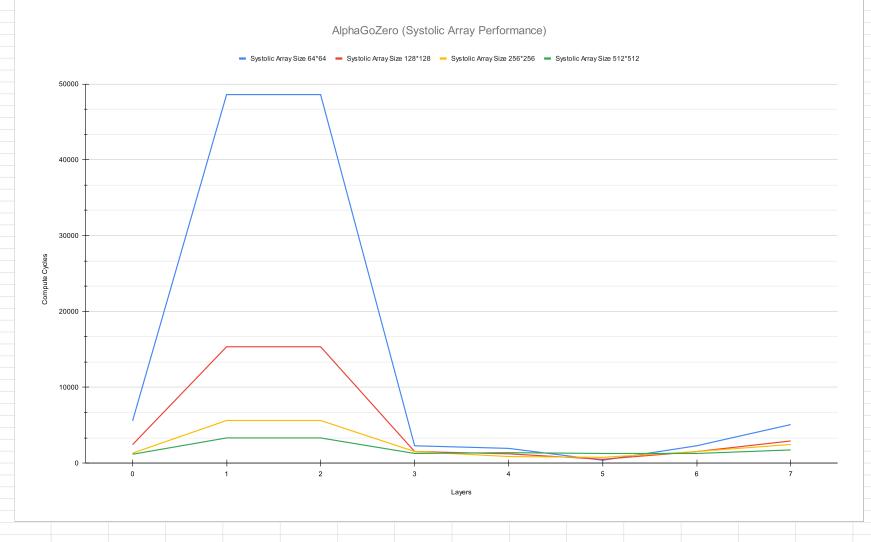
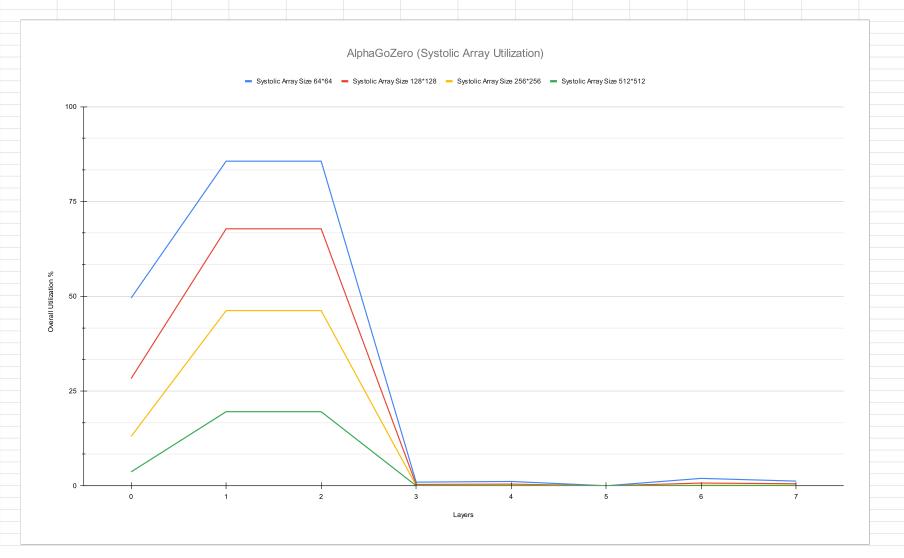
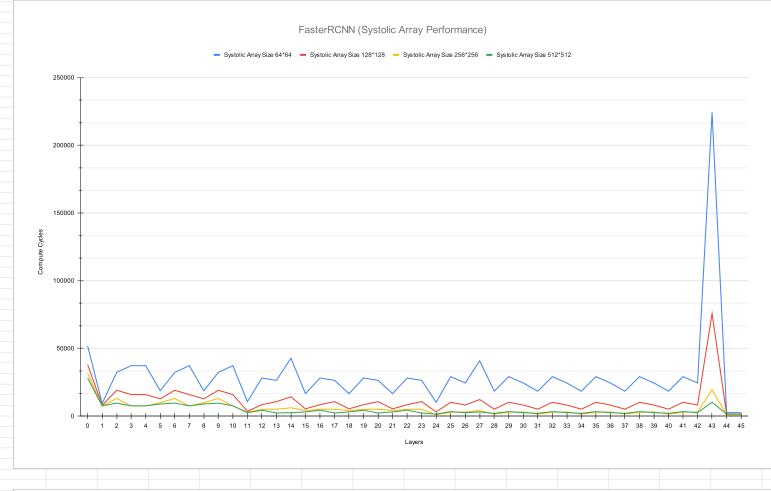
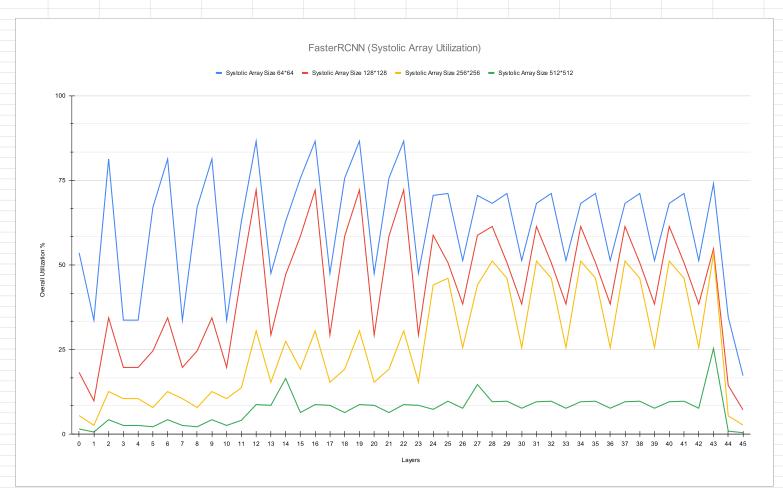
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(5579	49.54	C	2441	28.3		1325	13.04		0 1174	3.68	
	1 48599	85.63	1	15347	67.79		5627	46.22		1 3325	19.56	
:	2 48599	85.63	2	15347	67.79		5627	46.22		2 3325	19.56	
	3 229	0.98	3	1529	0.37	;	1531	0.09		3 1277	0.03	
,	4 1947	7 1.16	4	1229	0.46		870	0.16		4 1382	0.03	
ſ	5 38	0.02	5	509	0		765	0		5 1277	0	
	6 229	1.97	6	1529	0.74		1531	0.18		6 1277	0.06	
	7 508	1.25	7	2927	0.55		7 2463	0.16		7 1743	0.06	
PE DIM - 64	SRAM KB - 409	16	PE DIM - 128	SRAM KB - 4096		PE DIM - 256	SRAM KB - 4096		PE DIM - 512	SRAM KB - 4096		
_ayer	Compute_Cycles Overall_Utilization		Layer	Compute_Cycles Overall_Utilization		Layer	Compute_Cycles Ov	ompute_Cycles Overall_Utilization		Compute_Cycles Overall_Utilization		
,	0 5579	49.54	C	2441	28.3		1325	13.04		0 1174	3.68	
	1 48599	85.63	1	15347	67.79		5627	46.22		1 3325	19.56	
:	2 48599	85.63	2	15347	67.79		5627	46.22		2 3325	19.56	
:	3 229	0.98	3	1529	0.37	:	1531	0.09		3 1277	0.03	
-	4 194	7 1.16	4	1229	0.46		1 870	0.16		4 1382	0.03	
?	5 38	0.02	5	509	0		765	0		5 1277	0	
- 1	6 229	1.97	6	1529	0.74		1531	0.18		6 1277	0.06	
-	7 508	7 1.25	7	2927	0.55		7 2463	0.16		7 1743	0.06	
PE DIM - 64	SRAM KB - 102	14	PE DIM - 128	SRAM KB - 1024		PE DIM - 256	SRAM KB - 1024		PE DIM - 512	SRAM KB - 1024		
Layer	Compute_Cycle	es Overall_Utilization	Layer	Compute_Cycles Overall_Utilization		Layer	Compute_Cycles Overall_Utilization		Layer	Compute_Cycles Overall_Utilization		
1	5579	49.54	C	2441	28.3		1325	13.04		0 1174	3.68	
	1 48599	85.63	1	15347	67.79		5627	46.22		1 3325	19.56	
	2 48599	85.63	2	15347	67.79	:	5627	46.22		2 3325	19.56	
	3 229	0.98	3	1529	0.37	:	1531	0.09		3 1277	0.03	
,	4 1947	1.16	4	1229	0.46		870	0.16		4 1382	0.03	
I	5 38	0.02	5	509	0		765	0		5 1277	0	
(6 229	1.97	6	1529	0.74		1531	0.18		6 1277	0.06	
	7 508	7 1.25	7	2927	0.55		7 2463	0.16		7 1743	0.06	



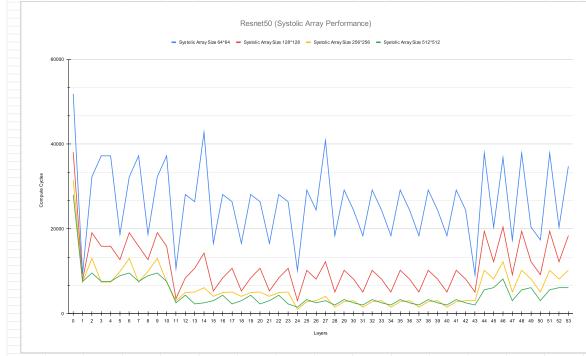


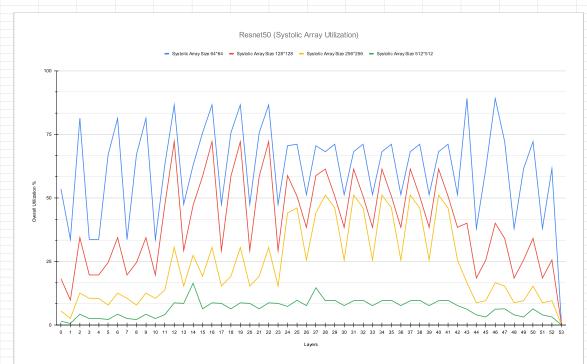
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1 8308 3388 11 7848 988 1 7448 1250 1 7801 2 3 32291 3328 3388 3 18589 1172 3 3 7481 10.51 3 7701 3 37239 3338 338 15898 1172 3 3 7481 10.51 4 7701 4 3 37239 3338 348 127 2 10.000 338 10.00 4 10.000 33.00 10.0000 10.0000 10.00	Layer	Compute_Cycles Overall_Utilization		Layer	Compute_Cycles Overall_Utilization		Layer	Compute_Cyc	les Overall_Utilization	n Layer	Compute_Cycles Overall_Utilization			
