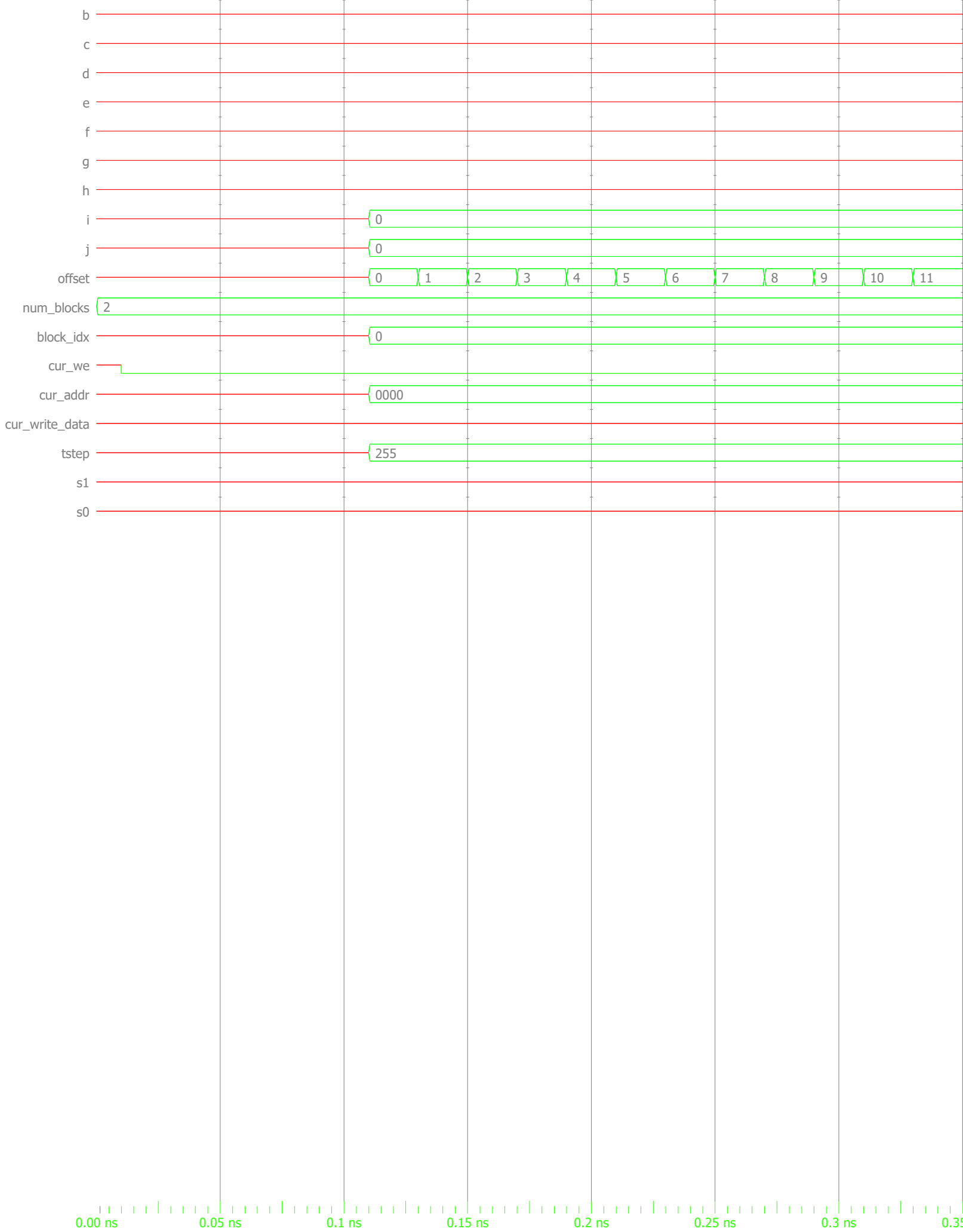
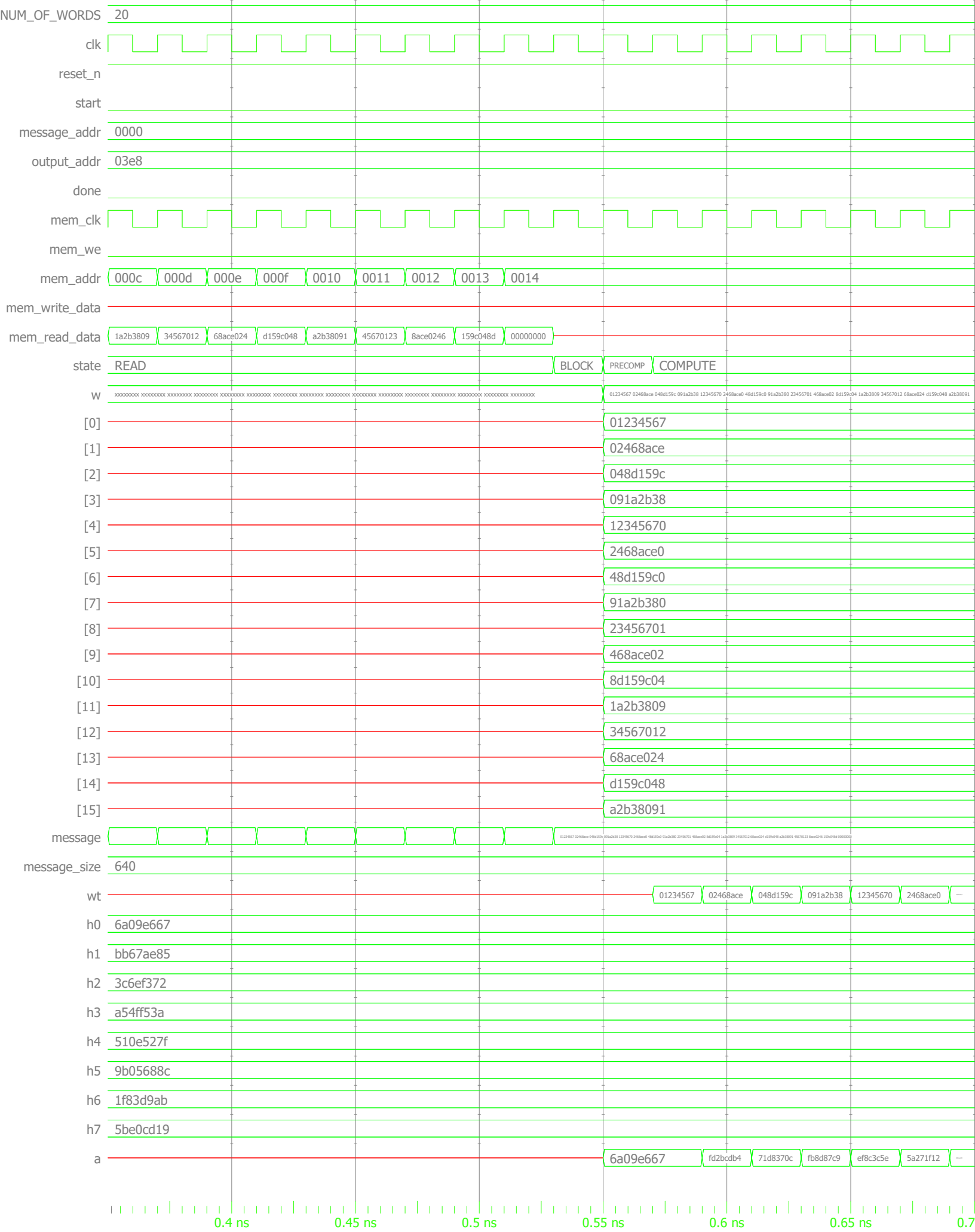
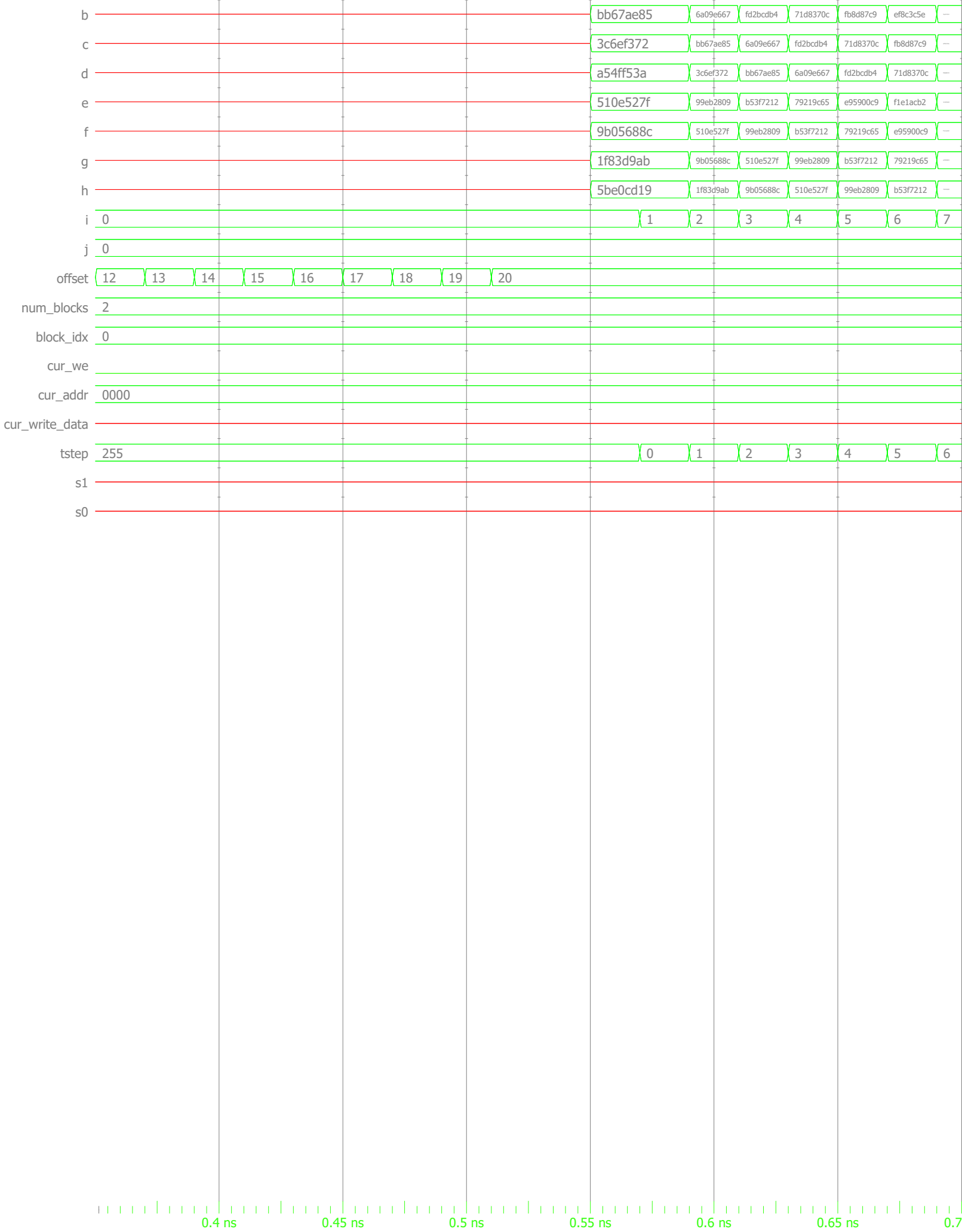
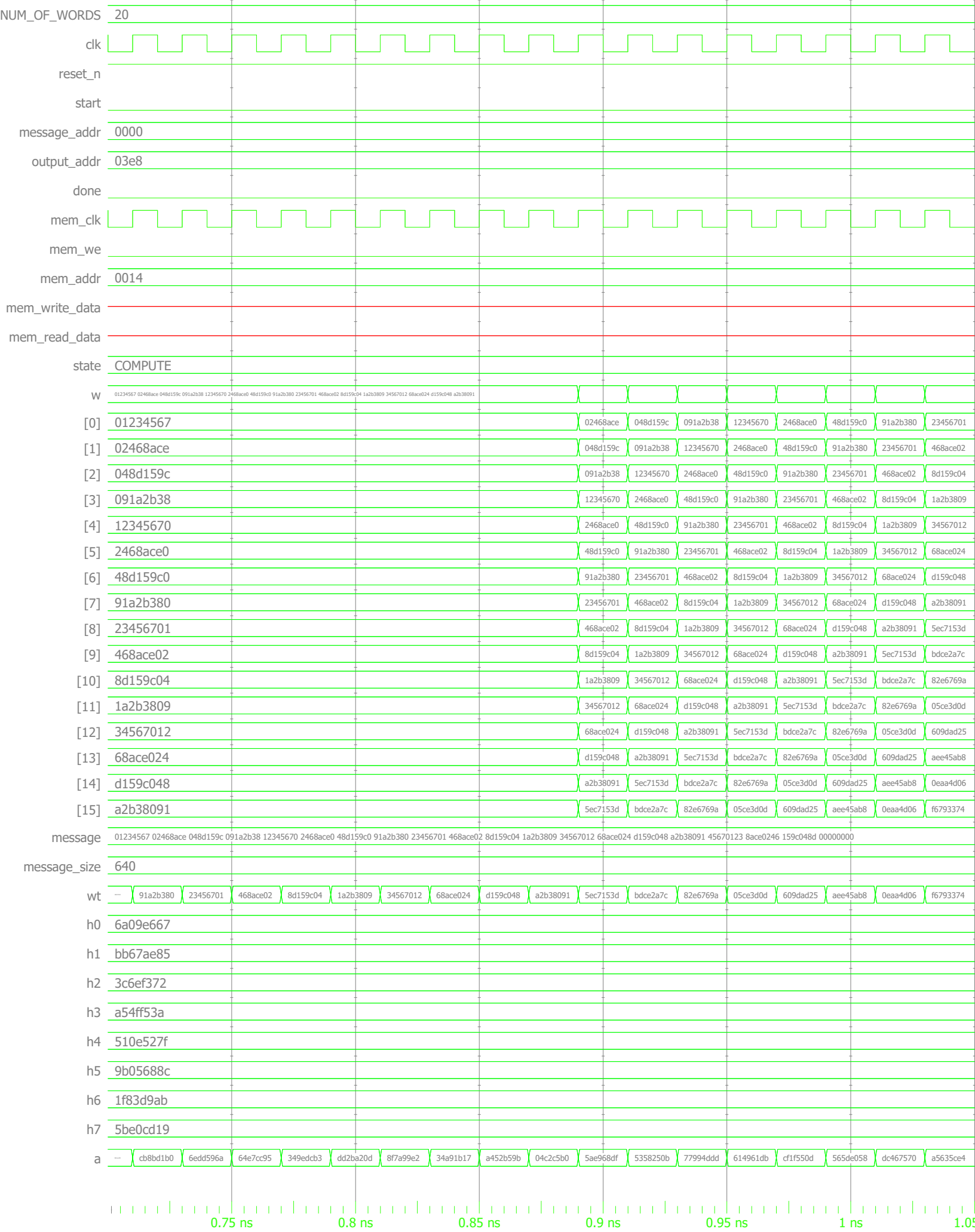
Entity:tb_simplified_sha256 Architecture: Date: Sat Jun 10 19:54:26 PDT 2023 Row: 1 Page: 1


