Unsigned 2-bit numbers: $X_1 X_0$ $Y_1 Y_0$

X_1	X_0	Y_1	Y_0	LT	EQ	GT
0	0	0	0	0	1	0
0	0	0	1	1	0	0
0	0	1	0	1	0	0
0	0	1	1	1	0	0
0	1	0	0	0	0	1
0	1	0	1	0	1	0
0	1	1	0	1	0	0
0	1	1	1	1	0	0
1	0	0	0	0	0	1
1	0	0	1	0	0	1
1	0	1	0	0	1	0
1	0	1	1	1	0	0
1	1	0	0	0	0	1
1	1	0	1	0	0	1
1	1	1	0	0	0	1
1	1	1	1	0	1	0

EQ K-map:

$$= X_1' X_0' Y_1' Y_0' + X_1' X_0 Y_1' Y_0 +$$
$$X_1 X_0 Y_1 Y_0 + X_1 Y_0' Y_1 Y_0'$$
$$= X_1' Y_1' (X_0' Y_0' + X_0 Y_0) +$$
$$X_1 Y_1 (X_0 Y_0 + X_0' Y_0')$$
$$= (X_0' Y_0' + X_0 Y_0)(X_1' Y_1' + X_1 Y_1)$$
$$= (X_0 \oplus Y_0)' (X_1 \oplus Y_1)'$$

LT K-map

$$= X_1' Y_1 + X_1' X_0' Y_0 + X_0' Y_1 Y_0$$
$$= X_1' Y_1 + X_0' Y_0 (X_1' + Y_1)$$

GT K-map

$$= X_1 Y_1' + X_0 Y_1' Y_0' + X_1 X_0 Y_0'$$
$$= X_1 Y_1' + X_0 Y_0' (X_1 + Y_1')$$