Invert

[10:4] CODE

blank

pixel\_clk

[31:0] Avalon Bus

[9:0] DrawX

[9:0] DrawY

Reset

CLK

[3:0] BKG\_B

[3:0] BKG\_G

[3:0] BKG\_R

[3:0] FGD\_R

[3:0] FGD\_G

[3:0] FGD\_B

Control Register (1 32-bit registers)

Reset

CLK

VS

HS

VGA\_controller

Logic (Algorithm)

[7:0] data

[3:0] Blue

[3:0] Green

[3:0] Red

[31:0] Avalon Bus

[31:0] Avalon Bus

[3:0] Green

[3:0] Blue

[3:0] Red

[3:0] Row Index

Font\_ROM

VS

HS

VRAM (600 32-bit registers)

CLK

Reset

Reset

CLK