b
c
d
e
f
g
h
i
j
offset
num_blocks
block_idx
cur_we
cur_addr
cur_write_data
tstep
s1
s0
0
0
0 1 2 3 4 5 6 7 8 9 10 11
2
0
0000
255
0.00 ns
0.05 ns
0.1 ns
0.15 ns
0.2 ns
0.25 ns
0.3 ns

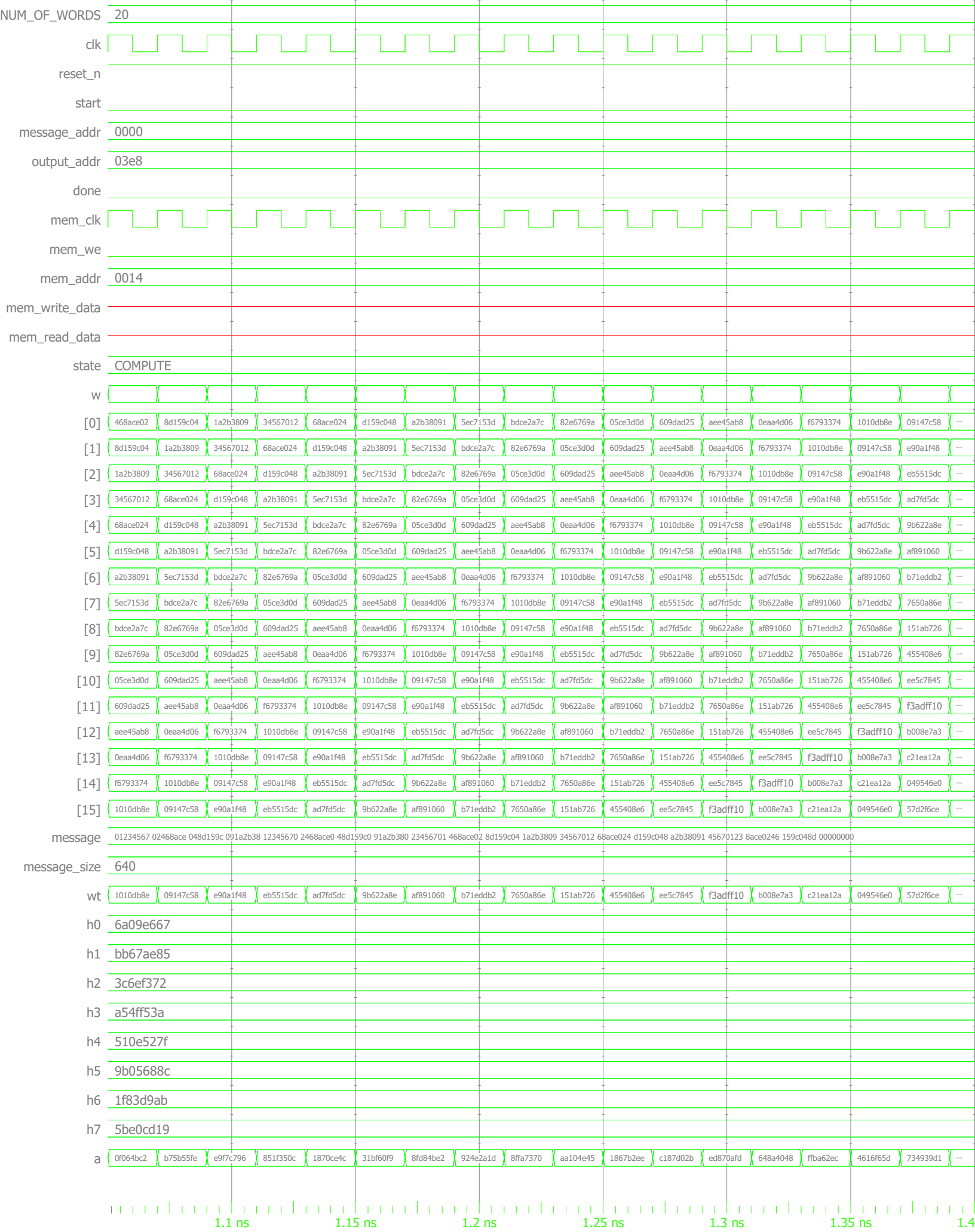

NUM_OF_WORDS
20
clk
reset_n
start
message_addr
0000
output_addr
03e8
done
mem_clk
mem_we
mem_addr
000c
000d
000e
000f
0010
0011
0012
0013
0014
mem_write_data
mem_read_data
1a2b3809
34567012
68ace024
d159c048
a2b38091
45670123
8ace0246
159c048d
00000000
state
READ
BLOCK
PRECOMP
COMPUTE
w
[0]
01234567
[1]
02468ace
[2]
048d159c
[3]
091a2b38
[4]
12345670
[5]
2468ace0
[6]
48d159c0
[7]
91a2b380
[8]
23456701
[9]
468ace02
[10]
8d159c04
[11]
1a2b3809
[12]
34567012
[13]
68ace024
[14]
d159c048
[15]
a2b38091
message
message_size
640
wt
01234567
02468ace
048d159c
091a2b38
12345670
2468ace0
h0
6a09e667
h1
bb67ae85
h2
3c6ef372
h3
a54ff53a
h4
510e527f
h5
9b05688c
h6
1f83d9ab
h7
5be0cd19
a
6a09e667
fd2bcdb4
71d8370c
fb8d87c9
ef8c3c5e
5a271f12
0.4 ns
0.45 ns
0.5 ns
0.55 ns
0.6 ns
0.65 ns
0.7


b
c
d
e
f
g
h
i
j
offset
num_blocks
block_idx
cur_we
cur_addr
cur_write_data
tstep
s1
s0
bb67ae85
6a09e667
fd2bcdb4
71d8370c
fb8d87c9
ef8c3c5e
3c6ef372
bb67ae85
6a09e667
fd2bcdb4
71d8370c
fb8d87c9
a54ff53a
3c6ef372
bb67ae85
6a09e667
fd2bcdb4
71d8370c
510e527f
99eb2809
b53f7212
79219c65
e95900c9
f1e1acb2
9b05688c
510e527f
99eb2809
b53f7212
79219c65
e95900c9
1f83d9ab
9b05688c
510e527f
99eb2809
b53f7212
79219c65
5be0cd19
1f83d9ab
9b05688c
510e527f
99eb2809
b53f7212
0
1
2
3
4
5
6
7
0
12
13
14
15
16
17
18
19
20
2
0
0000
255
0
1
2
3
4
5
6
0.4 ns
0.45 ns
0.5 ns
0.55 ns
0.6 ns
0.65 ns
0.7


NUM_OF_WORDS 20
clk
reset_n
start
message_addr 0000
output_addr 03e8
done
mem_clk
mem_we
mem_addr 0014
mem_write_data
mem_read_data
state COMPUTE
w 01234567 02468ace 048d159c 091a2b38 12345670 2468ace0 48d159c0 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091
[0] 01234567 02468ace 048d159c 091a2b38 12345670 2468ace0 48d159c0 91a2b380 23456701
[1] 02468ace 048d159c 091a2b38 12345670 2468ace0 48d159c0 91a2b380 23456701 468ace02
[2] 048d159c 091a2b38 12345670 2468ace0 48d159c0 91a2b380 23456701 468ace02 8d159c04
[3] 091a2b38 12345670 2468ace0 48d159c0 91a2b380 23456701 468ace02 8d159c04 1a2b3809
[4] 12345670 2468ace0 48d159c0 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012
[5] 2468ace0 48d159c0 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024
[6] 48d159c0 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048
[7] 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091
[8] 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 5ec7153d
[9] 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 5ec7153d bdce2a7c
[10] 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 5ec7153d bdce2a7c 82e6769a
[11] 1a2b3809 34567012 68ace024 d159c048 a2b38091 5ec7153d bdce2a7c 82e6769a 05ce3d0d
[12] 34567012 68ace024 d159c048 a2b38091 5ec7153d bdce2a7c 82e6769a 05ce3d0d 609dad25
[13] 68ace024 d159c048 a2b38091 5ec7153d bdce2a7c 82e6769a 05ce3d0d 609dad25 aee45ab8
[14] d159c048 a2b38091 5ec7153d bdce2a7c 82e6769a 05ce3d0d 609dad25 aee45ab8 0eaa4d06
[15] a2b38091 5ec7153d bdce2a7c 82e6769a 05ce3d0d 609dad25 aee45ab8 0eaa4d06 f6793374
message 01234567 02468ace 048d159c 091a2b38 12345670 2468ace0 48d159c0 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 45670123 8ace0246 159c048d 00000000
message_size 640
wt – 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 5ec7153d bdce2a7c 82e6769a 05ce3d0d 609dad25 aee45ab8 0eaa4d06 f6793374
h0 6a09e667
h1 bb67ae85
h2 3c6ef372
h3 a54ff53a
h4 510e527f
h5 9b05688c
h6 1f83d9ab
h7 5be0cd19
a – cb8bd1b0 6edd596a 64e7cc95 349edcb3 dd2ba20d 8f7a99e2 34a91b17 a452b59b 04c2c5b0 5ae968df 5358250b 77994ddd 614961db cf1f550d 565de058 dc467570 a5635ce4
0.75 ns
0.8 ns
0.85 ns
0.9 ns
0.95 ns
1 ns

