bit index i	ith bit of p	function calls	operation	pow_out
3	0	MONT_SQR(2^{125})	$2^{125\times 2-64}$	2^{186}
2	0	MONT_SQR(2^{186})	$2^{186\times 2-64}$	2^{308}
1	0	MONT_SQR(2^{308})	$2^{308\times 2-64}$	2^{552}
0	1	$2\times$ MONT_SQR(2^{552})	$2^{552\times 2-64}\times 2$	$2^{1040}\times 2 = 2^{1041}$