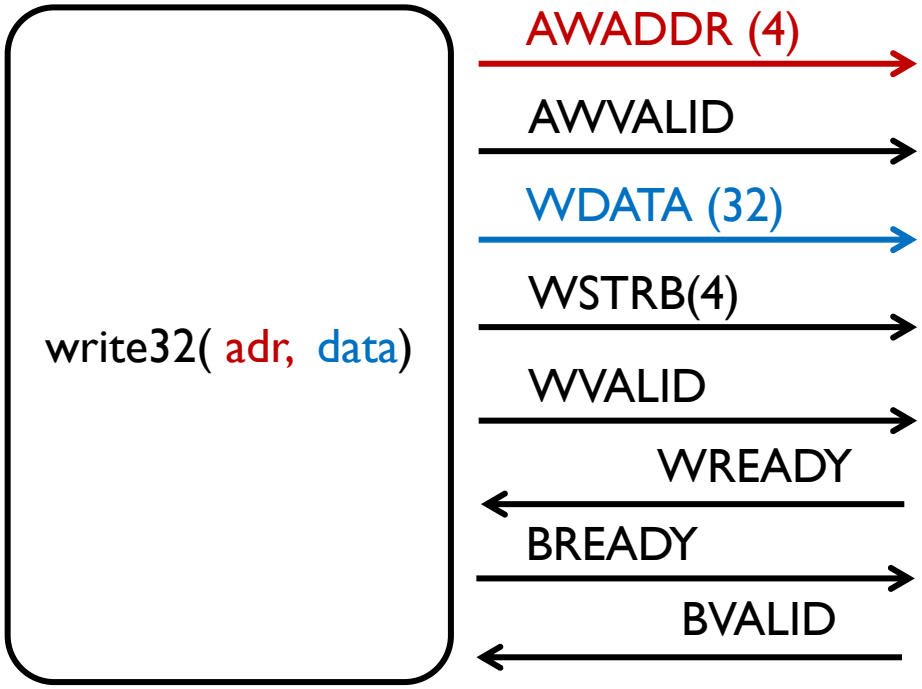
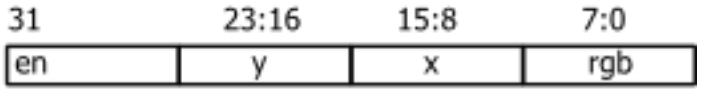
TestAXI: proceduri za pisanje in branje AXI



Nastavi registre:

```
write32(0, 3); -- r
write32(4, 5); -- p
write32(8, 1); -- q
```

$(x-5)^2 + (y-1)^2 < 3^2$



format podatkov vodila din in dout

```
DIN <= X"80010255"; -- x=2, y=1, rgb=55

wait until rising_edge(S_AXI_ACLK);

DIN <= X"80010355"; -- x=3, y=1, rgb=55
```

Testna struktura z izpisom v datoteko

- Popravi TestAXI, da bo simuliral 32x32 točk in izpisal v datoteko
- Knjižnica za delo s tekstovnimi datotekami:
- Pisanje v datoteko:
  - deklariraj datoteko za pisanje (write_mode)
  - zapiši znake v vrstico (write) in shrani v datoteko (writeline)

```
library STD;
use STD.textio.all;
```

```
stim_proc: process
  file dat: text open write_mode is "izhod.txt";
  variable vrstica : line;
begin

  for y in 0 to 31 loop -- dodaj na konec procesa
    for x ...
      DIN <= ...
      wait until rising_edge(S_AXI_ACLK);
      if DOUT(7 downto 0)=X"FF" then
         write(vrstica, '*');
      else  write(vrstica, '.');

      writeline(dat, vrstica);
```