

1. 0x018, 0x5a0, 0x158, 0x018, 0x010, 0x5f8, 0x2c0, 0x5f0, 0x070, 0x5f0, 0x5a8, 0x160

a. hit rate = 0% (-1)

Reference	Tag(-1)	Index(-1)	Offset(-1)	Hit/Miss	Type of miss(-1)
0x018	000000 (0x0)	011	000	MISS	Compulsory
0x5a0	010110 (0x16)	100	000	MISS	Compulsory
0x158	000101 (0x5)	011	000	MISS	Compulsory
0x018	000000 (0x0)	011	000	MISS	Conflict
0x010	000000 (0x0)	010	000	MISS	Compulsory
0x5f8	010111 (0x17)	111	000	MISS	Compulsory
0x2c0	001011 (0xb)	000	000	MISS	Compulsory
0x5f0	010111 (0x17)	110	000	MISS	Compulsory
0x070	000001 (0x1)	110	000	MISS	Compulsory
0x5f0	010111 (0x17)	110	000	MISS	Conflict
0x5a8	010110 (0x16)	101	000	MISS	Compulsory
0x160	000101 (0x5)	100	000	MISS	Compulsory

b. hit rate = 25% (-1)

Reference	Tag(-1)	Index(-1)	Offset(-1)	Hit/Miss	Type of miss(-1)
0x018	000000 (0x0)	01	1000	MISS	Compulsory
0x5a0	010110 (0x16)	10	0000	MISS	Compulsory
0x158	000101 (0x5)	01	1000	MISS	Compulsory
0x018	000000 (0x0)	01	1000	MISS	Conflict
0x010	000000 (0x0)	01	0000	HIT	
0x5f8	010111 (0x17)	11	1000	MISS	Compulsory
0x2c0	001011 (0xb)	00	0000	MISS	Compulsory
0x5f0	010111 (0x17)	11	0000	HIT	
0x070	000001 (0x1)	11	0000	MISS	Compulsory

0x5f0	010111 (0x17)	11	0000	MISS	Capacity
0x5a8	010110 (0x16)	10	1000	HIT	
0x160	000101 (0x5)	10	0000	MISS	Compulsory

c. hit rate = 16.67% or 8.33% (-1)

Reference	Tag(-1)	Index(-1)	Offset(-1)	Hit/Miss	Type of miss(-1)
0x018	0000000 (0x0)	11	000	MISS	Compulsory
0x5a0	0101101 (0x2d)	00	000	MISS	Compulsory
0x158	0001010 (0xa)	11	000	MISS	Compulsory
0x018	0000000 (0x0)	11	000	HIT	
0x010	0000000 (0x0)	10	000	MISS	Compulsory
0x5f8	0101111 (0x2f)	11	000	MISS	Compulsory
0x2c0	0010110 (0x16)	00	000	MISS	Compulsory
0x5f0	0101111 (0x2f)	10	000	MISS	Compulsory
0x070	0000011 (0x3)	10	000	MISS	Compulsory
0x5f0	0101111 (0x2f)	10	000	HIT or MISS	(Conflict)
0x5a8	0101101 (0x2d)	01	000	MISS	Compulsory
0x160	0001011 (0xb)	00	000	MISS	Compulsory

2. 0x123d, 0x08b3, 0x365c, 0x8716, 0xbee6, 0x3140, 0xc040

Reference	Tag	Hit/Miss in TLB(-1)	Page Fault(-1)	Physical Address (-1)
0x123d	000 = 0x0	MISS	NO	0010 0011 1101 (0x23d)
0x08b3	000 = 0x0	HIT	NO	1000 1011 0011 (0x8b3)
0x365c	001 = 0x1	MISS	YES	0110 0101 1100 (0x65c)
0x8716	100 = 0x4	MISS	NO	0111 0001 0110 (0x716)
0xbee6	101 = 0x5	MISS	NO	1110 1110 0110 (0xee6)
0x3140	001 = 0x1	HIT	NO	0001 0100 0000 (0x140)
0xc040	110 = 0x6	MISS	YES	0000 0100 0000 (0x040)

TLB update:(-3)

0x123d

Valid	Tag	Physical Page No	Reference	replacement pointer
1	0x5	11	0	v
1	0x7	4	1	
1	0x3	6	0	
1	0x0	5	1	

0x08b3

Valid	Tag	Physical Page No	Reference	replacement pointer
1	0x5	11	0	v
1	0x7	4	1	
1	0x3	6	0	
1	0x0	5	1	

0x365c

Valid	Tag	Physical Page No	Reference	replacement pointer
1	0x1	0(自訂)	1	
1	0x7	4	1	v
1	0x3	6	0	
1	0x0	5	1	

0x8716

Valid	Tag	Physical Page No	Reference	replacement pointer
1	0x1	0(自訂)	1	
1	0x7	4	0	
1	0x4	9	1	
1	0x0	5	1	v

0xbee6

Valid	Tag	Physical Page No	Reference	replacement pointer
1	0x1	0(自訂)	0	

1	0x5	11	1	
1	0x4	9	1	v
1	0x0	5	0	

0x3140

Valid	Tag	Physical Page No	Reference	replacement pointer
1	0x1	0(自訂)	1	
1	0x5	11	1	
1	0x4	9	1	v
1	0x0	5	0	

0xc040

Valid	Tag	Physical Page No	Reference	replacement pointer
1	0x1	0(自訂)	1	v
1	0x5	11	1	
1	0x4	9	0	
1	0x6	1(自訂)	1	