

Carry Chain Adder (1A)

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G and P

$x(i), y(i)$: B-bit number

Generate $g(i) = 1$ If $x(i) + y(i) > B - 1$
 0 otherwise

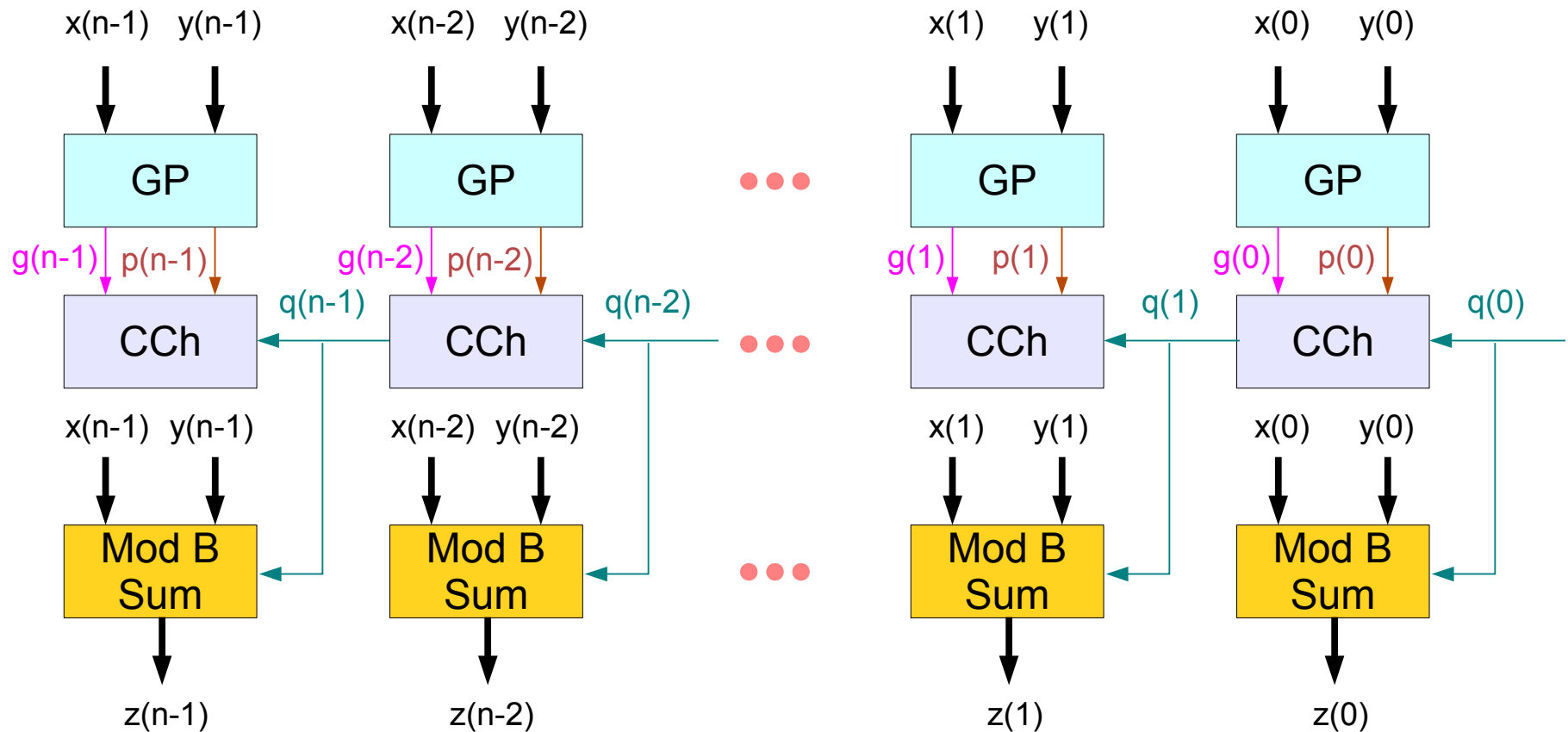
Propagate $p(i) = 1$ If $x(i) + y(i) = B - 1$
 0 otherwise

Carry Chain

$q(i+1), q(i)$: 1-bit number

$q(i+1)$	=	$q(i)$	when	$p(i) = 1$	Propagate
	=	$g(i)$	otherwise		Generate

Carry Chain Adder



Angle

References

- [1] <http://en.wikipedia.org/>
- [2] J-P Deschamps, et. al., "Synthesis of Arithmetic Circuits", 2006