$$(X_1 \otimes X_2) \otimes X_3$$

$$X_1 \qquad Y_1 \qquad Y_1 \qquad Y_1 \qquad Y_2 \qquad Y_2 \qquad Y_2 \qquad Y_3 \qquad Y_3$$

$$X_3 \qquad f_3 \qquad Y_3 \qquad Y_3$$