `core-v-gcc` on latest upstream
- joint submission to upstream GCC & Binutils by PLCT and Embecosm teams