

Name	n	GC using			Proposed approach		
					GC	QC	Time (sec)
1-bit-adder	4	5	–	–	4	12	0.11
2-to-4-decoder	4	–	6	–	6	18	0.30
decode-42	4	–	–	10	10	30	45.83
Mperk	4	–	–	9	9	17	2.04
Imark	4	–	–	7	7	19	0.49
4_49	4	–	–	12	12	72	12659.30
hwb4	4	–	–	11	11	23	232.88
Oc5	4	–	–	11	11	39	704.10
Oc6	4	–	–	12	12	44	14408.50
4gt5	5	–	4	–	3	19	0.33
mod5_mills	5	–	5	–	5	13	0.70
mod5d_1	5	–	7	–	7	15	6.84
mod5d_2	5	–	8	–	8	16	5.77
mod5	5	–	–	–	7	15	6.23
4mod5_younus	5	–	–	–	5	9	0.71
4mod5_miller	5	5	–	–	5	13	0.78
graycode	6	–	5	–	5	5	2.22
permanent2x2	6	–	–	–	3	23	1.24