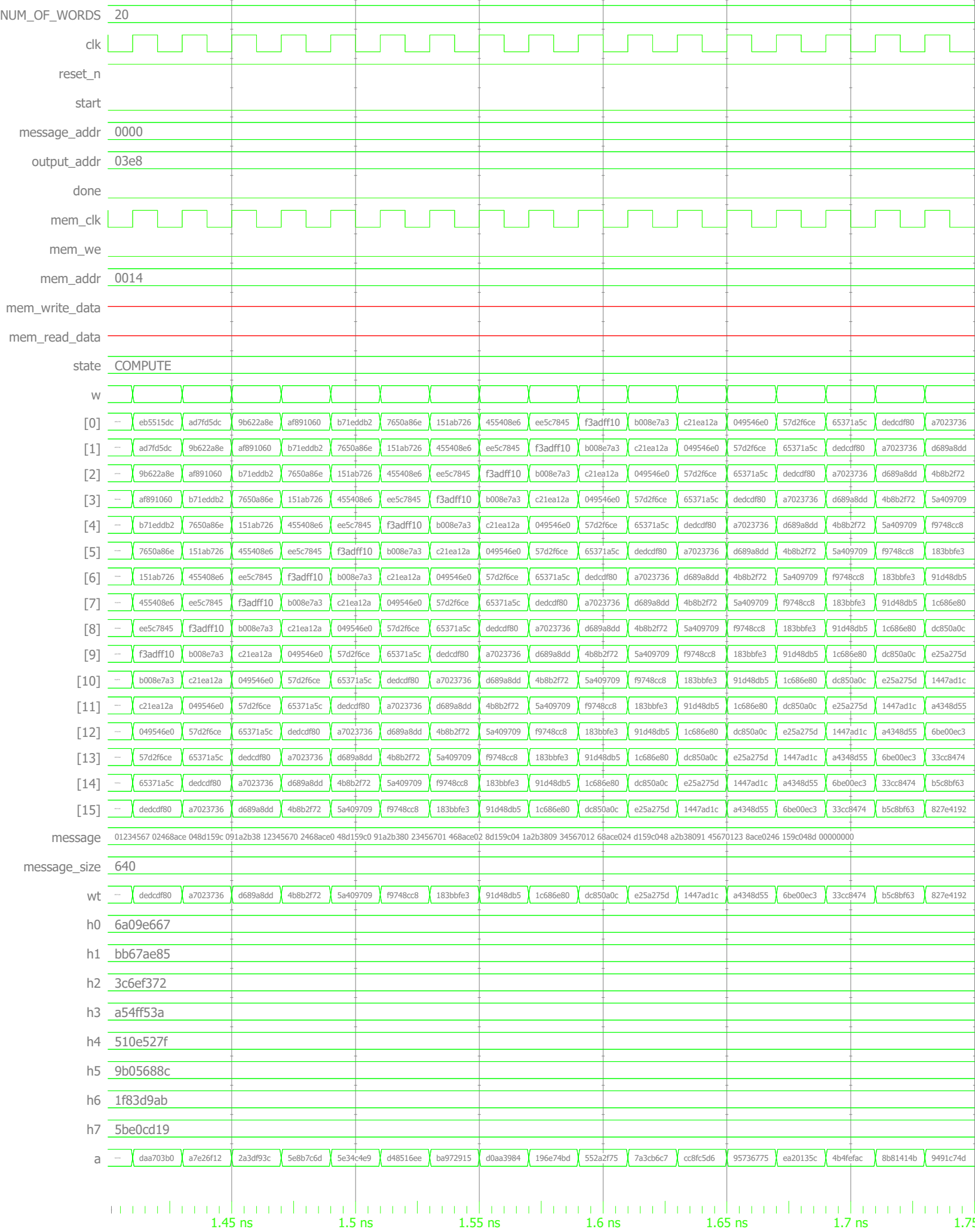
b	--	b81ea495	cb8bd1b0	6edd596a	64e7cc95	349edcb3	dd2ba20d	8f7a99e2	34a91b17	a452b59b	04c2c5b0	5ae968df	5358250b	77994ddd	614961db	cf1f550d	565de058	dc467570
c	--	5a271f12	b81ea495	cb8bd1b0	6edd596a	64e7cc95	349edcb3	dd2ba20d	8f7a99e2	34a91b17	a452b59b	04c2c5b0	5ae968df	5358250b	77994ddd	614961db	cf1f550d	565de058
d	--	ef8c3c5e	5a271f12	b81ea495	cb8bd1b0	6edd596a	64e7cc95	349edcb3	dd2ba20d	8f7a99e2	34a91b17	a452b59b	04c2c5b0	5ae968df	5358250b	77994ddd	614961db	cf1f550d
e	--	9cd2de33	f437951c	aeed90ec	db4d2610	f00ab802	bffbf00d	75a8f778	89c637e8	2e53ecc8	9dfb15c5	4d5a6a70	2d0adf0f	bbf81f49	c3a11859	9b9f2501	abadb654	a30a8d49
f	--	3c025cb3	9cd2de33	f437951c	aeed90ec	db4d2610	f00ab802	bffbf00d	75a8f778	89c637e8	2e53ecc8	9dfb15c5	4d5a6a70	2d0adf0f	bbf81f49	c3a11859	9b9f2501	abadb654
g	--	f1e1acb2	3c025cb3	9cd2de33	f437951c	aeed90ec	db4d2610	f00ab802	bffbf00d	75a8f778	89c637e8	2e53ecc8	9dfb15c5	4d5a6a70	2d0adf0f	bbf81f49	c3a11859	9b9f2501
h	--	e95900c9	f1e1acb2	3c025cb3	9cd2de33	f437951c	aeed90ec	db4d2610	f00ab802	bffbf00d	75a8f778	89c637e8	2e53ecc8	9dfb15c5	4d5a6a70	2d0adf0f	bbf81f49	c3a11859
i	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
j	0																	
offset	20																	
num_blocks	2																	
block_idx	0																	
cur_we																		
cur_addr	0000																	
cur_write_data																		
tstep	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
s1																		
s0																		

0.75 ns 0.8 ns 0.85 ns 0.9 ns 0.95 ns 1 ns 1.05


NUM_OF_WORDS 20
clk
reset_n
start
message_addr 0000
output_addr 03e8
done
mem_clk
mem_we
mem_addr 0014
mem_write_data
mem_read_data
state COMPUTE
w
[0] 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 5ec7153d bdce2a7c 82e6769a 05ce3d0d 609dad25 aee45ab8 0eaa4d06 f6793374 1010db8e 09147c58 --
[1] 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 5ec7153d bdce2a7c 82e6769a 05ce3d0d 609dad25 aee45ab8 0eaa4d06 f6793374 1010db8e 09147c58 e90a1f48 --
[2] 1a2b3809 34567012 68ace024 d159c048 a2b38091 5ec7153d bdce2a7c 82e6769a 05ce3d0d 609dad25 aee45ab8 0eaa4d06 f6793374 1010db8e 09147c58 e90a1f48 eb5515dc --
[3] 34567012 68ace024 d159c048 a2b38091 5ec7153d bdce2a7c 82e6769a 05ce3d0d 609dad25 aee45ab8 0eaa4d06 f6793374 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc --
[4] 68ace024 d159c048 a2b38091 5ec7153d bdce2a7c 82e6769a 05ce3d0d 609dad25 aee45ab8 0eaa4d06 f6793374 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc 9b622a8e --
[5] d159c048 a2b38091 5ec7153d bdce2a7c 82e6769a 05ce3d0d 609dad25 aee45ab8 0eaa4d06 f6793374 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc 9b622a8e af891060 --
[6] a2b38091 5ec7153d bdce2a7c 82e6769a 05ce3d0d 609dad25 aee45ab8 0eaa4d06 f6793374 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc 9b622a8e af891060 b71eddb2 --
[7] 5ec7153d bdce2a7c 82e6769a 05ce3d0d 609dad25 aee45ab8 0eaa4d06 f6793374 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc 9b622a8e af891060 b71eddb2 7650a86e --
[8] bdce2a7c 82e6769a 05ce3d0d 609dad25 aee45ab8 0eaa4d06 f6793374 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc 9b622a8e af891060 b71eddb2 7650a86e 151ab726 --
[9] 82e6769a 05ce3d0d 609dad25 aee45ab8 0eaa4d06 f6793374 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc 9b622a8e af891060 b71eddb2 7650a86e 151ab726 455408e6 --
[10] 05ce3d0d 609dad25 aee45ab8 0eaa4d06 f6793374 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc 9b622a8e af891060 b71eddb2 7650a86e 151ab726 455408e6 ee5c7845 --
[11] 609dad25 aee45ab8 0eaa4d06 f6793374 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc 9b622a8e af891060 b71eddb2 7650a86e 151ab726 455408e6 ee5c7845 f3adff10 --
[12] aee45ab8 0eaa4d06 f6793374 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc 9b622a8e af891060 b71eddb2 7650a86e 151ab726 455408e6 ee5c7845 f3adff10 b008e7a3 --
[13] 0eaa4d06 f6793374 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc 9b622a8e af891060 b71eddb2 7650a86e 151ab726 455408e6 ee5c7845 f3adff10 b008e7a3 c21ea12a --
[14] f6793374 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc 9b622a8e af891060 b71eddb2 7650a86e 151ab726 455408e6 ee5c7845 f3adff10 b008e7a3 c21ea12a 049546e0 --
[15] 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc 9b622a8e af891060 b71eddb2 7650a86e 151ab726 455408e6 ee5c7845 f3adff10 b008e7a3 c21ea12a 049546e0 57d2f6ce --
message 01234567 02468ace 048d159c 091a2b38 12345670 2468ace0 48d159c0 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 45670123 8ace0246 159c048d 00000000
message_size 640
wt 1010db8e 09147c58 e90a1f48 eb5515dc ad7fd5dc 9b622a8e af891060 b71eddb2 7650a86e 151ab726 455408e6 ee5c7845 f3adff10 b008e7a3 c21ea12a 049546e0 57d2f6ce --
h0 6a09e667
h1 bb67ae85
h2 3c6ef372
h3 a54ff53a
h4 510e527f
h5 9b05688c
h6 1f83d9ab
h7 5be0cd19
a 0f064bc2 b75b55fe e9f7c796 851f350c 1870ce4c 31bf60f9 8fd84be2 924e2a1d 8ffa7370 aa104e45 1867b2ee c187d02b ed870afd 648a4048 ffba62ec 4616f65d 734939d1 --
1.1 ns
1.15 ns
1.2 ns
1.25 ns
1.3 ns
1.35 ns
1.4

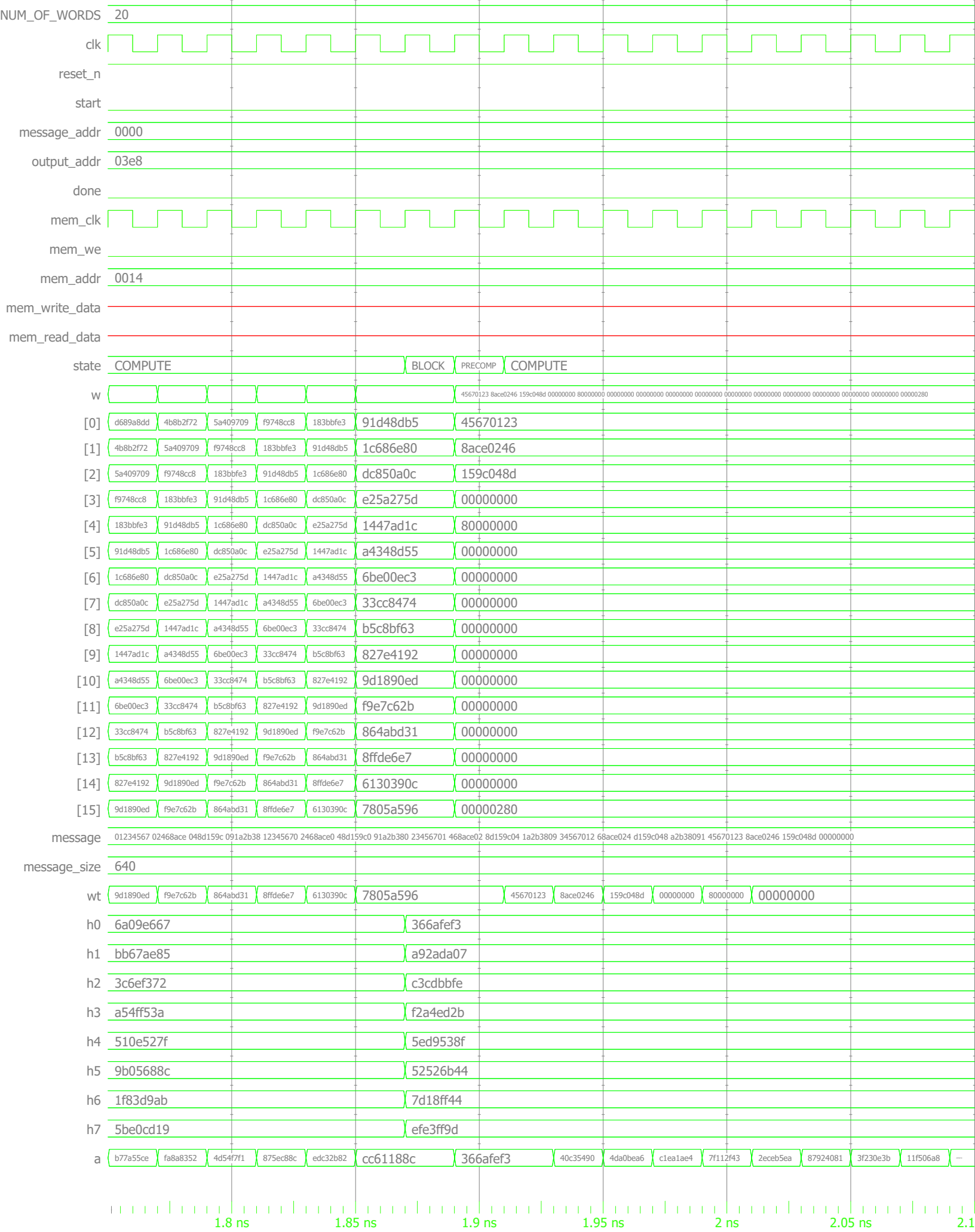
b	a5635ce4	0f064bc2	b75b55fe	e9f7c796	851f350c	1870ce4c	31bf60f9	8fd84be2	924e2a1d	8ffa7370	aa104e45	1867b2ee	c187d02b	ed870afd	648a4048	ffba62ec	4616f65d	--
c	dc467570	a5635ce4	0f064bc2	b75b55fe	e9f7c796	851f350c	1870ce4c	31bf60f9	8fd84be2	924e2a1d	8ffa7370	aa104e45	1867b2ee	c187d02b	ed870afd	648a4048	ffba62ec	--
d	565de058	dc467570	a5635ce4	0f064bc2	b75b55fe	e9f7c796	851f350c	1870ce4c	31bf60f9	8fd84be2	924e2a1d	8ffa7370	aa104e45	1867b2ee	c187d02b	ed870afd	648a4048	--
e	c6cfbda9	bb73f578	af8649a8	2156641e	8c1fecc2	a85d2f77	b26afe29	5fa72e3c	07b56804	fa3e229e	c4553ec0	39c0effd	86fa54cc	146da26d	003a3f9f	5911ad06	417eea4a	--
f	a30a8d49	c6cfbda9	bb73f578	af8649a8	2156641e	8c1fecc2	a85d2f77	b26afe29	5fa72e3c	07b56804	fa3e229e	c4553ec0	39c0effd	86fa54cc	146da26d	003a3f9f	5911ad06	--
g	abadb654	a30a8d49	c6cfbda9	bb73f578	af8649a8	2156641e	8c1fecc2	a85d2f77	b26afe29	5fa72e3c	07b56804	fa3e229e	c4553ec0	39c0effd	86fa54cc	146da26d	003a3f9f	--
h	9b9f2501	abadb654	a30a8d49	c6cfbda9	bb73f578	af8649a8	2156641e	8c1fecc2	a85d2f77	b26afe29	5fa72e3c	07b56804	fa3e229e	c4553ec0	39c0effd	86fa54cc	146da26d	--
i	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
j	0																	
offset	20																	
num_blocks	2																	
block_idx	0																	
cur_we																		
cur_addr	0000																	
cur_write_data																		
tstep	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
s1																		
s0																		

