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Self-timed CLA adder type	Delay (ns)	Area (μm^2)	Power (μW)
<i>Previous work</i>			
DIMS (in Type 2 SCBCLA) (2-bit CLAs & RCA)	14.8	24273	1208.8
Toms <i>et al.</i> (in Type 2 SCBCLA) (2-bit CLAs & RCA)	10.1	13479	906.1
Type 2 SCBCLA (2-bit CLAs & RCA)	5.3	8887	749.7
Type 2 SCBCLA (4-bit CLAs & RCA)	4.0	9385	757.3
Mixed SCBCLA (3-bit, 4-bit CLAs & RCA)	3.8	9601	765.5
<i>This work</i>			
Regular RCLA (2-bit CLAs)	5.4	7177	598.5
Mixed RCLA (2-bit CLAs & RCA)	5.2	7171	603.2
Mixed RCLA (3-bit & 2-bit CLAs)	4.4	7807	611.3
Mixed RCLA (3-bit CLAs & RCA)	4.3	7801	616.1
Regular RCLA (4-bit CLAs)	4.2	8553	632.6
Mixed RCLA (4-bit & 2-bit CLAs)	4.2	8381	627.8
Mixed RCLA (4-bit, 2-bit CLAs & RCA)	3.9	8375	632.6
Mixed RCLA (4-bit CLAs & RCA)	3.9	8369	637.6

* Sizes: 2-bit RCLA – $286\mu\text{m}^2$; 3-bit RCLA – $492\mu\text{m}^2$; 4-bit RCLA – $744\mu\text{m}^2$

TABLE 2. COMPARING DELAY, AREA AND POWER PARAMETERS OF 32, 48 AND 64-BIT MIXED SCBCLA AND MIXED RCLA ADDERS

Self-timed CLA adder type	Delay (ns)	Area (μm^2)	Power (μW)
<i>Earlier work (32, 48 and 64-bit SCBCLA adders)</i>			
Mixed SCBCLA (3-bit, 4-bit CLAs & RCA)	3.8	9601	765.5
Mixed SCBCLA (3-bit, 4-bit CLAs & RCA)	4.8	14667	1150.5
Mixed SCBCLA (3-bit, 4-bit CLAs & RCA)	6.6	19721	1697.1
<i>This work (32, 48 and 64-bit RCLA adders)</i>			
Mixed RCLA (4-bit CLAs & RCA)	3.9	8375	632.6
Mixed RCLA (4-bit CLAs & RCA)	5.2	12641	941.5
Mixed RCLA (4-bit CLAs & RCA)	7.3	16895	1350

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