

Digit Serial Multiplication Area and Delay for the 5 NIST Polinomials  
 $g$  express the amount of digit computed per clock cycle.

Table 1. Digit Serial Multiplication for  $m = 571$  in Virtex5.

$g$	cycles	FF	luts	period	Time (ns)	AxD
1	571	1727	1731	1.85	1056	1828.5
2	286	1726	1730	1.83	523	905.4
4	143	1723	2302	1.80	257	592.5
8	72	1722	3451	2.30	166	571.5
16	36	1721	5754	2.68	96	555.1
24	24	1720	8051	2.78	67	537.2
32	18	1720	10350	2.98	54	555.2

Table 2. Digit Serial Multiplication for  $m = 409$  in Virtex5.

$g$	cycles	FF	luts	period	Time (ns)	AxD
1	409	1240	1244	1.82	744	926.0
2	205	1239	1242	1.79	367	455.8
4	103	1238	1653	1.78	183	303.1
8	52	1235	2471	2.23	116	286.5
16	26	1234	4113	2.36	61	252.4
23	18	1234	5653	2.73	49	277.8
32	13	1233	7399	2.83	37	272.2

Table 3. Digit Serial Multiplication for  $m = 283$  in Virtex5.

$g$	cycles	FF	luts	period	Time (ns)	AxD
1	283	862	866	1.80	509	441.1
2	142	861	864	1.78	253	218.4
4	71	860	1152	1.78	126	145.6
8	36	857	1722	2.30	83	142.6
16	18	856	2874	2.67	48	138.1
24	12	855	4020	2.85	34	137.5
32	9	855	5169	2.90	26	134.9
41	7	854	6354	3.10	22	137.9

Table 4. Digit Serial Multiplication for  $m = 233$  in Virtex5.

$g$	cycles	FF	luts	period	Time (ns)	AxD
1	233	710	714	1.78	415	296.1
2	117	710	715	1.70	199	142.2
4	59	709	947	1.78	105	99.5
8	30	706	1413	2.23	67	94.5
16	15	705	2351	2.36	35	83.2
24	10	705	3291	2.73	27	89.8
30	8	705	3996	2.73	22	87.3
39	6	704	5167	2.94	18	91.1

Table 5. Digit Serial Multiplication for  $m = 163$  in Virtex5.

$g$	cycles	FF	luts	period	Time (ns)	AxD
1	163	500	504	1.78	290	146.2
2	82	500	505	1.72	141	71.2
4	41	497	669	1.78	73	48.8
6	28	496	834	2.23	62	52.1
8	21	496	1001	2.67	56	56.1
11	15	495	1179	2.36	35	41.7
15	11	495	1518	2.68	29	44.8
24	7	496	2336	2.78	19	45.5
33	5	494	3033	3.03	15	45.9
55	3	494	4995	3.21	10	48.1
82	2	495	7176	3.54	7	50.8

