INSERTION MASKING

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1.01 Insertion masking is performed on corresponding bits in a mask and two registers on a bit-by-bit basis.

MASK		R_x	R_y
1	and	Data	= Insert here
0			= No change

Ones in the mask are logically ANDed with the data in Rx then inserted into Ry. Data in Ry remains unchanged for all zeros in the mask. This is summarized as:

$$(R_x \ \& \ M) \ | \ (R_y \ \& \ rM)$$

Example: Mask=X (00FF) R_x=X (1234) (R_y =X(ABCD)

$$\begin{array}{cc} R_x =X(1234) & R_y =X(ABCD) \\ M=\underline{X (00FF)} & rM=\underline{X(FF00)} \\ 34 & AB \end{array}$$

Result R_y=X(AB34)