## Reese Ford

## Lab 01

В	С	D	E	F	G	Н	1	J	K	L	M	N	0
1	2	3	4	5	6	7	8	9	10	11	12	13	14
10	20	30	40	50	52	60	64	74	79	85	87	90	100
0	0	0	0	0	0	0	1	0	0	1	1	0	0
0	527	-8	3771334343958392850	77	4	18	18	981	981	981	345	345	345
0	527	-8	3771334343958392850	77	77	18	0	0	981	0	0	0	345
0	10	20	30	40	50	52		69			87		
							63	69		80		89	
	10 0 0 0 0	0 0 0 527	0 0 0 0 527 -8	0 0 0 0 0 0 527 -8 3771334343958392850 0 527 -8 3771334343958392850	0 0 0 0 0 0 0 0 527 -8 3771334343958392850 77 0 527 -8 3771334343958392850 77	1         2         3         4         5         6           10         20         30         40         50         52           0         0         0         0         0         0         0           0         527         -8         3771334343958392850         77         4           0         527         -8         3771334343958392850         77         77	1         2         3         4         5         6         7           10         20         30         40         50         52         60           0         0         0         0         0         0         0         0           0         527         -8         3771334343958392850         77         4         18           0         527         -8         3771334343958392850         77         77         18	1         2         3         4         5         6         7         8           10         20         30         40         50         52         60         64           0         0         0         0         0         0         0         0         1           0         527         -8         3771334343958392850         77         4         18         18           0         527         -8         3771334343958392850         77         77         18         0           0         10         20         30         40         50         52	1         2         3         4         5         6         7         8         9           10         20         30         40         50         52         60         64         74           0         0         0         0         0         0         0         1         0           0         527         -8         3771334343958392850         77         4         18         18         981           0         527         -8         3771334343958392850         77         77         18         0         0           0         10         20         30         40         50         52         69	1     2     3     4     5     6     7     8     9     10       10     20     30     40     50     52     60     64     74     79       0     0     0     0     0     0     0     1     0     0       0     527     -8     3771334343958392850     77     4     18     18     981     981       0     527     -8     3771334343958392850     77     77     18     0     0     981       0     10     20     30     40     50     52     69	1         2         3         4         5         6         7         8         9         10         11           10         20         30         40         50         52         60         64         74         79         85           0         0         0         0         0         0         0         1         0         0         1           0         527         -8         3771334343958392850         77         77         18         0         0         981         9           0         527         -8         3771334343958392850         77         77         18         0         0         981         0           0         10         20         30         40         50         52         69         69	1         2         3         4         5         6         7         8         9         10         11         12           10         20         30         40         50         52         60         64         74         79         85         87           0         0         0         0         0         0         0         1         0         0         1         1           0         527         -8         3771334343958392850         77         77         18         0         0         981         981         345           0         10         20         330         40         50         52         69         87	1         2         3         4         5         6         7         8         9         10         11         12         13           10         20         30         40         50         52         60         64         74         79         85         87         90           0         0         0         0         0         0         1         0         0         1         1         0           0         527         -8         3771334343958392850         77         4         18         18         981         981         981         345         345           0         527         -8         3771334343958392850         77         77         18         0         0         981         0

Figure 1: Expected Results Table

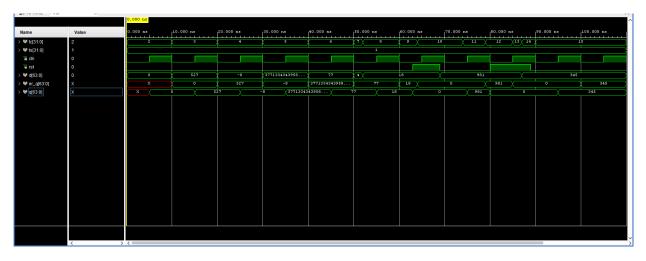


Figure 2: Simulation Waveform

\*\*\*\*\*\* BEGIN TEST RESULTS \*\*\*\*\*\*

Test Case 1

Inputs: rst = 0 | d = 0

+++ Step 1: Pass: |q| time = 10 ns | er = 0 | ar = 0 | er\_bits = 64 | ar\_bits = 64 +++