2 32291 8 127 2 10060 3437 2 2 13031 12 20 2 5987 3 3720 33.80 3 15890 1972 2 3 7481 10.51 3 7701 4 3720 33.80 4 15890 1972 4 6 7481 10.51 4 7701 5 18717 6 702 5 12740 2 4 6 6 9857 7 87 5 8845 6 32291 8 127 6 19060 34.37 6 13031 12.50 6 8957 7 3 3720 33.80 7 15890 34.37 6 13031 12.50 6 8957 7 3 3720 33.80 7 15890 34.37 6 13031 12.50 6 8957 7 3 3720 33.80 7 15890 34.37 9 13031 12.50 9 9 9857 1 18717 6 702 8 12740 2.4 6 8 9957 7 87 8 8 9855 1 18717 6 702 8 12740 2.4 6 8 9957 7 87 8 8 9855 1 10 3720 33.80 10 10 15890 1972 10 7481 10.51 10 7001 1 10 3720 33.80 10 10 15890 1972 10 7481 10.51 10 7601 1 11 10066 6 9.91 11 3560 1972 10 7481 10.51 10 7701 1 2 28115 8 556 12 2 8435 72.13 12 4886 30.51 12 4487 1 3 26415 14740 13 10685 72.32 13 12 2 4886 30.51 12 2 4357 1 16 28115 8 556 16 8 535 15 5361 15 6381 15		0 51869 53.58		(0 38094 18.24		0	0 315	35 5.51		0 28055	1.55		
3 3729 33.60 4 15890 19.72 3 7.481 10.51 3 7.7601 4 7.701 4 3729 33.60 4 15890 19.72 4 7.481 10.51 4 7.701 5 1871 6 7.02 5 12.749 2.4 6 5 8957 7.87 5 8955 6 9857 7 37 6 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9857 7 372 8 18.705 6 9957 7 372 8 18.705		1	9309	33.69		7949	9.86		1 74	61 2.63		1 7601	0.64	
4 372/30 33.00 4 15800 1972 4 7461 10.51 4 7701 5 18717 6 19080 34.37 6 19321 10.51 7 701 7 7411 10.51 7 701 8 1972 7 7461 10.51 7 701 8 18717 6 19.33 9 10.02 8 12740 24.6 8 88957 7.87 8 8.845 9 10.03 32.73 9 19.00 34.37 9 13011 12.50 9 9.9677 10 37.23 3.98 10 15.890 19.72 10 7.401 10.55 10 7.871 10 9.9877 10 37.239 3.980 10 15.890 19.72 10 7.741 10.55 10 7.871 10 7.741 10.55 10 7.741 10 7.741 10.55 10 9.9877 10 7.741 </td <td></td> <td>2</td> <td>32291</td> <td>81.27</td> <td>2</td> <td>19089</td> <td>34.37</td> <td></td> <td>2 130</td> <td>31 12.59</td> <td></td> <td>2 9587</td> <td>4.28</td>		2	32291	81.27	2	19089	34.37		2 130	31 12.59		2 9587	4.28	
9 1877		3	37239	33.69		15899	19.72		3 74	61 10.51		3 7601	2.58	
9 32281 81.27 6 19089 34.37 6 13039 12.50 6 9587 7 37239 33.69 7 8127 9 19089 34.37 9 1017 12.50 9 9 5877 10 37239 33.69 10 15.50 9 1472 10 17461 10.51 10 17601 11 10695 6 6 29 1 11 3560 19 72 11 11 2003 13.73 11 2.50 12 28115 85.50 12 8435 72.13 12 4095 30.51 12 4447 13 28415 82.50 9 14 14.279 47.12 14 6127 27.6 13 13.30 13.30 13.20 14 4.2728 6.9 14 14.279 47.12 14 6127 27.6 13 15.30 13		4	37239	33.69	4	1 15899	19.72		4 74	61 10.51		4 7601	2.58	
7 37230 33.60 7 15890 19.72 7 7461 10.51 7 7601 8 18717 67.02 8 127 9 19080 34.37 9 13031 12.96 9 9.657 10 37230 33.60 10 15890 19.72 10 7461 10.51 10 7601 11 10895 62.91 11 3660 47.13 11 3053 13.73 11 2555 12 20115 80.56 12 8435 72.13 12 4895 30.51 12 4447 13 26415 47.49 13 10895 29.32 13 51.38 15.38 13 2289 14 47283 62.9 14 47270 47.12 14 40127 27.45 14 2555 15 16887 75.63 16 8435 72.13 16 4895 30.51 16 47.47 17 26416 47.49 17 10.905 29.32 17 19.18 15 3067 18 16887 75.63 16 8435 72.13 16 4985 30.51 16 4947 19 22116 80.56 16 8435 72.13 16 4985 30.51 16 4947 19 2216 80.56 19 8435 72.13 16 4985 30.51 16 4947 19 2216 80.56 19 8435 72.13 19 4985 30.51 19 4945 20 26415 47.49 20 10895 29.32 20 5103 15.36 20 2289 21 16887 75.63 21 8435 72.13 19 4985 30.51 19 4945 22 28115 80.56 22 8435 72.13 22 4985 30.51 22 4347 23 26416 47.49 20 10895 29.32 20 5103 15.36 20 2289 24 10207 70.54 22 23 24 24 24 25 24 24 25 25 26116 47.49 20 10895 29.32 20 5103 15.36 20 2289 24 10207 70.54 24 3063 85.77 24 4067 19.18 21 23 24 24 25 24 25 25 25 25		5	18717	67.02		12749	24.6		5 99	57 7.87		5 8945	2.19	
