Appendix

- The verification code can be downloaded from `https://github.com/paraVerifier/paraVerifier.git`.
  - The verification ML code is `flash_data_cub.ml` in the directory `examples`. You can use the command "corebuild flash_data_cub.byte" to build the `flash_data_cub.byte`.
  - The Murphi oracle is `n_flash_data_cub.m`. Notice that its
  - The SMV oracle is `flash_nodata.smv`.
- Invariants 91 and 92 says that this flag is set during sharing write-back procedure. Invariants 111 that this flag is set during the nakc procedure when Sta.NakcMsg.Cmd = NAKC_Nakc.
- Invariants 114 that the flag is set during the invalidating procedure to an old shared-copy store in node 1. The invalidating procedure is a sub-procedure of a WRITE request from any other node. In 134, `Sta.Proc[2].CacheState = cache_e` shows that the WRITE request is from node 2, and CacheState of node 2 changes to exclusive even before node 1 has not been invalidated. From this, we can see that the version we verify is an eager-mode.
- Invarian 153 that Sta.Dir.Pending is set during a write-back procedure.
- The last one says that if there is a local shared-copy in the Home node, Sta.Dir.Pending is FALSE because the requests can be processed at once, thus the system need not be pended.