

\$s1 0x11 0x00002000 \$s2 0x12 0x00004000 \$s3 0x13 0x0000FFF4 \$t0 0x08 0x0000FFF8			
\$s1 0x11 0x00002000 \$s2 0x12 0x00004000 \$s3 0x13 0x0000FFF4 \$t0 0x08 0x0000FFF8	Reg	ID	Initial value
\$s2 0x12 0x00004000 \$s3 0x13 0x0000FFF4 \$t0 0x08 0x0000FFF8	\$s0	0x10	0x00001000
\$s3 0x13 0x0000FFF4 \$t0 0x08 0x0000FFF8	\$s1	0x11	0x00002000
\$t0 0x08 0x0000FFF8	\$s2	0x12	0x00004000
·	\$s3	0x13	0x0000FFF4
\$t1 0x09 0x00100010	\$t0	0x08	0x0000FFF8
<u> </u>	\$t1	0x09	0x00100010
\$t2 0x0A 0x00200020	\$t2	0x0A	0x00200020

Assume beq is at 0x40000000 and L is at 0x40000088

[1] What are the width (in bits) of the wires?

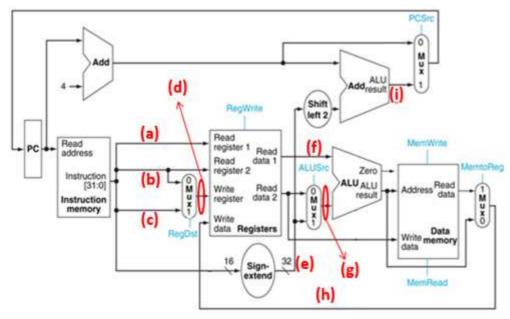
(a) (d) (f) (g) (h) (i)

What are the values on the datapaths when the following instructions are executed, respectively?

[2] add \$s0, \$s1, \$s2 (a) (b) (c) (d) (f) (g) (h)

[3] lw \$s3, -4(\$t0) (a) (d) (f) (g)

[4] beq \$t1, \$t2, L (a) (b) (e) (f) (g) (i)



Reg	ID	Initial value
\$s0	0x10	0x00001000
\$s1	0x11	0x00002000
\$s2	0x12	0x00004000
\$s3	0x13	0x0000FFF4
\$t0	0x08	0x0000FFF8
\$t1	0x09	0x00100010
\$t2	0x0A	0x00200020

Assume beq is at 0x40000000 and L is at 0x40000088

[1] What are the width (in bits) of the wires?

(a) (d) (f) (g) (h) (i)

What are the values on the datapath when the following instructions are executed, respectively?

[2] add \$s0, \$s1, \$s2 (a) (b) (c) (d) (f) (g) (h)

[3] lw \$s3, -4(\$t0) (a) (d) (f) (g)

[4] beq \$t1, \$t2, L (a) (b) (e) (f) (g) (i)