B		6	32291	81.27	(19089	34.37		6 130	31 12.59		6 9587	4.28	
9 32291 8127 9 19089 1972 10 7461 10.51 10 7001 11 10895 62.91 11 3569 1972 10 7461 10.51 10 7001 11 1 10895 62.91 11 3569 47.13 11 3063 13.73 11 2565 12 28115 86.56 11 2 84.55 72.13 11 3063 13.73 11 2565 13 28415 47.49 113 10895 29.32 13 5103 15.36 13 2299 14 42783 62.9 14 14 14279 47.12 14 6127 27.45 14 2555 15 16567 75.63 15 5361 85.5 15 4007 15.18 15 3067 16 28115 86.56 16 84.55 72.13 16 84.56 30.51 16 44.97 17 26415 47.49 17 10895 29.32 17 5103 15.36 17 22.99 18 16567 75.63 18 551 85.5 18 4007 15.18 18 15 3067 19 28115 85.56 19 84.57 27.13 19 4865 30.51 18 18 3067 19 28115 85.56 19 84.57 27.13 19 4865 30.51 11 38 3067 20 26415 47.49 20 10.695 29.32 20 5103 15.36 20 22.99 21 16667 75.63 21 18 5561 85.5 18 4007 15.18 18 18 3067 22 28115 85.56 22 84.35 72.13 19 4865 30.51 19 4347 23 2415 47.49 20 10.695 29.32 20 5103 15.36 20 22.99 24 10207 75.64 22 84.35 72.13 19 4865 30.51 13 18 21 3067 23 26415 47.49 20 10.695 29.32 20 5103 15.36 20 22.99 24 10207 75.64 24 3063 85.7 21.3 22 4465 30.51 22 4437 23 26415 47.49 20 310695 29.32 20 5103 15.36 20 22.99 24 10207 75.64 24 3063 85.7 21.3 22 4465 30.51 22 4437 23 26415 47.49 23 10.695 29.32 20 5103 15.36 20 22.99 24 10207 75.64 24 3063 85.7 21.3 22 4665 30.51 22 4437 23 26415 47.49 23 10.695 29.32 20 5103 15.36 23 22.99 24 10207 75.64 24 3063 85.7 21.3 22 4665 30.51 22 4437 25 29159 71.11 25 10231 50.67 22 211 46.07 24 15.33 25 29159 71.11 22 10.25 10.23 50.67 22 21.3 40.07 24 15.3 30.5 22.9 22.9 22.9 22.9 22.9 22.9 22.9 22		7	37239	33.69	1	7 15899	19.72		7 74	61 10.51		7 7601	2.58	
10 3729 33.89 10 15899 4713 11 10.95 17.76 10.51 10.776 11 11 10.95 62.91 11 3.959 4713 11 2.955 12 2815 86.56 12 84.95 72.13 12 4.985 30.51 12 4.447 13 22415 4749 13 10.855 72.13 14 61.77 2745 14 61.77 2745 14 62.77 2745 14 62.77 2745 14 62.77 2745 14 62.77 2745 14 61.77 2745 15 61.55 15 61.55 15 15 15 15 15 15 15		8	18717	67.02	8	3 12749	24.6		8 99	57 7.87		8 8945	2.19	
11		9	32291	81.27	9	19089	34.37		9 130	31 12.59		9 9587	4.28	
12	1	0	37239	33.69	10	15899	19.72	1	0 74	61 10.51		10 7601	2.58	
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17	1	5	16587		15			1					6.39	
18 16587 75.83 18 5361 58.5 18 4067 19.18 18 3067 19 28115 86.56 19 8435 72.13 19 4865 30.51 19 4347 20 26415 47.49 20 10695 29.32 20 5103 15.36 20 2289 21 16687 75.63 21 5361 68.5 21 4087 19.18 21 3067 22 28115 86.56 22 28435 72.13 22 4985 30.51 22 4347 23 22415 47.49 23 10095 29.32 23 5103 15.36 23 2299 24 10207 70.54 24 3063 58.77 24 1021 44.07 24 1533 25 29159 71.11 25 10231 50.67 25 2913 46.07 25 3332 26 24447 51.31 26 8159 38.44 26	1	6	28115	86.56	16	8435	72.13	1	6 49	85 30.51		16 4347	8.75	
