

$n=8$

x_7	y_7	C_7	z_7	C_8	
x_{n-1}	y_{n-1}	C_{n-1}	z_{n-1}	C_n	over
0	0	0	0	0	0
0	0	1	1	0	1
0	1	0	1	0	0
0	1	1	0	1	0
1	0	0	1	0	0
1	0	1	0	1	0
1	1	0	0	1	1
1	1	1	1	1	0

$$\text{over} = C_{n-1} \oplus C_n$$

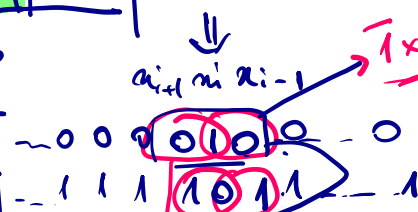
$$(-1)^{S_1} \times M_1 \times 2^{E_1}$$

$$(-1)^{S_1 \oplus S_2} \times (M_1 \times M_2) \times 2^{E_1 + E_2}$$

trans.

isolated

a_{i+1}	a_i	R	OP	R^*
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	0	0
1	0	1	1	1
1	1	0	1	1
1	1	1	0	1



$$+1 \times 2^{i-1}$$

$$-1 \times 2^i + 1 \times 2^{i+1} = 2^i(-1+2)$$

$$= 2^i \times 1 \equiv 1$$

$$+1 \times 2^i + 1 \times 2^{i+1} = 2^i(-2+1)$$

$$= -2^i \equiv 1$$

001001000

001011000

00111...1

0011

$$X = \begin{array}{r} \boxed{10101010}_2 \\ 10101001_{c1} \\ 11010110_{SM} \end{array}$$

$$\begin{array}{r} 64+ \\ 22 \\ - 86 \end{array}$$

$$Y = \begin{array}{r} \boxed{10000011}_{62} \\ 10000010_{c1} \\ 11111101_{SM} \end{array}$$

$$- 125$$

$$\begin{array}{r} 127- \\ 2 \\ 125 \end{array}$$

$$\begin{array}{r} 125 \times \\ 86 \\ \hline 750 \\ 1000 \\ + 10750 \end{array}$$

$$-M = 01111011$$

9

4096x

$$2^9 - 1 = 511$$

$$\begin{array}{r} 510+ \\ 2048 \\ 8192 \\ \hline + 10750 \end{array} \checkmark$$

COUNT	OVER	A	Q[3]	Q	R	T1
000	0	0000 0000 0000 0000	1 0	10101010 11010101	0	1000 0011
001	+	1000 0011 1000 0011 1100 0001	1	01101010	0	
010	0	1110 0000	1	10110101	0	
011	+	1000 0011 1100 0011 1011 0001	1	11011010	0	
100	0	1101 1000	1	11101101	0	
101	+	1000 0011 0101 1011 0101 1101	1	11110110	0	
110	0	1101 0110	1	11111011	0	
111	+	0111 1101 0101 0011 0010 1001	1	11111101	1	

$$X = -107$$

$$X = 11101011_{SM} = 10010101_{C2}$$

$$Y = 01001111_{SM, C1, C2}$$

$$Y = +79$$

$$\begin{array}{r} 107 \\ -64 \\ \hline 43 \\ -32 \\ \hline 11 \end{array}$$

$$M = 10110001$$

$$R^* = Q[1] \cdot Q[0] + Q[1] \cdot R + Q[0] \cdot R$$

$$\begin{array}{r} 107 \times \\ 79 \\ \hline 963 \\ 749 \\ \hline -8453 \end{array}$$

$$\begin{array}{r} 2048 \\ 4096 \\ 8192 \end{array}$$

count	over	A	Q[3]	Q	R	M
000	0	0000 0000 + 0100 1111 ⊕ 0100 1111 → 0010 0111	1	1001 0101	0	0100 1111
001	0	0001 0011 + 0100 1111 ⊕ 0110 0010 → 0011 0001	1	1110 0101	0	0100 1111
010	+	0100 1111 ⊕ 0110 0010 → 0011 0001	0	1111 0010	0	
011	0	⊕ 0011 0001 + 0100 1111 ⊕ 0110 0010 → 0011 0001	1	0111 1001	0	
100	+	⊕ 0100 1111 ⊕ 0110 0010 → 0011 0001	1	1011 1100	0	
101	0	⊕ 0001 1001 + 0100 1111 ⊕ 0110 0010 → 0011 0001	1	1101 1110	0	
110	⊕	⊕ 0000 1100 + 0100 1111 ⊕ 0110 0010 → 0011 0001	1	1110 1111	0	
111	+	⊕ 1011 0001 + 0100 1111 ⊕ 0110 0010 → 0011 0001	1	1111 0111	1	
		1101 1110	1	1111 0111		
		1101 1110	1	1111 0110	C1	

$$10100001 \quad 00000101_{SM}$$

$$\begin{array}{r} 256 \\ 8192 \\ \hline -8453 \end{array}$$

$$\begin{array}{r} 01010110 + \\ 01000111 \\ \hline 10011101 \end{array}$$

$$\begin{array}{r} 10101110 + \\ 10000101 \\ \hline 00110011 \end{array}$$

$$\begin{array}{r} 01101101 + \\ 11011000 \\ \hline 01000101 \end{array}$$

$$01000101$$

