LISTING 2 REWIRING MODIFICATION

```
module pwm(Clk, Reset, Enable, Value, Out);

parameter CountBits = 8;

input  Clk, Reset;
input  Enable;
output Out;
input  [CountBits-1:0] Value;

reg    [CountBits-1:0] Count;

reg [CountBits-1:0] Swapped;
integer k;
always @*
  for (k = 0; k < CountBits; k=k+1)
    Swapped[k] = Count[CountBits-1-k];

assign Out = Swapped < Value;

always @(posedge Clk or posedge Reset)
  if (Reset)
    Count <= 0;
  else
    if (Enable)
      Count <= Count + 1;

endmodule
```