19	1	7	26415	47.49	17	7 10695	29.32	1	7 51	03 15.36		17 2299	8.53	
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25 29159 71.11 25 10231 50.67 25 2813 46.07 25 3325 26 24447 51.31 26 8159 38.44 26 3063 25.6 26 2555 27 40831 70.53 27 12255 58.75 27 4087 44.04 27 3067 28 18399 68.18 28 5111 61.36 28 1633 51.14 28 2045 29 29159 71.11 29 10231 50.67 29 2813 46.07 29 3325 30 24447 51.31 30 8159 38.44 30 3063 25.6 30 2555 31 18399 68.18 31 5111 61.36 31 1533 51.14 31 2045 32 29159 71.11 32 10231 50.67 32 2813 46.07 32 33 <td>2</td> <td>3</td> <td>26415</td> <td>47.49</td> <td>23</td> <td>3 10695</td> <td>29.32</td> <td>2</td> <td>3 51</td> <td>03 15.36</td> <td></td> <td>23 2299</td> <td>8.53</td>	2	3	26415	47.49	23	3 10695	29.32	2	3 51	03 15.36		23 2299	8.53	
26 24447 51.31 26 8159 38.44 26 3063 25.6 26 2555 27 40831 70.53 27 12255 58.75 27 4087 44.04 27 3067 28 18399 68.18 28 5111 61.36 28 1533 51.14 28 2045 29 29159 71.11 29 10231 50.67 29 2813 46.07 29 3325 30 24447 51.31 30 8159 38.44 30 3063 25.6 30 2555 31 18399 68.18 31 5111 61.36 31 1533 51.14 31 2045 32 29159 71.11 33 8159 38.44 33 3063 25.6 30 2555 33 24447 51.31 33 8159 38.44 33 3063 25.6 33 2555 34 18399 68.18 34 5111 61.36 34	2	4	10207	70.54	24	3063	58.77	2	4 10	21 44.07		24 1533	7.34	
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28 18399 68.18 28 5111 61.36 28 1533 51.14 28 2045 29 29159 71.11 29 10231 50.67 29 2813 46.07 29 3325 30 24447 51.31 30 8159 38.44 30 3063 25.6 30 2555 31 18399 68.18 31 5111 61.36 31 1533 51.14 31 2045 32 29159 71.11 32 10231 50.67 32 2813 46.07 32 3325 33 24447 51.31 33 8159 38.44 33 3063 25.6 33 2555 34 18399 68.18 34 5111 61.36 34 1533 51.14 34 2045 35 29159 71.11 35 10231 50.67 35 2813 46.07 35 3325 36 24447 51.31 36 8159 38.44 36 <	2	6	24447	51.31	26	8159	38.44	2	6 30	63 25.6		26 2555	7.67	
29 29159 71.11 29 10231 50.67 29 2813 46.07 29 3325 30 24447 51.31 30 8159 38.44 30 3063 25.6 30 2555 31 18399 68.18 31 5111 61.36 31 1533 51.14 31 2045 32 29159 71.11 32 10231 50.67 32 2813 46.07 32 3325 33 24447 51.31 33 8159 38.44 33 3063 25.6 33 2555 34 18399 68.18 34 5111 61.36 34 1533 51.14 34 2045 35 29159 71.11 35 10231 50.67 35 2813 46.07 35 3325 36 24447 51.31 36 8159 38.44 36 3063 25.6 36 2555 <td>2</td> <td>7</td> <td>40831</td> <td>70.53</td> <td>27</td> <td>7 12255</td> <td>58.75</td> <td>2</td> <td>7 40</td> <td>87 44.04</td> <td></td> <td>27 3067</td> <td>14.67</td>	2	7	40831	70.53	27	7 12255	58.75	2	7 40	87 44.04		27 3067	14.67	
30 24447 51.31 30 8159 38.44 30 3063 25.6 30 2555 31 18399 68.18 31 5111 61.36 31 1533 51.14 31 2045 32 29159 71.11 32 10231 50.67 32 2813 46.07 32 3325 33 24447 51.31 33 8159 38.44 33 3063 25.6 33 2555 34 18399 68.18 34 5111 61.36 34 1533 51.14 34 2045 35 29159 71.11 35 10231 50.67 35 2813 46.07 35 3325 36 24447 51.31 36 8159 38.44 36 3063 25.6 36 2555 37 18399 68.18 37 5111 61.36 37 1533 51.14 37 2045	2	8	18399	68.18	28	5111	61.36	2	8 15	33 51.14		28 2045	9.58	
