

Celement_with_env_1.hs x

```
1  module Concept where
2
3  import Tuura.ConceptConcat
4
5  -- C-element with environment circuit described using signal-level concepts
6  circuit :: (Eq a) => a -> a -> a -> CircuitConcept a
7  circuit a b c = interface <> outputRise <> inputFall <> outputFall <> inputRise <> initialState
8      where
9          interface = inputs [a, b] <> outputs [c]
10
11          outputRise = rise a ~> rise c <> rise b ~> rise c
12
13          inputFall = rise c ~> fall a <> rise c ~> fall b
14
15          outputFall = fall a ~> fall c <> fall b ~> fall c
16
17          inputRise = fall c ~> rise a <> fall c ~> rise b
18
19          initialState = initialise a False <> initialise b False <> initialise c False
20
```