1	ilatio n Hiera rchy Node	I - I	ALMs used in final place ment	ate of ALMs recov erabl e by dense packi ng	Estim ate of ALMs unava ilable	for mem ory	inatio nal ALUT s	ated Logic Regis ters	Regis ters	Mem ory Bits	S	Block s			Hierar chy Name	1	Librar y Name
1	DE1_ SoC	1.4) 2.2 (2.	2.2) 3.8 (3.	8) 1.7 (1.	0.0 (0.	0)	1 (1)	10 (1 0)		0	0			0	DE1_S oC	oC LFSR_	
	10bit: comp uter_ playe r														oC LFSR_ 10bit: comp uter_p layer		
	 clock _divid er:cdi v	8.0 (8. 0)						16 (1 6)	0 (0)	0	0	0	0		 DE1_S oC clock_ divide r:cdiv	clock_ divide r	work
	comp arator _10bi t:com puter _play er_in put	3.1 (3. 1)				0.0 (0. 0)	7 (7)	0 (0)	0 (0)	0	0	0	0		DE1_S	comp arator _10bit	work
4	 input _blink :blink _win1	0.2 (0. 2)				0.0 (0. 0)	0 (0)	1 (1)	0 (0)	0	0	0	0			input_ blink	work
5	 input _blink :blink _win2					0.0 (O. O)	0 (0)	1 (1)	0 (0)	0	0	0	0		 DE1_S oC input_ blink:	input_ blink	work

		d	ALMs used in final place	ate of ALMs	Estim ate of ALMs unava ilable	for mem	inatio nal	ated Logic	Regis			DSP Block s		l Pins	Hierar chy Name		Librar y Name
6	 input _blink :inblin kL		0.3 (0. 3)		0.0 (0. 0)	0.0 (0. 0)	0 (0)	1 (1)	0 (0)	0	0	0	0	0	blink_ win2 DE1_S oC input_ blink:i nblink	input_ blink	work
7	input _blink :inblin kR	3)	5)	3)	Í	0)									DE1_S oC input_ blink:i nblink R		
8	input _buff er:inb uff				0.0 (0. 0)	0.0 (0. 0)	0 (0)	4 (0)	0 (0)	0	0	0	0		 DE1_S oC input_ buffer: inbuff	input_ buffer	work
1	myDF F:dff1				0.0 (0. 0)	0.0 (0. 0)	0 (0)	1 (1)	0 (0)	0					DE1_S oC input_ buffer: inbuff myDF F:dff1		
2	myDF F:dff2		0.3 (0. 3)		0.0 (0. 0)	0.0 (0. 0)	0 (0)	1 (1)	0 (0)	0	0	0	0		 DE1_S oC input_ buffer: inbuff myDF		work

		d [=A-	ALMs used in final	ate of ALMs recov erabl	Estim ate of ALMs unava ilable	for mem	inatio nal	ated Logic	Regis			DSP Block s		l Pins	Hierar chy Name	1	Librar Y Name
3	myDF F:dff3 	3)	3)	0)	Í	0)								0	DE1_S oC input_ buffer: inbuff myDF F:dff3		
4	myDF F:dff4				0.0 (O. O)	0.0 (0. 0)	O (O)	1 (1)	0 (0)	0	0	0	0		 DE1_S oC input_ buffer: inbuff myDF F:dff4		work
9	 myDF F:dff1 				0.0 (0. 0)	0.0 (0. 0)	0 (0)	1 (1)	0 (0)	0	0	0	0		 DE1_S oC myDF F:dff1	myDF F	work
10	 myDF F:dff2 				0.0 (0. 0)	0.0 (0. 0)	0 (0)	1 (1)	0 (0)	0	0	0	0	0	 DE1_S oC myDF F:dff2	myDF F	work
11	 play_l ight:le d1			I	0.0 (O. O)	0.0 (0. 0)	3 (3)	2 (2)	0 (0)	0	0	0	0		 DE1_S oC play_li ght:le d1		work
12	 play_l ight:le d2			1	0.0 (0. 0)	0.0 (0. 0)	3 (3)	3 (3)	0 (0)	0	0	0	0		 DE1_S oC play_li		work

	- 1	d [=A-	ALMs used in final	recov erabl	Estim ate of ALMs unava ilable	for mem	inatio nal	ated Logic	Regis			DSP Block s		l Pins	Hierar chy Name		Librar y Name
13	 play_l ight:le d3	3)		0.1 (0. 1)		0.0 (0. 0)	3 (3)	3 (3)	0 (0)	0	0	o	0	0	ght:le d2 DE1_S oC play_li ght:le d3		work
	play_l ight:le d4	3)	8)	,	0)	0)									DE1_S oC play_li ght:le d4		
	play_l ight:le d5	3)	3)	Í	0)	0)									DE1_S oC play_li ght:le d5		
	play_l ight:le d6	2)	2)		0)	0)			. ,						DE1_S oC play_li ght:le d6		
	play_l ight:le d7	3)	8)		0)	0)			.,						DE1_S oC play_li ght:le d7		
	play_l ight:le d8	8)	2)		0)	0)			. ,						DE1_S oC play_li ght:le d8		
19	1	1.2 (1.	1.2 (1.	0.0 (0.	0.0 (0.	υ.0 (O.	2 (2)	2 (2)	0 (0)	0	0	0	0	0		play_li	work

	ilatio n Hiera rchy Node	d [=A- B+C]	ALMs used in final place ment	ate of ALMs recov erabl e by dense packi ng	Estim ate of ALMs unava ilable	for mem ory	inatio nal	ated Logic	Regis			DSP Block s	l	l Pins	Hierar chy Name		Librar y Name
	play_l ight:le d9	2)	2)	0)	0)	0)									DE1_S oC play_li ght:le d9		
20	 play_l ight:p 1win		l	l	0.0 (0. 0)	0.0 (0. 0)	2 (2)	2 (2)	0 (0)	0	0	0	0		 DE1_S oC play_li ght:p1 win		work
21	 play_l ight:p 2win				0.0 (0. 0)	0.0 (0. 0)	2 (2)	2 (2)	0 (0)	0	0	0	0		 DE1_S oC play_li ght:p2 win		work
	 score _coun ter:p1 count		l		0.0 (0. 0)		10 (1 0)	3 (3)	0 (0)	0	0	0	0		DE1_S	score_ count er	work
23	 score _coun ter:p2 count 		1	I	0.0 (0. 0)		11 (1 1)	3 (3)	0 (0)	0	0	0	0	0	 DE1_S	er	work