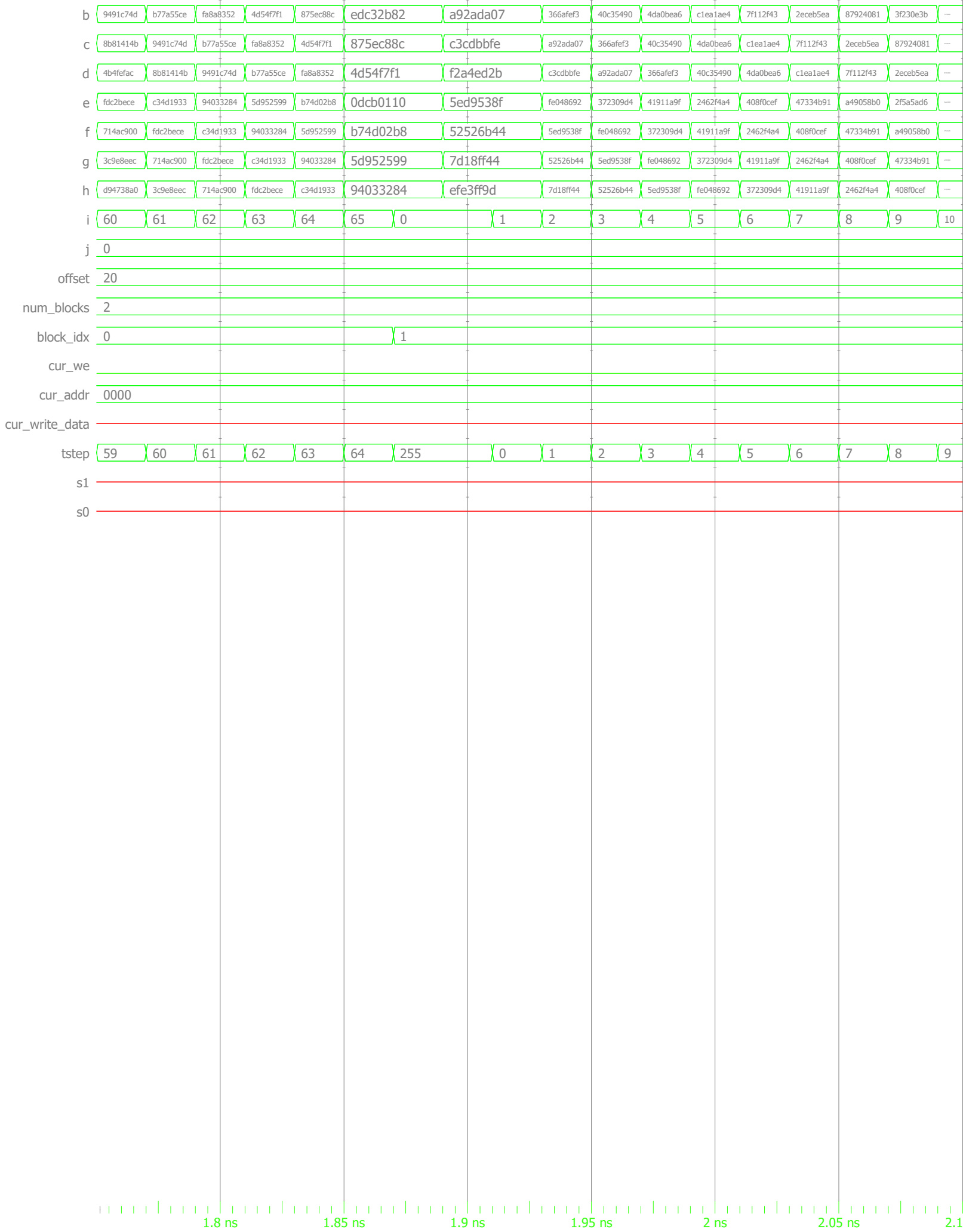
1.1 ns 1.15 ns 1.2 ns 1.25 ns 1.3 ns 1.35 ns 1.4

