

VGA controller - Framebuffer

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Framebuffer

- Two channel RAM 30x40
 - Monochromatic image
 - one bit – one pixel
- Signals
 - addrIN_i – address for writing
 - addrOUT_i – address for reading
 - we – write enable
 - data_i – input row data (based on addrIN_i)
 - data_o – output row data (based on addrOUT_i)
 - clk_i - clock

Naloga

- Povežite framebuffer z obstoječim VGA modulom
 - Na učilnici se nahaja koda za dvokanalni 30x40 RAM
 - povežite jo z obstoječim VGA modulom
 - prikaz 40x30 slike v resoluciji 640x480
- Spremenite RAM tako, da bo možna sprememba posameznega piksla, ne samo celotne vrstice