

Designs	Gate count	Ancilla inputs	Delay
K(1)	$O(n^{\log_2 3})$	$6n$	$O(n)$
K(2)	$O(n^{\log_2 6})$	$4n$	$O(n^{\log_2 6})$
K(3)	$O(n^{\log_2 3})$	$5n + n/2 + 1$	$O(n^{\log_2 3})$
K(4)	$O(n^{\log_2 6})$	$3n + n/2$	$O(n^{\log_2 6})$
Proposed	$O(n^2)$	$2n + 1$	$O(n^2)$
K(1),K(2),K(3), and K(4) indicates Karatsuba designs 1,2,3, and 4 proposed in			