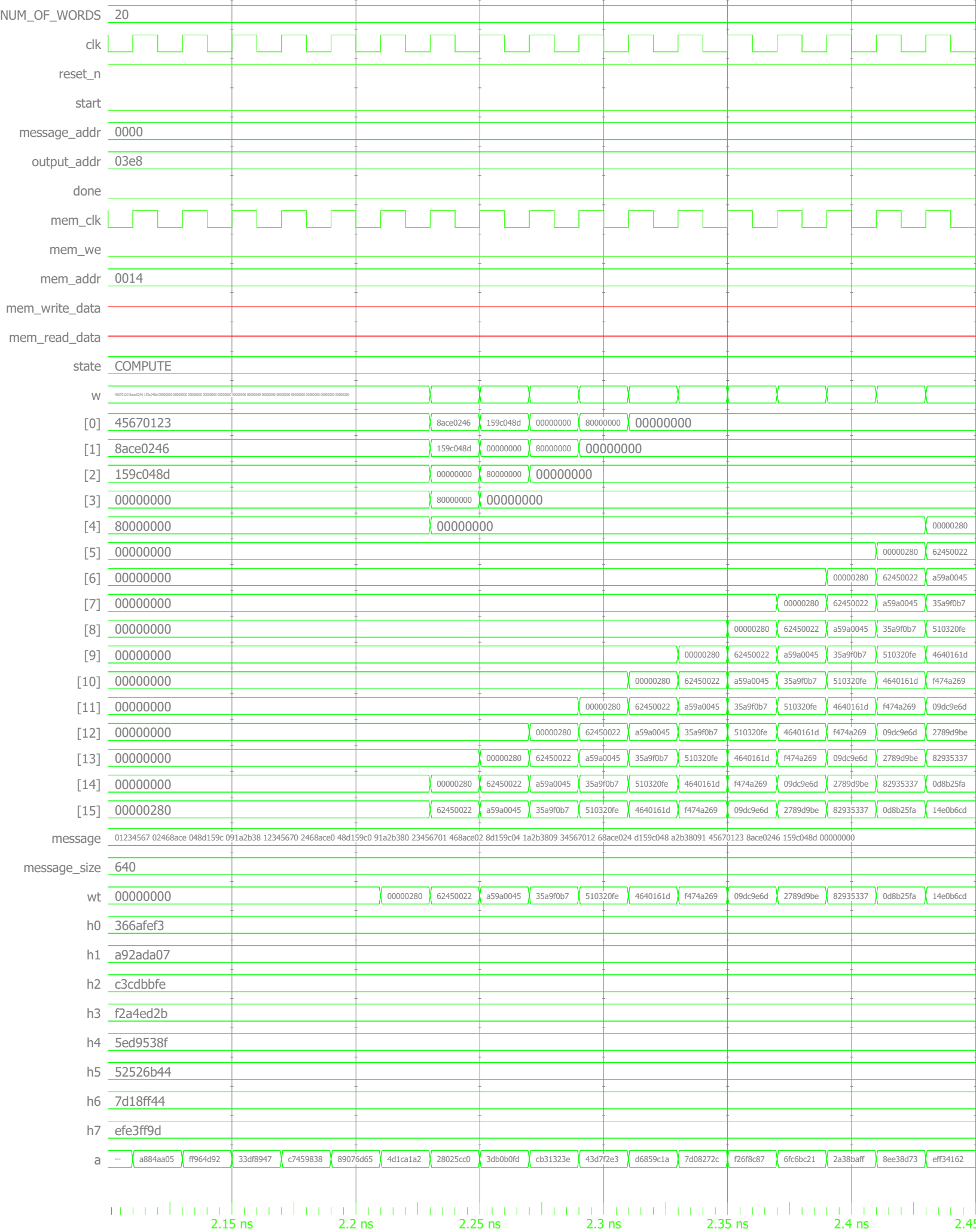

NUM_OF_WORDS 20
clk
reset_n
start
message_addr 0000
output_addr 03e8
done
mem_clk
mem_we
mem_addr 0014
mem_write_data
mem_read_data
state COMPUTE
w
[0] -- eb5515dc ad7fd5dc 9b622a8e af891060 b71eddb2 7650a86e 151ab726 455408e6 ee5c7845 f3adff10 b008e7a3 c21ea12a 049546e0 57d2f6ce 65371a5c dedcdf80 a7023736
[1] -- ad7fd5dc 9b622a8e af891060 b71eddb2 7650a86e 151ab726 455408e6 ee5c7845 f3adff10 b008e7a3 c21ea12a 049546e0 57d2f6ce 65371a5c dedcdf80 a7023736 d689a8dd
[2] -- 9b622a8e af891060 b71eddb2 7650a86e 151ab726 455408e6 ee5c7845 f3adff10 b008e7a3 c21ea12a 049546e0 57d2f6ce 65371a5c dedcdf80 a7023736 d689a8dd 4b8b2f72
[3] -- af891060 b71eddb2 7650a86e 151ab726 455408e6 ee5c7845 f3adff10 b008e7a3 c21ea12a 049546e0 57d2f6ce 65371a5c dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709
[4] -- b71eddb2 7650a86e 151ab726 455408e6 ee5c7845 f3adff10 b008e7a3 c21ea12a 049546e0 57d2f6ce 65371a5c dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709 f9748cc8
[5] -- 7650a86e 151ab726 455408e6 ee5c7845 f3adff10 b008e7a3 c21ea12a 049546e0 57d2f6ce 65371a5c dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709 f9748cc8 183bbfe3
[6] -- 151ab726 455408e6 ee5c7845 f3adff10 b008e7a3 c21ea12a 049546e0 57d2f6ce 65371a5c dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709 f9748cc8 183bbfe3 91d48db5
[7] -- 455408e6 ee5c7845 f3adff10 b008e7a3 c21ea12a 049546e0 57d2f6ce 65371a5c dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709 f9748cc8 183bbfe3 91d48db5 1c686e80
[8] -- ee5c7845 f3adff10 b008e7a3 c21ea12a 049546e0 57d2f6ce 65371a5c dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709 f9748cc8 183bbfe3 91d48db5 1c686e80 dc850a0c
[9] -- f3adff10 b008e7a3 c21ea12a 049546e0 57d2f6ce 65371a5c dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709 f9748cc8 183bbfe3 91d48db5 1c686e80 dc850a0c e25a275d
[10] -- b008e7a3 c21ea12a 049546e0 57d2f6ce 65371a5c dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709 f9748cc8 183bbfe3 91d48db5 1c686e80 dc850a0c e25a275d 1447ad1c
[11] -- c21ea12a 049546e0 57d2f6ce 65371a5c dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709 f9748cc8 183bbfe3 91d48db5 1c686e80 dc850a0c e25a275d 1447ad1c a4348d55
[12] -- 049546e0 57d2f6ce 65371a5c dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709 f9748cc8 183bbfe3 91d48db5 1c686e80 dc850a0c e25a275d 1447ad1c a4348d55 6be00ec3
[13] -- 57d2f6ce 65371a5c dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709 f9748cc8 183bbfe3 91d48db5 1c686e80 dc850a0c e25a275d 1447ad1c a4348d55 6be00ec3 33cc8474
[14] -- 65371a5c dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709 f9748cc8 183bbfe3 91d48db5 1c686e80 dc850a0c e25a275d 1447ad1c a4348d55 6be00ec3 33cc8474 b5c8bf63
[15] -- dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709 f9748cc8 183bbfe3 91d48db5 1c686e80 dc850a0c e25a275d 1447ad1c a4348d55 6be00ec3 33cc8474 b5c8bf63 827e4192
message 01234567 02468ace 048d159c 091a2b38 12345670 2468ace0 48d159c0 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 45670123 8ace0246 159c048d 00000000
message_size 640
wt -- dedcdf80 a7023736 d689a8dd 4b8b2f72 5a409709 f9748cc8 183bbfe3 91d48db5 1c686e80 dc850a0c e25a275d 1447ad1c a4348d55 6be00ec3 33cc8474 b5c8bf63 827e4192
h0 6a09e667
h1 bb67ae85
h2 3c6ef372
h3 a54ff53a
h4 510e527f
h5 9b05688c
h6 1f83d9ab
h7 5be0cd19
a -- daa703b0 a7e26f12 2a3df93c 5e8b7c6d 5e34c4e9 d48516ee ba972915 d0aa3984 196e74bd 552a2f75 7a3cb6c7 cc8fc5d6 95736775 ea20135c 4b4fefac 8b81414b 9491c74d
1.45 ns
1.5 ns
1.55 ns
1.6 ns
1.65 ns
1.7 ns

b	--	5d233594	daa703b0	a7e26f12	2a3df93c	5e8b7c6d	5e34c4e9	d48516ee	ba972915	d0aa3984	196e74bd	552a2f75	7a3cb6c7	cc8fc5d6	95736775	ea20135c	4b4fefac	8b81414b
c	--	734939d1	5d233594	daa703b0	a7e26f12	2a3df93c	5e8b7c6d	5e34c4e9	d48516ee	ba972915	d0aa3984	196e74bd	552a2f75	7a3cb6c7	cc8fc5d6	95736775	ea20135c	4b4fefac
d	--	4616f65d	734939d1	5d233594	daa703b0	a7e26f12	2a3df93c	5e8b7c6d	5e34c4e9	d48516ee	ba972915	d0aa3984	196e74bd	552a2f75	7a3cb6c7	cc8fc5d6	95736775	ea20135c
e	--	4c21bbbf	dbb45d21	65121d35	dc7c67c9	70f6ad23	7a5523af	704372a3	d5f468ee	5631e7b0	369f6a95	5d4baa4f	a99be6a9	b0306622	cf9cb6e7	d94738a0	3c9e8eec	714ac900
f	--	93d4710f	4c21bbbf	dbb45d21	65121d35	dc7c67c9	70f6ad23	7a5523af	704372a3	d5f468ee	5631e7b0	369f6a95	5d4baa4f	a99be6a9	b0306622	cf9cb6e7	d94738a0	3c9e8eec
g	--	417eea4a	93d4710f	4c21bbbf	dbb45d21	65121d35	dc7c67c9	70f6ad23	7a5523af	704372a3	d5f468ee	5631e7b0	369f6a95	5d4baa4f	a99be6a9	b0306622	cf9cb6e7	d94738a0
h	--	5911ad06	417eea4a	93d4710f	4c21bbbf	dbb45d21	65121d35	dc7c67c9	70f6ad23	7a5523af	704372a3	d5f468ee	5631e7b0	369f6a95	5d4baa4f	a99be6a9	b0306622	cf9cb6e7
i	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
j	0																	
offset	20																	
num_blocks	2																	
block_idx	0																	
cur_we																		
cur_addr	0000																	
cur_write_data																		
tstep	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58
s1																		
s0																		

1.45 ns 1.5 ns 1.55 ns 1.6 ns 1.65 ns 1.7 ns 1.75

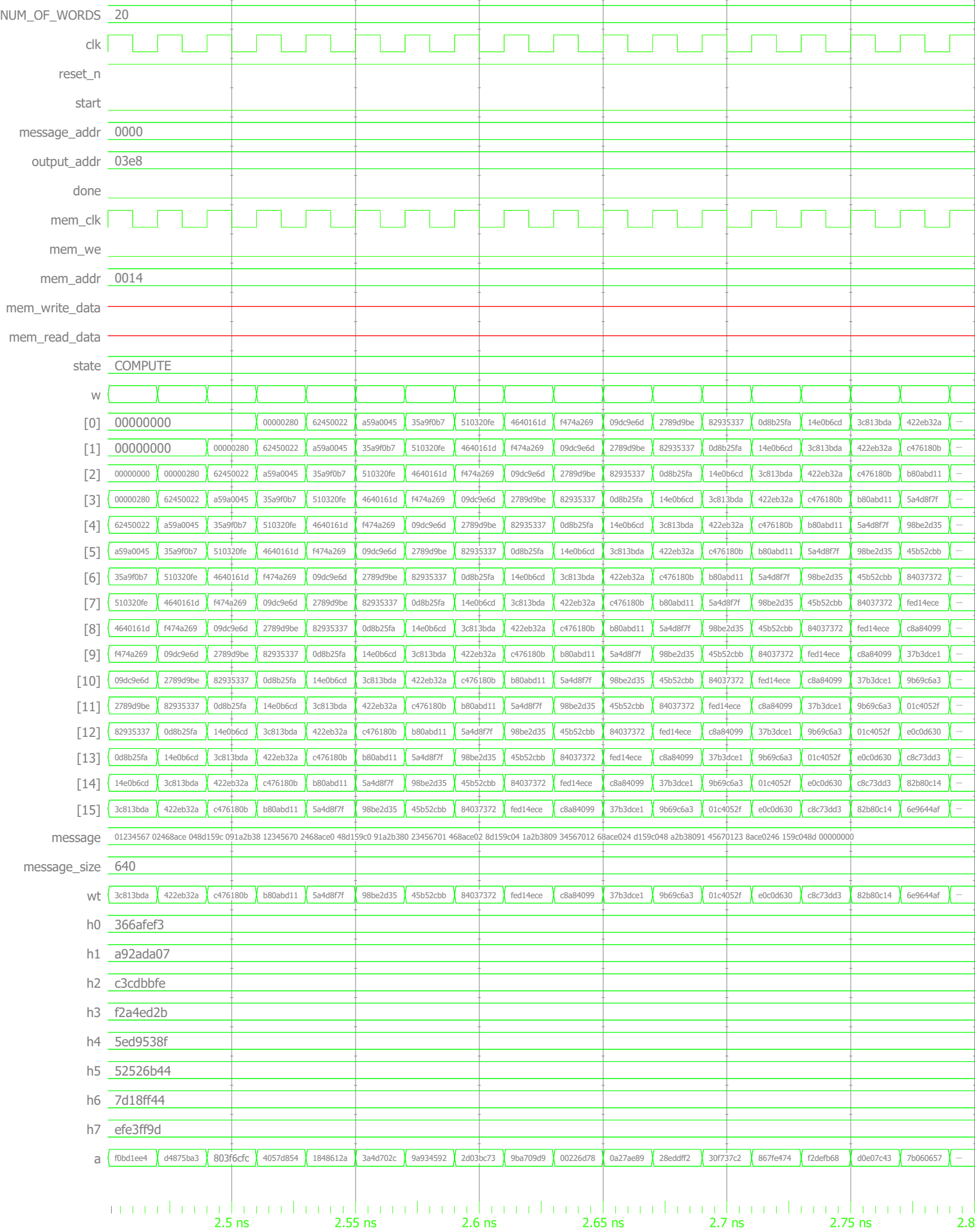

NUM_OF_WORDS 20
clk
reset_n
start
message_addr 0000
output_addr 03e8
done
mem_clk
mem_we
mem_addr 0014
mem_write_data
mem_read_data
state COMPUTE BLOCK PRECOMP COMPUTE
w 45670123 8ace0246 159c048d 00000000 80000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000280
[0] d689a8dd 4b8b2f72 5a409709 f9748cc8 183bbfe3 91d48db5 45670123
[1] 4b8b2f72 5a409709 f9748cc8 183bbfe3 91d48db5 1c686e80 8ace0246
[2] 5a409709 f9748cc8 183bbfe3 91d48db5 1c686e80 dc850a0c 159c048d
[3] f9748cc8 183bbfe3 91d48db5 1c686e80 dc850a0c e25a275d 00000000
[4] 183bbfe3 91d48db5 1c686e80 dc850a0c e25a275d 1447ad1c 80000000
[5] 91d48db5 1c686e80 dc850a0c e25a275d 1447ad1c a4348d55 00000000
[6] 1c686e80 dc850a0c e25a275d 1447ad1c a4348d55 6be00ec3 00000000
[7] dc850a0c e25a275d 1447ad1c a4348d55 6be00ec3 33cc8474 00000000
[8] e25a275d 1447ad1c a4348d55 6be00ec3 33cc8474 b5c8bf63 00000000
[9] 1447ad1c a4348d55 6be00ec3 33cc8474 b5c8bf63 827e4192 00000000
[10] a4348d55 6be00ec3 33cc8474 b5c8bf63 827e4192 9d1890ed 00000000
[11] 6be00ec3 33cc8474 b5c8bf63 827e4192 9d1890ed f9e7c62b 00000000
[12] 33cc8474 b5c8bf63 827e4192 9d1890ed f9e7c62b 864abd31 00000000
[13] b5c8bf63 827e4192 9d1890ed f9e7c62b 864abd31 8ffde6e7 00000000
[14] 827e4192 9d1890ed f9e7c62b 864abd31 8ffde6e7 6130390c 00000000
[15] 9d1890ed f9e7c62b 864abd31 8ffde6e7 6130390c 7805a596 00000280
message 01234567 02468ace 048d159c 091a2b38 12345670 2468ace0 48d159c0 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 45670123 8ace0246 159c048d 00000000
message_size 640
wt 9d1890ed f9e7c62b 864abd31 8ffde6e7 6130390c 7805a596 45670123 8ace0246 159c048d 00000000 80000000 00000000
h0 6a09e667 366afef3
h1 bb67ae85 a92ada07
h2 3c6ef372 c3cdbbfe
h3 a54ff53a f2a4ed2b
h4 510e527f 5ed9538f
h5 9b05688c 52526b44
h6 1f83d9ab 7d18ff44
h7 5be0cd19 efe3ff9d
a b77a55ce fa8a8352 4d54f7f1 875ec88c edc32b82 cc61188c 366afef3 40c35490 4da0bea6 c1ea1ae4 7f112f43 2eceb5ea 87924081 3f230e3b 11f506a8
1.8 ns
1.85 ns
1.9 ns
1.95 ns
2 ns
2.05 ns
2.1