31 18399 68.18 31 5111 61.36 31 1533 51.14 31 2045 32 29159 71.11 32 10231 50.67 32 2813 46.07 32 3325 33 24447 51.31 33 8159 38.44 33 3063 25.6 33 2555 34 18399 68.18 34 5111 61.36 34 1533 51.14 34 2045 35 29159 71.11 35 10231 50.67 35 2813 46.07 35 3325 36 24447 51.31 36 8159 38.44 36 3063 25.6 36 2555 37 18399 68.18 37 5111 61.36 37 1533 51.14 37 2045 38 29159 71.11 38 10231 50.67 38 2813 46.07 38 3325 <td>2</td> <td>9</td> <td>29159</td> <td>71.11</td> <td>29</td> <td>10231</td> <td>50.67</td> <td>2</td> <td>9 28</td> <td>13 46.07</td> <td></td> <td>29 3325</td> <td>9.74</td>	2	9	29159	71.11	29	10231	50.67	2	9 28	13 46.07		29 3325	9.74	
32 29159 71.11 32 10231 50.67 32 2813 46.07 32 3325 33 24447 51.31 33 8159 38.44 33 3063 25.6 33 2555 34 18399 68.18 34 5111 61.36 34 1533 51.14 34 2045 35 29159 71.11 35 10231 50.67 35 2813 46.07 35 3325 36 24447 51.31 36 8159 38.44 36 3063 25.6 36 2555 37 18399 68.18 37 5111 61.36 37 1533 51.14 37 2045 38 29159 71.11 38 10231 50.67 38 2813 46.07 38 3325 39 24447 51.31 39 8159 38.44 39 3063 25.6 39 2555 40 18399 68.18 40 5111 61.36 40 1533 51.14 40 2045 41 29159 71.11 41 10231 50.67 41 2813 46.07<	3	0	24447	51.31	30	8159	38.44	3	0 30	63 25.6		30 2555	7.67	
33 24447 51.31 33 8159 38.44 33 3063 25.6 33 2555 34 18399 68.18 34 5111 61.36 34 1533 51.14 34 2045 35 29159 71.11 35 10231 50.67 35 2813 46.07 35 3325 36 24447 51.31 36 8159 38.44 36 3063 25.6 36 2555 37 18399 68.18 37 5111 61.36 37 1513 51.14 37 2045 38 29159 71.11 38 10231 50.67 38 2813 46.07 38 3325 39 24447 51.31 39 8159 38.44 39 3063 25.6 39 2555 40 18399 68.18 40 5111 61.36 40 1533 51.14 40 2045 41 29159 77.11 41 10231 50.67 41 <t< td=""><td>3</td><td>1</td><td>18399</td><td>68.18</td><td>3.</td><td>5111</td><td>61.36</td><td>3</td><td>1 15</td><td>33 51.14</td><td></td><td>31 2045</td><td>9.58</td></t<>	3	1	18399	68.18	3.	5111	61.36	3	1 15	33 51.14		31 2045	9.58	
34 18399 68.18 34 5111 61.36 34 1533 51.14 34 2045 35 29159 71.11 35 10231 50.67 35 2813 46.07 35 3325 36 24447 51.31 36 8159 38.44 36 3063 25.6 36 2555 37 18399 68.18 37 5111 61.36 37 1533 51.14 37 2045 38 29159 71.11 38 10231 50.67 38 2813 46.07 38 3325 39 24447 51.31 39 8159 38.44 39 3063 25.6 39 2555 40 18399 68.18 40 5111 61.36 40 1533 51.14 40 2045 41 29159 71.11 41 10231 50.67 41 2813 46.07 41 3325 42 24447 51.31 42 8159 38.44 42 3063 25.6 39 2555 43 224207 73.99 43 75759 54.74 43 19451 53.3	3.	2	29159	71.11	32	2 10231	50.67	3	2 28	13 46.07		32 3325	9.74	
35 29159 71.11 35 10231 50.67 35 2813 46.07 35 3325 36 24447 51.31 36 8159 38.44 36 3063 25.6 36 2555 37 18399 68.18 37 5111 61.36 37 1533 51.14 37 2045 38 29159 71.11 38 10231 50.67 38 2813 46.07 38 3325 39 24447 51.31 39 8159 38.44 39 3063 25.6 39 2555 40 18399 68.18 40 5111 61.36 40 1533 51.14 40 2045 41 29159 71.11 41 10231 50.67 41 2813 46.07 41 3325 42 24447 51.31 42 8159 38.44 42 3063 25.6 42 2555 <td>3</td> <td>3</td> <td>24447</td> <td>51.31</td> <td>30</td> <td>8159</td> <td>38.44</td> <td>3</td> <td>3 30</td> <td>63 25.6</td> <td></td> <td>33 2555</td> <td>7.67</td>	3	3	24447	51.31	30	8159	38.44	3	3 30	63 25.6		33 2555	7.67	
