

Teak: A synthesiser for Balsa

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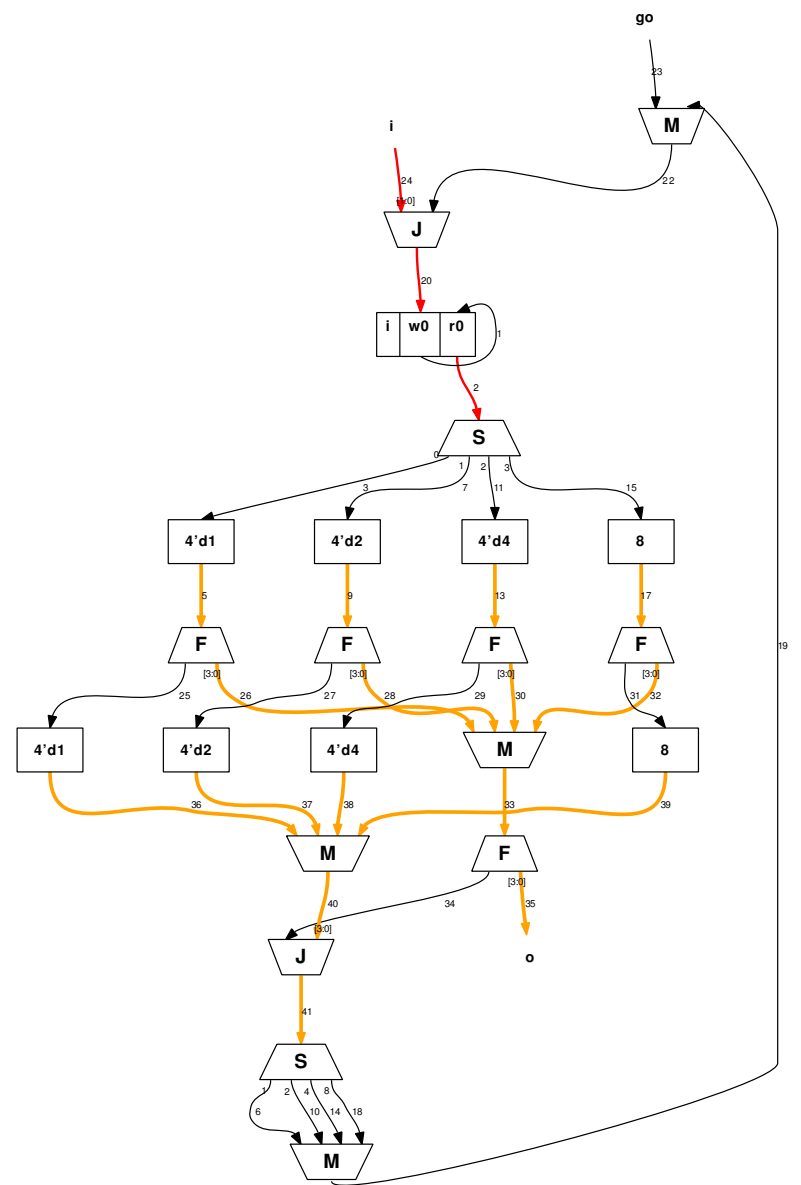
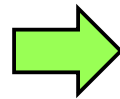
Teak is a new synthesiser for the Balsa language. Teak generates networks of macromodular components from Balsa descriptions, like the Balsa System, but uses a different, more conventional set of components instead of Handshake Components.

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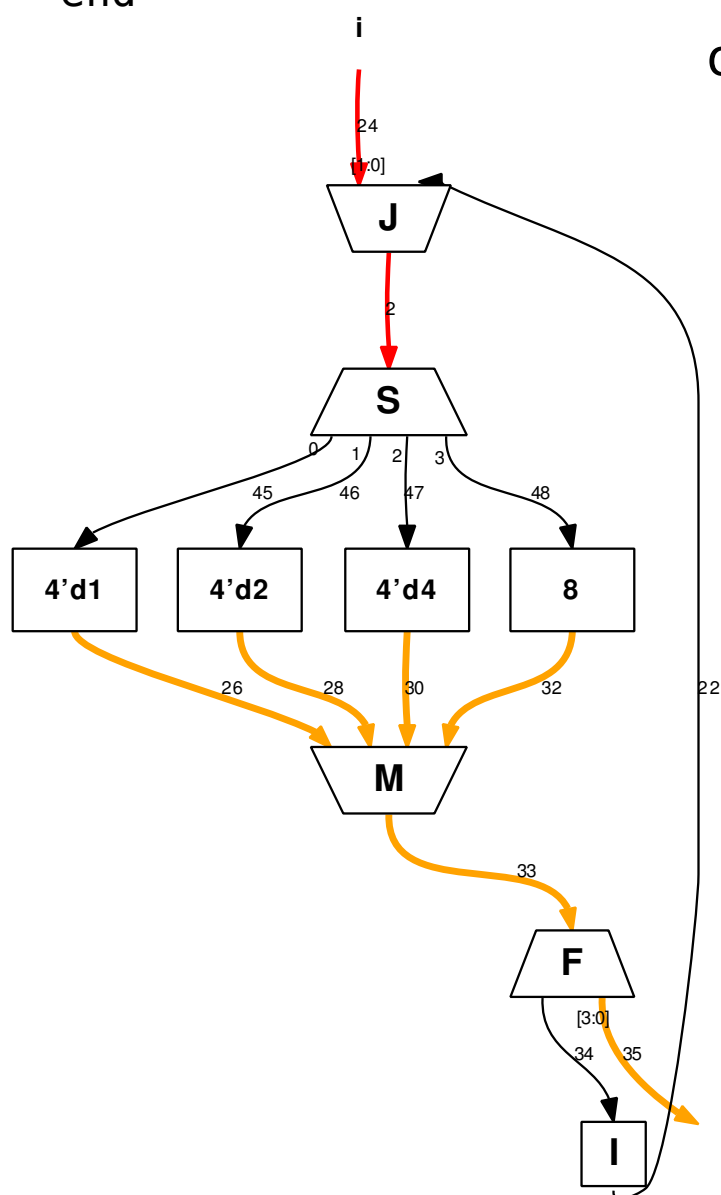
procedure onehot (
  input i : 2 bits;
  output o : 4 bits
) is
begin
loop
  i -> then
  case i of
  | 0 then o <- 1
  | 1 then o <- 2
  | 2 then o <- 4
  | 3 then o <- 8
  end
end
end
end
end

```

Syntax
directed
synthesis



Peep-hole
optimisation



Control
optimisation

