

Results

The first number of the command indicate the latency constraint that multiply the ASAP time in order to obtain the overall latency constraint of the DFG.

The second number indicate the depth of the update of the parent and child in the FDS. -1 indicate the max depth possible

As underlined during the presentation the run time of the simultaneous scheduling, binding and reg allocation is much more higher that the sequential implementation.

./main file res/ 1.5 -1

DFG		FDS + Binding/Allocation						Simultaneous FDS/Binding/Allocation					
Name	Nodes	Time [s]	Area	FU	Register	Mux	DeMux	Time [s]	Area	FU	Register	Mux	DeMux
arf	28	0.0145	47568	6	16	528	208	0.111528	43404	6	16	33	9
ewf	34	0.0841	26400	4	8	400	176	0.204586	23208	4	8	32	12
feedback point	53	0.0721	66016	12	42	1040	464	0.69402	70430	16	42	54	23
hal	11	0.0026	25648	5	10	176	80	0.0144445	24196	5	10	11	3
horner bezier surf	18	0.0160	26704	5	10	320	112	0.0718084	24256	5	10	17	7
interpolate aux	108	0.5992	136956	18	96	2320	1088	5.14074	131140	23	96	145	61
invert matrix general	333	3.0441	331916	56	154	8192	4048	258.086	269690	47	154	455	200
matmul	109	0.0246	128880	20	50	2464	1152	3.12063	118876	21	51	139	55
motion vectors	32	0.0200	58992	9	28	576	240	0.216462	79702	15	28	30	15
smooth color z triangle	197	2.2321	190576	20	130	4832	2272	30.688	143086	20	130	288	101
write bmp header	106	0.5957	87344	16	76	2480	1184	2.27517	67838	20	76	150	73

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DFG		FDS + Binding/Allocation						Simultaneous FDS/Binding/Allocation					
Name	Nodes	Time [s]	Area	FU	Register	Mux	DeMux	Time [s]	Area	FU	Register	Mux	DeMux
arf	28	0.0012	63840	8	16	368	224	0.0437855	69006	9	16	22	3
ewf	34	0.0008	46056	7	9	480	224	0.0117725	42108	7	9	33	13
feedback point	53	0.0160	102272	19	42	896	416	0.26524	99234	22	42	53	18
hal	11	0.0005	33928	6	10	144	64	0.0027001	41284	7	10	4	2
horner bezier surf	18	0.0018	34984	6	10	272	112	0.013677	32824	6	10	17	7
interpolate aux	108	0.0283	219152	40	96	2064	1072	5.06548	201128	40	96	102	30
invert matrix general	333	0.5783	484940	93	154	7344	3600	378.548	439460	94	154	396	128
matmul	109	0.0234	199640	31	50	2112	1088	1.41968	174254	31	50	118	51
motion vectors	32	0.0019	108800	18	28	384	176	0.0811636	139814	22	28	15	2
smooth color z triangle	197	0.0834	406432	72	130	3664	1824	47.815	375148	72	130	204	70
write bmp header	106	0.2850	102328	25	76	2416	1168	1.62645	74094	31	76	133	58

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DFG		FDS + Binding/Allocation						Simultaneous FDS/Binding/Allocation					
Name	Nodes	Time [s]	Area	FU	Register	Mux	DeMux	Time [s]	Area	FU	Register	Mux	DeMux
arf	28	0.0687	47280	6	16	480	208	0.671973	43404	6	16	32	10
ewf	34	0.2043	17544	3	7	416	176	1.08504	33156	6	8	34	12
feedback point	53	0.3373	56752	9	42	1008	544	2.55101	50362	12	42	69	26
hal	11	0.0128	17080	4	10	160	96	0.0493829	24190	5	10	10	3
horner bezier surf	18	0.0689	18136	4	10	304	128	0.279143	16120	4	11	23	9
interpolate aux	108	1.4881	100604	11	96	2416	1168	17.5141	82262	12	97	165	70
invert matrix general	333	12.6587	310328	53	154	7840	3728						
matmul	109	0.8614	98096	11	50	2416	1136	10.5066	60022	8	52	151	62
motion vectors	32	0.0704	36496	5	28	656	256	0.551875	42676	8	28	42	16
smooth color z triangle	197	9.2340	172288	18	130	4784	2128	141.511	117170	16	132	298	105
write bmp header	106	2.0745	82936	11	76	2528	1168	9.23371	62972	16	76	167	71