36 24447 51.31 36 8159 38.44 36 3063 25.6 36 2555 37 18399 68.18 37 5111 61.36 37 1533 51.14 37 2045 38 29159 71.11 38 10231 50.67 38 2813 46.07 38 3325 39 24447 51.31 39 8159 38.44 39 3063 25.6 39 2555 40 18399 68.18 40 5111 61.36 40 1533 51.14 40 2045 41 29159 71.11 41 10231 50.67 41 2813 46.07 41 3325 42 24447 51.31 42 8159 38.44 42 3063 25.6 42 2555 43 224207 73.99 43 75759 54.74 43 19451 53.3 43 10237 44 2551 34.57 44 1531 14.4 44 1021 5.4 44 1533	3	4	18399	68.18	34	5111	61.36	3	4 15	33 51.14		34 2045	9.58	
37 18399 68.18 37 5111 61.36 37 1533 51.14 37 2045 38 29159 71.11 38 10231 50.67 38 2813 46.07 38 3325 39 24447 51.31 39 8159 38.44 39 3063 25.6 39 2555 40 18399 68.18 40 5111 61.36 40 1533 51.14 40 2045 41 29159 71.11 41 10231 50.67 41 2813 46.07 41 332 42 24447 51.31 42 8159 38.44 42 3063 25.6 42 2555 43 224207 73.99 43 75759 54.74 43 19451 53.3 43 10237 44 2551 34.57 44 1531 14.4 44 1021 5.4 44 1533	3	5	29159	71.11	38	5 10231	50.67	3	5 28	13 46.07		35 3325	9.74	
38 29159 71.11 38 10231 50.67 38 2813 46.07 38 3325 39 24447 51.31 39 8159 38.44 39 3063 25.6 39 2555 40 18399 68.18 40 5111 61.36 40 1533 51.14 40 2045 41 29159 71.11 41 10231 50.67 41 2813 46.07 41 3325 42 24447 51.31 42 8159 38.44 42 3063 25.6 42 2555 43 224207 73.99 43 75759 54.74 43 19451 53.3 43 10237 44 2551 34.57 44 1531 14.4 44 1021 5.4 44 1533	3	6	24447	51.31	36	8159	38.44	3	6 30	63 25.6		36 2555	7.67	
39 24447 51.31 39 8159 38.44 39 3063 25.6 39 2555 40 18399 68.18 40 5111 61.36 40 1533 51.14 40 2045 41 29159 71.11 41 10231 50.67 41 2813 46.07 41 3325 42 24447 51.31 42 8159 38.44 42 3063 25.6 42 2555 43 224207 73.99 43 75759 54.74 43 19451 53.3 43 10237 44 2551 34.57 44 1531 14.4 44 1021 5.4 44 1533	3	7	18399	68.18	37	7 5111	61.36	3	7 15	33 51.14		37 2045	9.58	
40 18399 68.18 40 5111 61.36 40 1533 51.14 40 2045 41 29159 71.11 41 10231 50.67 41 2813 46.07 41 3325 42 24447 51.31 42 8159 38.44 42 3063 25.6 42 2555 43 224207 73.99 43 75759 54.74 43 19451 53.3 43 10237 44 2551 34.57 44 1531 14.4 44 1021 5.4 44 1533	3	8	29159	71.11	38	3 10231	50.67	3	8 28	13 46.07		38 3325	9.74	
41 29159 71.11 41 10231 50.67 41 2813 46.07 41 3325 42 24447 51.31 42 8159 38.44 42 3063 25.6 42 2555 43 224207 73.99 43 75759 54.74 43 19451 53.3 43 10237 44 2551 34.57 44 1531 14.4 44 1021 5.4 44 1533	3	9	24447	51.31	39	8159	38.44	3	9 30	63 25.6		39 2555	7.67	
42 24447 51.31 42 8159 38.44 42 3063 25.6 42 2555 43 224207 73.99 43 75759 54.74 43 19451 53.3 43 10237 44 2551 34.57 44 1531 14.4 44 1021 5.4 44 1533	4	0	18399	68.18	40	5111	61.36	4	0 15	33 51.14		40 2045	9.58	
43 224207 73.99 43 75759 54.74 43 19451 53.3 43 10237 44 2551 34.57 44 1531 14.4 44 1021 5.4 44 1533	4	1	29159	71.11	4	1 10231	50.67	4	1 28	13 46.07		41 3325	9.74	