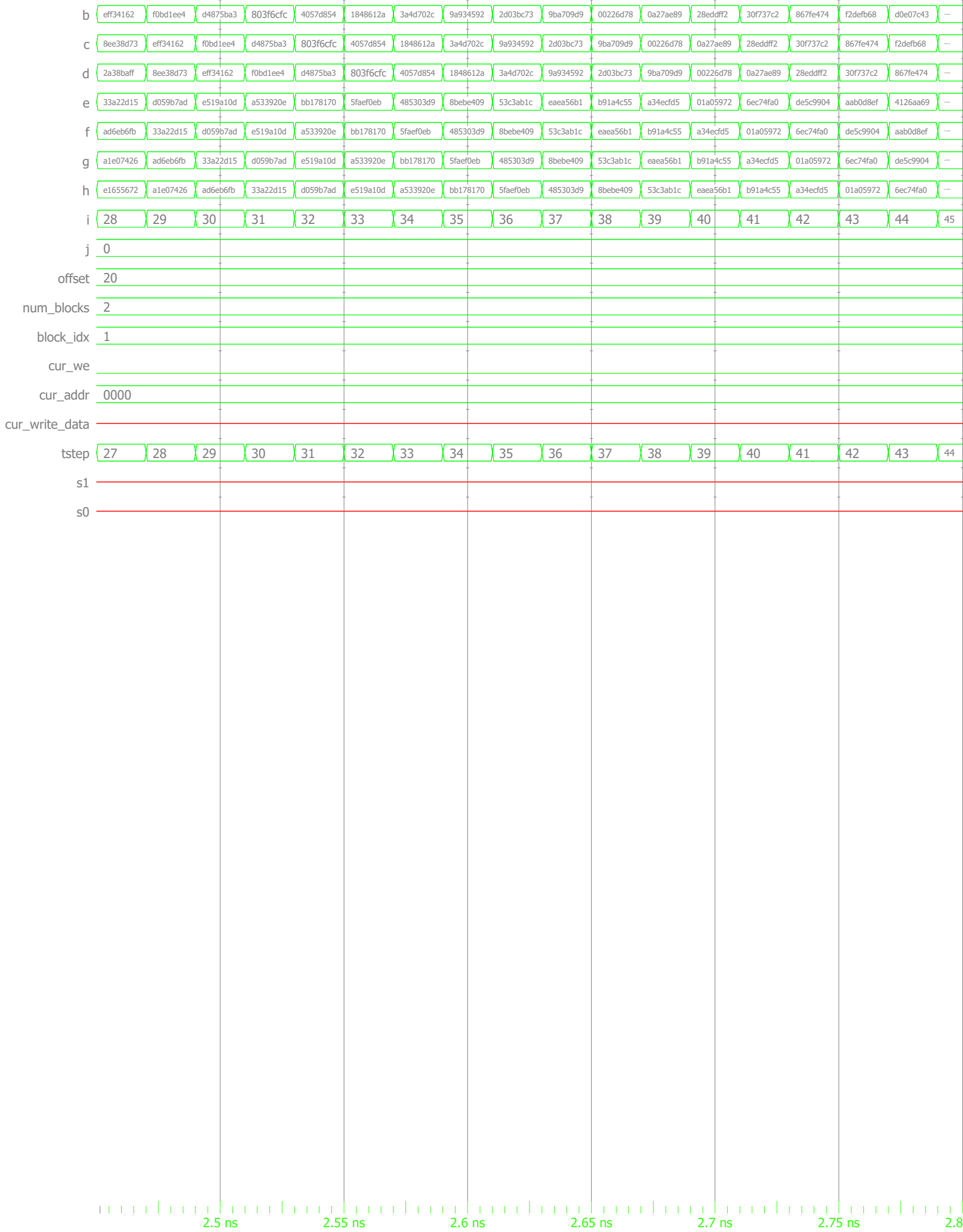

b 9491c74d b77a55ce fa8a8352 4d54f7f1 875ec88c edc32b82 a92ada07 366afef3 40c35490 4da0bea6 c1ea1ae4 7f112f43 2eceb5ea 87924081 3f230e3b --
c 8b81414b 9491c74d b77a55ce fa8a8352 4d54f7f1 875ec88c c3cdbbfe a92ada07 366afef3 40c35490 4da0bea6 c1ea1ae4 7f112f43 2eceb5ea 87924081 --
d 4b4fefac 8b81414b 9491c74d b77a55ce fa8a8352 4d54f7f1 f2a4ed2b c3cdbbfe a92ada07 366afef3 40c35490 4da0bea6 c1ea1ae4 7f112f43 2eceb5ea --
e fdc2bece c34d1933 94033284 5d952599 b74d02b8 0dcb0110 5ed9538f fe048692 372309d4 41911a9f 2462f4a4 408f0cef 47334b91 a49058b0 2f5a5ad6 --
f 714ac900 fdc2bece c34d1933 94033284 5d952599 b74d02b8 52526b44 5ed9538f fe048692 372309d4 41911a9f 2462f4a4 408f0cef 47334b91 a49058b0 --
g 3c9e8eec 714ac900 fdc2bece c34d1933 94033284 5d952599 7d18ff44 52526b44 5ed9538f fe048692 372309d4 41911a9f 2462f4a4 408f0cef 47334b91 --
h d94738a0 3c9e8eec 714ac900 fdc2bece c34d1933 94033284 efe3ff9d 7d18ff44 52526b44 5ed9538f fe048692 372309d4 41911a9f 2462f4a4 408f0cef --
i 60 61 62 63 64 65 0 1 2 3 4 5 6 7 8 9 10
j 0
offset 20
num_blocks 2
block_idx 0 1
cur_we
cur_addr 0000
cur_write_data
tstep 59 60 61 62 63 64 255 0 1 2 3 4 5 6 7 8 9
s1
s0
1.8 ns
1.85 ns
1.9 ns
1.95 ns
2 ns
2.05 ns
2.1

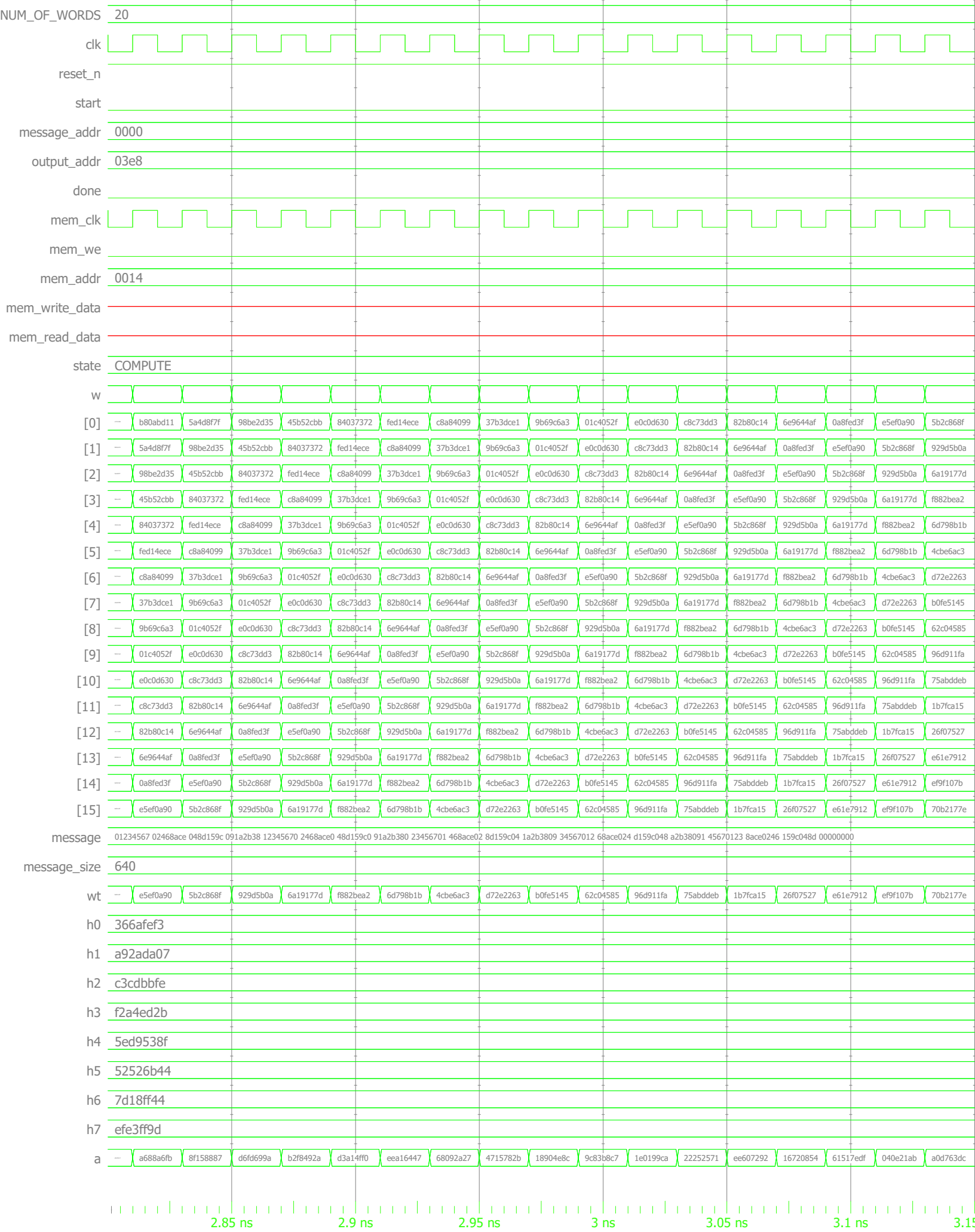

NUM_OF_WORDS 20
clk
reset_n
start
message_addr 0000
output_addr 03e8
done
mem_clk
mem_we
mem_addr 0014
mem_write_data
mem_read_data
state COMPUTE
w
[0] 45670123 8ace0246 159c048d 00000000 80000000 00000000
[1] 8ace0246 159c048d 00000000 80000000 00000000
[2] 159c048d 00000000 80000000 00000000
[3] 00000000 80000000 00000000
[4] 80000000 00000000 00000280
[5] 00000000 00000280 62450022
[6] 00000000 00000280 62450022 a59a0045
[7] 00000000 00000280 62450022 a59a0045 35a9f0b7
[8] 00000000 00000280 62450022 a59a0045 35a9f0b7 510320fe
[9] 00000000 00000280 62450022 a59a0045 35a9f0b7 510320fe 4640161d
[10] 00000000 00000280 62450022 a59a0045 35a9f0b7 510320fe 4640161d f474a269
[11] 00000000 00000280 62450022 a59a0045 35a9f0b7 510320fe 4640161d f474a269 09dc9e6d
[12] 00000000 00000280 62450022 a59a0045 35a9f0b7 510320fe 4640161d f474a269 09dc9e6d 2789d9be
[13] 00000000 00000280 62450022 a59a0045 35a9f0b7 510320fe 4640161d f474a269 09dc9e6d 2789d9be 82935337
[14] 00000000 00000280 62450022 a59a0045 35a9f0b7 510320fe 4640161d f474a269 09dc9e6d 2789d9be 82935337 0d8b25fa
[15] 00000280 62450022 a59a0045 35a9f0b7 510320fe 4640161d f474a269 09dc9e6d 2789d9be 82935337 0d8b25fa 14e0b6cd
message 01234567 02468ace 048d159c 091a2b38 12345670 2468ace0 48d159c0 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 45670123 8ace0246 159c048d 00000000
message_size 640
wt 00000000 00000280 62450022 a59a0045 35a9f0b7 510320fe 4640161d f474a269 09dc9e6d 2789d9be 82935337 0d8b25fa 14e0b6cd
h0 366afef3
h1 a92ada07
h2 c3cdbbfe
h3 f2a4ed2b
h4 5ed9538f
h5 52526b44
h6 7d18ff44
h7 efe3ff9d
a – a884aa05 ff964d92 33df8947 c7459838 89076d65 4d1ca1a2 28025cc0 3db0b0fd cb31323e 43d7f2e3 d6859c1a 7d08272c f26f8c87 6fc6bc21 2a38baff 8ee38d73 eff34162
2.15 ns
2.2 ns
2.25 ns
2.3 ns
2.35 ns
2.4 ns

b	--	28f86f3d	a884aa05	ff964d92	33df8947	c7459838	89076d65	4d1ca1a2	28025cc0	3db0b0fd	cb31323e	43d7f2e3	d6859c1a	7d08272c	f26f8c87	6fc6bc21	2a38baff	8ee38d73
c	--	11f506a8	28f86f3d	a884aa05	ff964d92	33df8947	c7459838	89076d65	4d1ca1a2	28025cc0	3db0b0fd	cb31323e	43d7f2e3	d6859c1a	7d08272c	f26f8c87	6fc6bc21	2a38baff
d	--	3f230e3b	11f506a8	28f86f3d	a884aa05	ff964d92	33df8947	c7459838	89076d65	4d1ca1a2	28025cc0	3db0b0fd	cb31323e	43d7f2e3	d6859c1a	7d08272c	f26f8c87	6fc6bc21
e	--	23ba339e	ed20b59a	12fbfcb2	3bbc1e0c	533ccf19	b4936089	a208732e	167d03d3	1ce1b977	7fd1755f	9ab1d6d3	b41b6d7f	5f5db81d	96fab362	e1655672	a1e07426	ad6eb6fb
f	--	5aecb039	23ba339e	ed20b59a	12fbfcb2	3bbc1e0c	533ccf19	b4936089	a208732e	167d03d3	1ce1b977	7fd1755f	9ab1d6d3	b41b6d7f	5f5db81d	96fab362	e1655672	a1e07426
g	--	2f5a5ad6	5aecb039	23ba339e	ed20b59a	12fbfcb2	3bbc1e0c	533ccf19	b4936089	a208732e	167d03d3	1ce1b977	7fd1755f	9ab1d6d3	b41b6d7f	5f5db81d	96fab362	e1655672
h	--	a49058b0	2f5a5ad6	5aecb039	23ba339e	ed20b59a	12fbfcb2	3bbc1e0c	533ccf19	b4936089	a208732e	167d03d3	1ce1b977	7fd1755f	9ab1d6d3	b41b6d7f	5f5db81d	96fab362
i	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
j	0																	
offset	20																	
num_blocks	2																	
block_idx	1																	
cur_we																		
cur_addr	0000																	
cur_write_data																		
tstep	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
s1																		
s0																		

