

VGA avanzado

Colocar x, y en VGA

```
BEGIN
x <= 50;
y <= 15;
PROCESS(dispatch, row, column)
BEGIN
IF(dispatch = '1') THEN
    if ((row > x and row < x+20) and (column > y and column < y+15)) THEN
        red <= (OTHERS => '1');
    elsif ((row > x+20 and row < x+40) and (column > y-5 and column < y+20)) then
        red <= (OTHERS => '1');
    else
        --es el fondo
        red <= (OTHERS => '0');
    end if;
END IF; --del enable
END PROCESS;
```

Nuevo proceso dentro de hw_imagen_generator:

```

process(reloj, dipsw)
  begin
    if (reloj'event and reloj = '1') then
      if (dipsw(1)='1' and dipsw(0)='1') then --SUBE
        if (x>0 and x<450) then
          x<=x-1;
          y<=y;
        else
          x<=1;
        end if;

        elsif(dipsw(1)='0' and dipsw(0)='1') then --AVANZA DER
          if (y>0 and y<370) then
            x<=x;
            y<=y+1;
          else
            y<=1;
          end if;

          elsif(dipsw(1)='1' and dipsw(0)='0') then --AVANZA IZQ
            if (y>-10 and y<450) then
              x<=x;
              y<=y-1;
            else
              y<=1;
            end if;

            elsif(dipsw(1)='0' and dipsw(0)='0') then --BAJA
              if (x>0 and x<410) then
                x<=x+1;
                y<=y;
              else
                x<=1;
              end if;

            end if;
          end if;
        end process;
      END behavior;

```