44 2551 34.57 44 1531 14.4 44 1021 5.4 44 1533	4	2	24447	51.31	42	2 8159	38.44	4	2 30	63 25.6		42 2555	7.67	
	4	3	224207	73.99	43	75759	54.74	4	3 194	51 53.3		43 10237	25.32	
	4	4	2551	34.57	44	1531	14.4	4	4 10	21 5.4		44 1533	0.9	
45 2551 17.29 45 1531 7.2 45 1021 2.7 45 1533	4	5	2551	17.29	45	5 1531	7.2	4	5 10	21 2.7		45 1533	0.45	





DIM - 64	SRAM KB - 2048		PE DIM - 128	SRAM KB - 2048		PE DIM - 256	SRAM KB - 2048	PE DIM - 512	SRAM KB - 2048		PE DIM - 512	SRAM KB - 1024		PE DIM - 512	SRAM KB - 4096	
er	Compute_Cycles	Overall Utilization	Laver	Compute_Cycles	Overall Utilization	Laver	Compute_Cycles Overall_Ut		Compute_Cycles Ov	verall Utilization	Laver		Overall_Utilization	Laver	Compute_Cycles	
	51869	53.58		0 38094	18.24	.,.			0 28055	1.55	Layer		1.55	Layer		1.55
	1 9309	33.69		1 7949	9.86			2.63	1 7601	0.64		7601	0.64		1 7601	0.64
		81.27		2 19089	34.37				2 9587	4.28			4.28			4.28
				3 15899	19.72				3 7601				2.58			2.58
		33.69						10.51		2.58			2.58		1001	2.58
		33.69			19.72					2.58					7601	
	5 18717	67.02		5 12749	24.6				5 8945	2.19			2.19		8945	2.19
- 1		81.27		6 19089	34.37			12.59	6 9587	4.28			4.28			4.28
		33.69		7 15899	19.72			10.51	7 7601	2.58			2.58	1	7 7601	2.58
		67.02		8 12749	24.6				8 8945	2.19			2.19			2.19
!	9 32291	81.27		9 19089	34.37			12.59	9 9587	4.28		9587	4.28	5	9587	4.28
11	37239	33.69		10 15899	19.72	1	0 7461	10.51	0 7601	2.58	11	7601	2.58	10	7601	2.58
- 1	1 10695	62.91		11 3569	47.13	1	11 3063	13.73	1 2555	4.11	1	1 2555	4.11	1	1 2555	4.11
1:	2 28115	86.56		12 8435	72.13	1	2 4985	30.51	2 4347	8.75	1:	4347	8.75	12	2 4347	8.75
1:	3 26415	47.49		13 10695	29.32	1	3 5103	15.36	3 2299	8.53	1:		8.53	1:	3 2299	8.53
1-		62.9		14 14279	47.12				4 2555	16.46	14			14		16.46
19		75.63		15 5361	58.5				5 3067	6.39	11		6.39	15		6.39
1		86.56		16 8435	72.13				6 4347	8.75	11			16		8.75
1		47.49		17 10695	29.32				7 2299	8.53	1			17		8.53
1		47.49 75.63		18 5361	29.32 58.5				7 2299 8 3067	6.39	11		6.39	18		6.39
11		86.56		19 8435	72.13				9 4347	8.75	11		8.75	19		8.75
21		47.49		20 10695	29.32				0 2299	8.53	2			21		8.53
2		75.63		21 5361	58.5				1 3067	6.39	2		6.39	2		6.39
2:		86.56		22 8435	72.13				2 4347	8.75	2		8.75	22		8.75
2	3 26415	47.49		23 10695	29.32	2	23 5103	15.36	3 2299	8.53	2	3 2299	8.53	23	3 2299	8.53
2	4 10207	70.54		24 3063	58.77	2	24 1021	44.07	4 1533	7.34	2	1533	7.34	24	1533	7.34
2	5 29159	71.11		25 10231	50.67	2	25 2813	46.07	5 3325	9.74	2	3325	9.74	25	3325	9.74
2	6 24447	51.31		26 8159	38.44	2	6 3063	25.6	6 2555	7.67	2	3 2555	7.67	21	3 2555	7.67
2		70.53		27 12255	58.75				7 3067	14.67	2		14.67	2		14.67
2		68.18		28 5111	61.36				8 2045	9.58	2		9.58	21		9.58
2		71.11		29 10231	50.67				9 3325	9.74	2			21		9.74
31		51.31		30 8159	38 44				0 2555	7.67	3			3(7.67
3		68.18		31 5111	61.36				1 2045	9.58				3		9.58
3:		71.11		32 10231	50.67				2045	9.74	3			33		9.36
3:		51.31		33 8159	38.44				3 2555	7.67	3			33		7.67