2.15 ns 2.2 ns 2.25 ns 2.3 ns 2.35 ns 2.4 ns 2.45

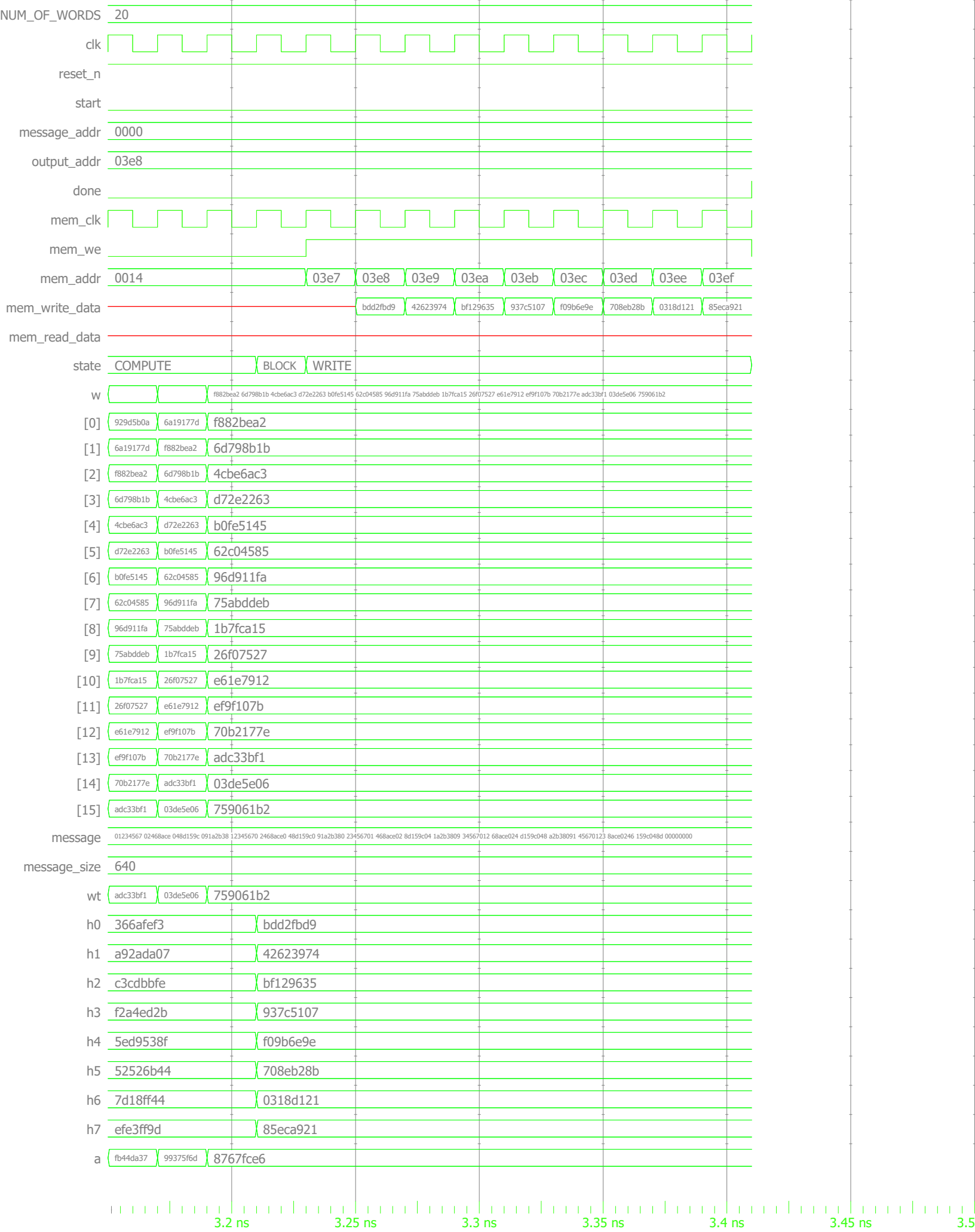

NUM_OF_WORDS 20
clk
reset_n
start
message_addr 0000
output_addr 03e8
done
mem_clk
mem_we
mem_addr 0014
mem_write_data
mem_read_data
state COMPUTE
w
[0] 00000000 00000280 62450022 a59a0045 35a9f0b7 510320fe 4640161d f474a269 09dc9e6d 2789d9be 82935337 0d8b25fa 14e0b6cd 3c813bda 422eb32a
[1] 00000000 00000280 62450022 a59a0045 35a9f0b7 510320fe 4640161d f474a269 09dc9e6d 2789d9be 82935337 0d8b25fa 14e0b6cd 3c813bda 422eb32a c476180b
[2] 00000000 00000280 62450022 a59a0045 35a9f0b7 510320fe 4640161d f474a269 09dc9e6d 2789d9be 82935337 0d8b25fa 14e0b6cd 3c813bda 422eb32a c476180b b80abd11
[3] 00000280 62450022 a59a0045 35a9f0b7 510320fe 4640161d f474a269 09dc9e6d 2789d9be 82935337 0d8b25fa 14e0b6cd 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f
[4] 62450022 a59a0045 35a9f0b7 510320fe 4640161d f474a269 09dc9e6d 2789d9be 82935337 0d8b25fa 14e0b6cd 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f 98be2d35
[5] a59a0045 35a9f0b7 510320fe 4640161d f474a269 09dc9e6d 2789d9be 82935337 0d8b25fa 14e0b6cd 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f 98be2d35 45b52cbb
[6] 35a9f0b7 510320fe 4640161d f474a269 09dc9e6d 2789d9be 82935337 0d8b25fa 14e0b6cd 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f 98be2d35 45b52cbb 84037372
[7] 510320fe 4640161d f474a269 09dc9e6d 2789d9be 82935337 0d8b25fa 14e0b6cd 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f 98be2d35 45b52cbb 84037372 fed14ece
[8] 4640161d f474a269 09dc9e6d 2789d9be 82935337 0d8b25fa 14e0b6cd 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f 98be2d35 45b52cbb 84037372 fed14ece c8a84099
[9] f474a269 09dc9e6d 2789d9be 82935337 0d8b25fa 14e0b6cd 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f 98be2d35 45b52cbb 84037372 fed14ece c8a84099 37b3dce1
[10] 09dc9e6d 2789d9be 82935337 0d8b25fa 14e0b6cd 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f 98be2d35 45b52cbb 84037372 fed14ece c8a84099 37b3dce1 9b69c6a3
[11] 2789d9be 82935337 0d8b25fa 14e0b6cd 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f 98be2d35 45b52cbb 84037372 fed14ece c8a84099 37b3dce1 9b69c6a3 01c4052f
[12] 82935337 0d8b25fa 14e0b6cd 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f 98be2d35 45b52cbb 84037372 fed14ece c8a84099 37b3dce1 9b69c6a3 01c4052f e0c0d630
[13] 0d8b25fa 14e0b6cd 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f 98be2d35 45b52cbb 84037372 fed14ece c8a84099 37b3dce1 9b69c6a3 01c4052f e0c0d630 c8c73dd3
[14] 14e0b6cd 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f 98be2d35 45b52cbb 84037372 fed14ece c8a84099 37b3dce1 9b69c6a3 01c4052f e0c0d630 c8c73dd3 82b80c14
[15] 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f 98be2d35 45b52cbb 84037372 fed14ece c8a84099 37b3dce1 9b69c6a3 01c4052f e0c0d630 c8c73dd3 82b80c14 6e9644af
message 01234567 02468ace 048d159c 091a2b38 12345670 2468ace0 48d159c0 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 45670123 8ace0246 159c048d 00000000
message_size 640
wt 3c813bda 422eb32a c476180b b80abd11 5a4d8f7f 98be2d35 45b52cbb 84037372 fed14ece c8a84099 37b3dce1 9b69c6a3 01c4052f e0c0d630 c8c73dd3 82b80c14 6e9644af
h0 366afef3
h1 a92ada07
h2 c3cdbbfe
h3 f2a4ed2b
h4 5ed9538f
h5 52526b44
h6 7d18ff44
h7 efe3ff9d
a f0bd1ee4 d4875ba3 803f6cfc 4057d854 1848612a 3a4d702c 9a934592 2d03bc73 9ba709d9 00226d78 0a27ae89 28eddff2 30f737c2 867fe474 f2defb68 d0e07c43 7b060657
2.5 ns
2.55 ns
2.6 ns
2.65 ns
2.7 ns
2.75 ns
2.8