Test Case 2

```
Inputs: rst = 0 | d = 527
+++ Step 1: Pass: |q| time = 20 ns | er = 527 | ar = 527 | er_bits = 64 | ar_bits = 64 +++
Test Case 3
Inputs: rst = 0 \mid d = -8
+++ Step 1: Pass: |q| time = 30 ns | er = -8 | ar = -8 | er_bits = 64 | ar_bits = 64 +++
Test Case 4
Inputs: rst = 0 | d = 3771334343958392850
+++ Step 1: Pass: |q| time = 40 ns | er = 3456789abcdef012 | ar = 3456789abcdef012 | er_bits = 64 |
ar_bits = 64 +++
Test Case 5
Inputs: rst = 0 \mid d = 77
+++ Step 1: Pass: |q| time = 50 ns | er = 77 | ar = 77 | er_bits = 64 | ar_bits = 64 +++
Test Case 6
Inputs: rst = 0 \mid d = 4
+++ Step 1: Pass: |q| time = 52 ns | er = 77 | ar = 77 | er_bits = 64 | ar_bits = 64 +++
Test Case 7
Inputs: rst = 0 | d = 18
+++ Step 1: Pass: |q| time = 60 ns | er = 18 | ar = 18 | er_bits = 64 | ar_bits = 64 +++
Test Case 8
Inputs: rst = 1 | d = 18
+++ Step 1: Pass: |q| time = 64 ns | er = 0 | ar = 0 | er_bits = 64 | ar_bits = 64 +++
```

Test Case 9

```
Inputs: rst = 0 | d = 981
+++ Step 1: Pass: |q| time = 74 ns | er = 0 | ar = 0 | er_bits = 64 | ar_bits = 64 +++
Test Case 10
Inputs: rst = 0 | d = 981
+++ Step 1: Pass: |q| time = 79 ns | er = 981 | ar = 981 | er_bits = 64 | ar_bits = 64 +++
Test Case 11
Inputs: rst = 1 | d = 981
+++ Step 1: Pass: |q| time = 85 ns | er = 0 | ar = 0 | er_bits = 64 | ar_bits = 64 +++
Test Case 12
Inputs: rst = 1 | d = 345
+++ Step 1: Pass: |q| time = 87 ns | er = 0 | ar = 0 | er_bits = 64 | ar_bits = 64 +++
Test Case 13
Inputs: rst = 0 | d = 345
+++ Step 1: Pass: |q| time = 90 ns | er = 0 | ar = 0 | er_bits = 64 | ar_bits = 64 +++
Test Case 14
Inputs: rst = 0 | d = 345
+++ Step 1: Pass: |q| time = 100 ns | er = 345 | ar = 345 | er_bits = 64 | ar_bits = 64 +++
Pass Count = 14
Fail Count = 0
```

\*\*\*\*\* END TEST RESULTS \*\*\*\*\*\*

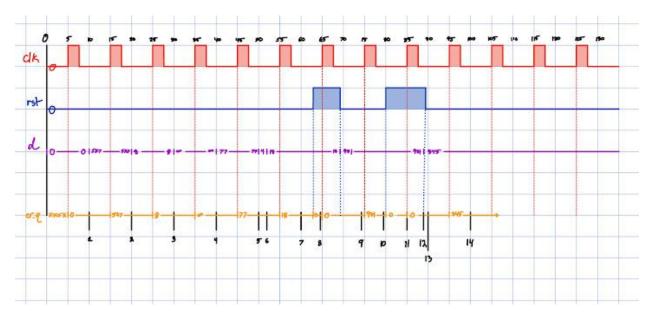


Figure 3: Worked-Out Waveform (just in case;))