3		68.18		34 5111	61.36				4 2045	9.58	3			34		9.58
3		71.11		35 10231	50.67				5 3325	9.74	3			38		9.74
3		51.31		36 8159	38.44				6 2555	7.67	3			36		7.67
3		68.18		37 5111	61.36				7 2045	9.58	3			37		9.58
3	B 29159	71.11		38 10231	50.67	3	88 2813		8 3325	9.74	3		9.74	31	3325	9.74
3	9 24447	51.31		39 8159	38.44	3	9 3063	25.6	9 2555	7.67	3	2555	7.67	39	2555	7.67
41	18399	68.18		40 5111	61.36	4	10 1533	51.14 4	0 2045	9.58	4	2045	9.58	40	2045	9.58
4	1 29159	71.11		41 10231	50.67	4	11 2813	46.07	1 3325	9.74	4	3325	9.74	4	1 3325	9.74
4:	2 24447	51.31		42 8159	38.44	4	2 3063	25.6	2 2555	7.67	4:	2 2555	7.67	42	2 2555	7.67
4:	3 9199	89.05		43 5111	40.07	4			3 2045	6.26	4:		6.26	43	3 2045	6.26
4		38.02		44 19447	18.51				4 5629	4	4			44		4
4		61.45		45 12255	25.59			9.59	5 6135	3.19	4:			4		3.19
4		89.05		46 20447	40.06				6 8183	6.26	4		6.26	44		6.26
4		72.13		47 9207	34.06				7 3069	6.39	4			4		6.39
4		38.02		48 19447	18.51				8 5629	6.39	4			44		0.39
4				49 12255	18.51 25.59					3.19	4		3 19	44		3.19
		61.45											4110			
51		72.13		50 9207	34.06				0 3069	6.39	5			50		6.39
5		38.02		51 19447	18.51				1 5629	4	5			5		4
5		61.45		52 12255	25.59				2 6135	3.19	5			52		3.19
5	3 34783	1.44		53 18415	0.68	5	3 10231	0.31	3 6139	0.13	5	6139	0.13	50	6139	0.13
					Resnet50 (Systo	olic Array Perfor	mance)									
					sonotoo (oystt	, , uray 1 011011										
			Systoli	c Array Size 64*64	 Systolic Array Size 128*1 	28 — Systolic Array Siz	ne 256*256 - Systolic Array Si	ize 512*512								
	60000 T															





PE DIM - 64	SRAM KB - 2048		PE DIM - 128	SRAM KB - 2048		PE DIM - 256	SRAM KB - 204	8	PE DIM - 512	SRAM KB - 2048	
ayer	Compute_Cycles	Overall_Utilization	Layer	Compute_Cycles Ove	rall_Utilization	Layer	Compute_Cycle	es Overall_Utilization	Layer	Compute_Cycles	Overall_Utilization
0	117962	17.63	C	108465	4.79	(10364	1.25	C	101752	0.32
1	541241	81.95	1	320379	34.61	•	20959	7 13.23	1	155005	4.47
2	485639	89.7	2	133569	81.53	2	7977	34.13	2	52175	13.05
3	485639	89.7	3	133569	81.53	3	7977	34.13	3	52175	13.05
4	447119	93.91	4	117667	89.21	4	3376	7 77.72	4	19955	32.88
5	447119	93.91	5	117667	89.21		3376	7 77.72	5	19955	32.88
6	447119	93.91	6	117667	89.21	6	3376	7 77.72	6	19955	32.88
7	447119	93.91	7	117667	89.21	7	3376	7 77.72	7	19955	32.88
8	416591	93.47	8	116687	83.42	3	3070	7 79.25	8	11259	54.04
9	416591	93.47	g	116687	83.42	9	3070	7 79.25	g	11259	54.04
10	416591	93.47	10	116687	83.42	10	3070	7 79.25	10	11259	54.04
11	416591	93.47	11	116687	83.42	1:	3070	7 79.25	11	11259	54.04
12	113615	73	12	38895	53.31	12	1023	50.65	12	5629	23.02
13	113615	73	13	38895	53.31	13	1023	50.65	13	5629	23.02
14	113615	73	14	38895	53.31	14	1023	50.65	14	5629	23.02
15	113615	73	15	38895	53.31	15	1023	50.65	15	5629	23.02
16	40831	1.25	16	24511	0.52	16	1635	1 0.2	16	12271	0.07
17	40831	1.25	17	24511	0.52	17	1635	1 0.2	17	12271	0.07
18	10207	1.22	18	6127	0.51	18	408	7 0.19	18	3067	0.06