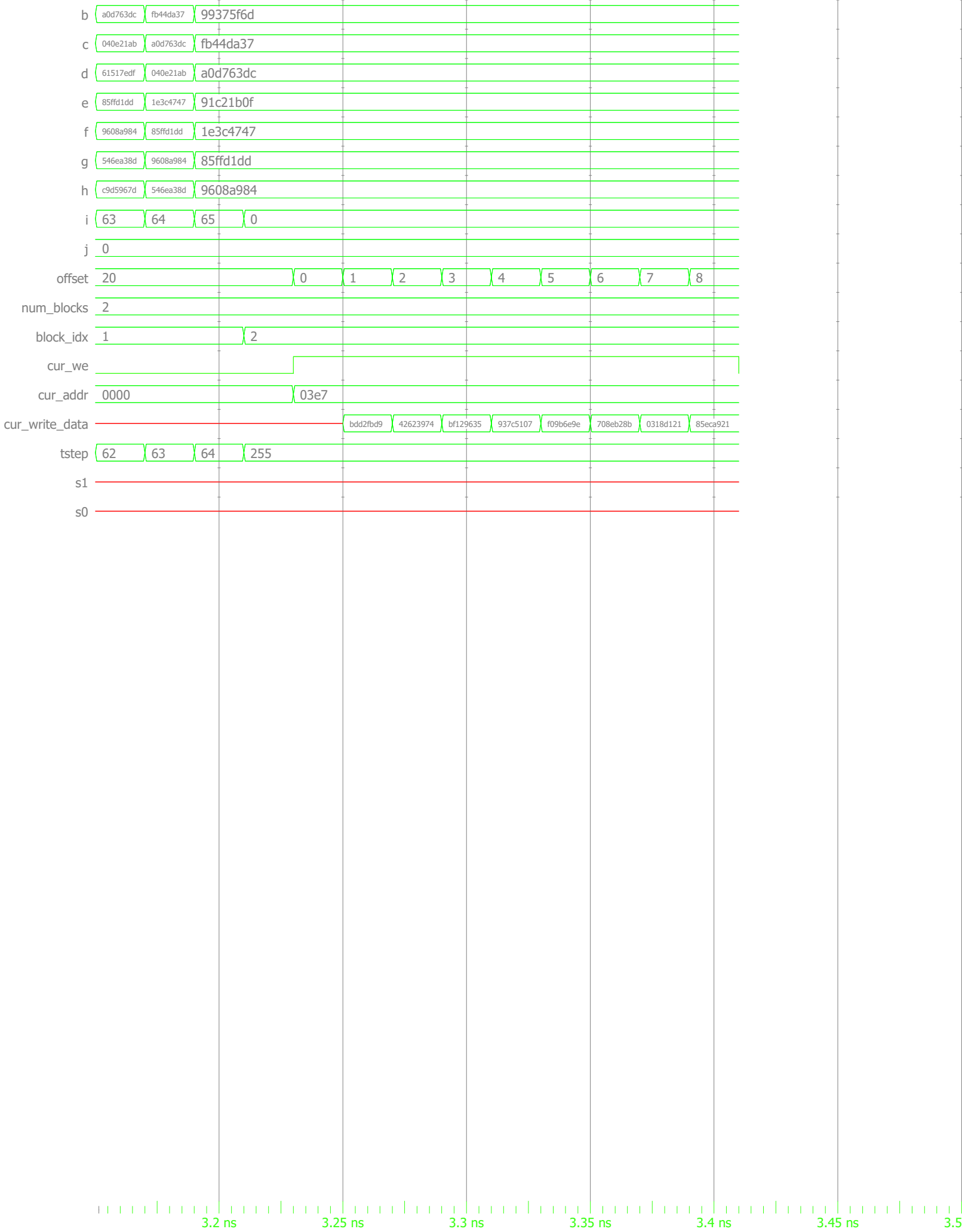

b eff34162 f0bd1ee4 d4875ba3 803f6cfc 4057d854 1848612a 3a4d702c 9a934592 2d03bc73 9ba709d9 00226d78 0a27ae89 28eddff2 30f737c2 867fe474 f2defb68 d0e07c43 —
c 8ee38d73 eff34162 f0bd1ee4 d4875ba3 803f6cfc 4057d854 1848612a 3a4d702c 9a934592 2d03bc73 9ba709d9 00226d78 0a27ae89 28eddff2 30f737c2 867fe474 f2defb68 —
d 2a38baff 8ee38d73 eff34162 f0bd1ee4 d4875ba3 803f6cfc 4057d854 1848612a 3a4d702c 9a934592 2d03bc73 9ba709d9 00226d78 0a27ae89 28eddff2 30f737c2 867fe474 —
e 33a22d15 d059b7ad e519a10d a533920e bb178170 5faef0eb 485303d9 8bebe409 53c3ab1c eaea56b1 b91a4c55 a34ecfd5 01a05972 6ec74fa0 de5c9904 aab0d8ef 4126aa69 —
f ad6eb6fb 33a22d15 d059b7ad e519a10d a533920e bb178170 5faef0eb 485303d9 8bebe409 53c3ab1c eaea56b1 b91a4c55 a34ecfd5 01a05972 6ec74fa0 de5c9904 aab0d8ef —
g a1e07426 ad6eb6fb 33a22d15 d059b7ad e519a10d a533920e bb178170 5faef0eb 485303d9 8bebe409 53c3ab1c eaea56b1 b91a4c55 a34ecfd5 01a05972 6ec74fa0 de5c9904 —
h e1655672 a1e07426 ad6eb6fb 33a22d15 d059b7ad e519a10d a533920e bb178170 5faef0eb 485303d9 8bebe409 53c3ab1c eaea56b1 b91a4c55 a34ecfd5 01a05972 6ec74fa0 —
i 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45
j 0
offset 20
num_blocks 2
block_idx 1
cur_we
cur_addr 0000
cur_write_data
tstep 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44
s1
s0
2.5 ns
2.55 ns
2.6 ns
2.65 ns
2.7 ns
2.75 ns
2.8


NUM_OF_WORDS 20
clk
reset_n
start
message_addr 0000
output_addr 03e8
done
mem_clk
mem_we
mem_addr 0014
mem_write_data
mem_read_data
state COMPUTE
w
[0] -- b80abd11 5a4d8f7f 98be2d35 45b52cbb 84037372 fed14ece c8a84099 37b3dce1 9b69c6a3 01c4052f e0c0d630 c8c73dd3 82b80c14 6e9644af 0a8fed3f e5ef0a90 5b2c868f
[1] -- 5a4d8f7f 98be2d35 45b52cbb 84037372 fed14ece c8a84099 37b3dce1 9b69c6a3 01c4052f e0c0d630 c8c73dd3 82b80c14 6e9644af 0a8fed3f e5ef0a90 5b2c868f 929d5b0a
[2] -- 98be2d35 45b52cbb 84037372 fed14ece c8a84099 37b3dce1 9b69c6a3 01c4052f e0c0d630 c8c73dd3 82b80c14 6e9644af 0a8fed3f e5ef0a90 5b2c868f 929d5b0a 6a19177d
[3] -- 45b52cbb 84037372 fed14ece c8a84099 37b3dce1 9b69c6a3 01c4052f e0c0d630 c8c73dd3 82b80c14 6e9644af 0a8fed3f e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2
[4] -- 84037372 fed14ece c8a84099 37b3dce1 9b69c6a3 01c4052f e0c0d630 c8c73dd3 82b80c14 6e9644af 0a8fed3f e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2 6d798b1b
[5] -- fed14ece c8a84099 37b3dce1 9b69c6a3 01c4052f e0c0d630 c8c73dd3 82b80c14 6e9644af 0a8fed3f e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2 6d798b1b 4cbe6ac3
[6] -- c8a84099 37b3dce1 9b69c6a3 01c4052f e0c0d630 c8c73dd3 82b80c14 6e9644af 0a8fed3f e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2 6d798b1b 4cbe6ac3 d72e2263
[7] -- 37b3dce1 9b69c6a3 01c4052f e0c0d630 c8c73dd3 82b80c14 6e9644af 0a8fed3f e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2 6d798b1b 4cbe6ac3 d72e2263 b0fe5145
[8] -- 9b69c6a3 01c4052f e0c0d630 c8c73dd3 82b80c14 6e9644af 0a8fed3f e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2 6d798b1b 4cbe6ac3 d72e2263 b0fe5145 62c04585
[9] -- 01c4052f e0c0d630 c8c73dd3 82b80c14 6e9644af 0a8fed3f e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2 6d798b1b 4cbe6ac3 d72e2263 b0fe5145 62c04585 96d911fa
[10] -- e0c0d630 c8c73dd3 82b80c14 6e9644af 0a8fed3f e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2 6d798b1b 4cbe6ac3 d72e2263 b0fe5145 62c04585 96d911fa 75abddeb
[11] -- c8c73dd3 82b80c14 6e9644af 0a8fed3f e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2 6d798b1b 4cbe6ac3 d72e2263 b0fe5145 62c04585 96d911fa 75abddeb 1b7fca15
[12] -- 82b80c14 6e9644af 0a8fed3f e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2 6d798b1b 4cbe6ac3 d72e2263 b0fe5145 62c04585 96d911fa 75abddeb 1b7fca15 26f07527
[13] -- 6e9644af 0a8fed3f e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2 6d798b1b 4cbe6ac3 d72e2263 b0fe5145 62c04585 96d911fa 75abddeb 1b7fca15 26f07527 e61e7912
[14] -- 0a8fed3f e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2 6d798b1b 4cbe6ac3 d72e2263 b0fe5145 62c04585 96d911fa 75abddeb 1b7fca15 26f07527 e61e7912 ef9f107b
[15] -- e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2 6d798b1b 4cbe6ac3 d72e2263 b0fe5145 62c04585 96d911fa 75abddeb 1b7fca15 26f07527 e61e7912 ef9f107b 70b2177e
message 01234567 02468ace 048d159c 091a2b38 12345670 2468ace0 48d159c0 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 45670123 8ace0246 159c048d 00000000
message_size 640
wt -- e5ef0a90 5b2c868f 929d5b0a 6a19177d f882bea2 6d798b1b 4cbe6ac3 d72e2263 b0fe5145 62c04585 96d911fa 75abddeb 1b7fca15 26f07527 e61e7912 ef9f107b 70b2177e
h0 366afef3
h1 a92ada07
h2 c3cdbbfe
h3 f2a4ed2b
h4 5ed9538f
h5 52526b44
h6 7d18ff44
h7 efe3ff9d
a -- a688a6fb 8f158887 d6fd699a b2f8492a d3a14ff0 eea16447 68092a27 4715782b 18904e8c 9c83b8c7 1e0199ca 22252571 ee607292 16720854 61517edf 040e21ab a0d763dc
2.85 ns
2.9 ns
2.95 ns
3 ns
3.05 ns
3.1 ns

b	--	a5e58cc7	a688a6fb	8f158887	d6fd699a	b2f8492a	d3a14ff0	eea16447	68092a27	4715782b	18904e8c	9c83b8c7	1e0199ca	22252571	ee607292	16720854	61517edf	040e21ab
c	--	7b060657	a5e58cc7	a688a6fb	8f158887	d6fd699a	b2f8492a	d3a14ff0	eea16447	68092a27	4715782b	18904e8c	9c83b8c7	1e0199ca	22252571	ee607292	16720854	61517edf
d	--	d0e07c43	7b060657	a5e58cc7	a688a6fb	8f158887	d6fd699a	b2f8492a	d3a14ff0	eea16447	68092a27	4715782b	18904e8c	9c83b8c7	1e0199ca	22252571	ee607292	16720854
e	--	8e0c4392	bb8c8a92	b8a2de79	c570a680	de5d7e1e	dc6c955c	f05f12bf	5fdabb8e	38b06a98	0f94cb9c	397a3704	fd0146c8	f1596a5e	d60f6b2b	c9d5967d	546ea38d	9608a984
f	--	453beeaf	8e0c4392	bb8c8a92	b8a2de79	c570a680	de5d7e1e	dc6c955c	f05f12bf	5fdabb8e	38b06a98	0f94cb9c	397a3704	fd0146c8	f1596a5e	d60f6b2b	c9d5967d	546ea38d
g	--	4126aa69	453beeaf	8e0c4392	bb8c8a92	b8a2de79	c570a680	de5d7e1e	dc6c955c	f05f12bf	5fdabb8e	38b06a98	0f94cb9c	397a3704	fd0146c8	f1596a5e	d60f6b2b	c9d5967d
h	--	aab0d8ef	4126aa69	453beeaf	8e0c4392	bb8c8a92	b8a2de79	c570a680	de5d7e1e	dc6c955c	f05f12bf	5fdabb8e	38b06a98	0f94cb9c	397a3704	fd0146c8	f1596a5e	d60f6b2b
i	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
j	0																	
offset	20																	
num_blocks	2																	
block_idx	1																	
cur_we																		
cur_addr	0000																	
cur_write_data																		
tstep	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61
s1																		
s0																		

2.85 ns 2.9 ns 2.95 ns 3 ns 3.05 ns 3.1 ns 3.15


NUM_OF_WORDS 20
clk
reset_n
start
message_addr 0000
output_addr 03e8
done
mem_clk
mem_we
mem_addr 0014 03e7 03e8 03e9 03ea 03eb 03ec 03ed 03ee 03ef
mem_write_data bdd2fbd9 42623974 bf129635 937c5107 f09b6e9e 708eb28b 0318d121 85eca921
mem_read_data
state COMPUTE BLOCK WRITE
w f882bea2 6d798b1b 4cbe6ac3 d72e2263 b0fe5145 62c04585 96d911fa 75abddeb 1b7fca15 26f07527 e61e7912 ef9f107b 70b2177e adc33bf1 03de5e06 759061b2
[0] 929d5b0a 6a19177d f882bea2
[1] 6a19177d f882bea2 6d798b1b
[2] f882bea2 6d798b1b 4cbe6ac3
[3] 6d798b1b 4cbe6ac3 d72e2263
[4] 4cbe6ac3 d72e2263 b0fe5145
[5] d72e2263 b0fe5145 62c04585
[6] b0fe5145 62c04585 96d911fa
[7] 62c04585 96d911fa 75abddeb
[8] 96d911fa 75abddeb 1b7fca15
[9] 75abddeb 1b7fca15 26f07527
[10] 1b7fca15 26f07527 e61e7912
[11] 26f07527 e61e7912 ef9f107b
[12] e61e7912 ef9f107b 70b2177e
[13] ef9f107b 70b2177e adc33bf1
[14] 70b2177e adc33bf1 03de5e06
[15] adc33bf1 03de5e06 759061b2
message 01234567 02468ace 048d159c 091a2b38 12345670 2468ace0 48d159c0 91a2b380 23456701 468ace02 8d159c04 1a2b3809 34567012 68ace024 d159c048 a2b38091 45670123 8ace0246 159c048d 00000000
message_size 640
wt adc33bf1 03de5e06 759061b2
h0 366afef3 bdd2fbd9
h1 a92ada07 42623974
h2 c3cdbbfe bf129635
h3 f2a4ed2b 937c5107
h4 5ed9538f f09b6e9e
h5 52526b44 708eb28b
h6 7d18ff44 0318d121
h7 efe3ff9d 85eca921
a fb44da37 99375f6d 8767fce6
3.2 ns
3.25 ns
3.3 ns
3.35 ns
3.4 ns
3.45 ns
3.5


b
a0d763dc
fb44da37
99375f6d
c
040e21ab
a0d763dc
fb44da37
d
61517edf
040e21ab
a0d763dc
e
85ffd1dd
1e3c4747
91c21b0f
f
9608a984
85ffd1dd
1e3c4747
g
546ea38d
9608a984
85ffd1dd
h
c9d5967d
546ea38d
9608a984
i
63
64
65
0
j
0
offset
20
0
1
2
3
4
5
6
7
8
num_blocks
2
block_idx
1
2
cur_we
cur_addr
0000
03e7
cur_write_data
bdd2fbd9
42623974
bf129635
937c5107
f09b6e9e
708eb28b
0318d121
85eca921
tstep
62
63
64
255
s1
s0
3.2 ns
3.25 ns
3.3 ns
3.35 ns
3.4 ns
3.45 ns
3.5