$a:$
$0xAC620014$

$b:$
$0x00820820A$

$a =$
$(10101100011000100000000000010100)_2$

$b =$
$(00000000100000100000100000101010)_2$

$opcode_a =$
$a[31:26] =$
$(101011)_2 =$
$(43)_{10} \longrightarrow$
$store$

$\{ r_s =$
$a[25:21] =$
$(00011)_2 =$
$(3)_{10} \longrightarrow$
$v_1$
$r_t =$
$a[20:16] =$
$(00010)_2 =$
$(2)_{10} \longrightarrow$
$v_0$
$immediate =$
$a[15:0] =$
$(0000000000010100)_2 =$
$(20)_{10} \longrightarrow$
$sw\$v_0, 20(\$v_1)$

$opcode_b =$
$b[31:26] =$
$(000000)_2 =$
$(0)_{10} \longrightarrow$
$R-$
$Type$

$\{ r_s =$
$b[25:21] =$
$(00100)_2 =$
$(4)_{10} \longrightarrow$
$a_0$
$r_t =$
$b[20:16] =$
$(00010)_2 =$
$(2)_{10} \longrightarrow$
$v_0$
$r_d =$
$b[15:11] =$
$(00001)_2 =$
$(1)_{10} \longrightarrow$
$a_t$
$function =$
$b[5:0] =$
$(101010)_2 \longrightarrow$
$setonlessthan \longrightarrow$
$slt\$a_t, \$a_0, \$v_0$

$output =$
$(00000000000000000000000000010100)_2 =$
$(14)_{16}$

$output =$
$(01000001000001000010101000)_2 =$
$(20820A8)_{16}$

$[width = 0.7]figs/4$