

8X8 LED Matrix Rotation Function Translations

	C0	C1	C2	C3	C4	C5	C6	C7
R0								
R1								
R2								
R3								
R4								
R5								
R6								
R7								

0°

setPixel(r, c) -> setPixel(r, c)
 setRow(r, b) -> setRow(r, b)
 setCol(c, b) -> setCol(c, b)

	C0	C1	C2	C3	C4	C5	C6	C7
R0								
R1								
R2								
R3								
R4								
R5								
R6								
R7								

90°

setPixel(r, c) -> setPixel(c, rRev)
 setRow(r, b) -> setCol(rRev, b)
 setCol(c, b) -> setRow(c, inv(b))

	C0	C1	C2	C3	C4	C5	C6	C7
R0								
R1								
R2								
R3								
R4								
R5								
R6								
R7								

270°

setPixel(r, c) -> setPixel(cRev, r)
 setRow(r, b) -> setCol(r, inv(b))
 setCol(c, b) -> setRow(cRev, b)

	C0	C1	C2	C3	C4	C5	C6	C7
R0								
R1								
R2								
R3								
R4								
R5								
R6								
R7								

180°

setPixel(r, c) -> setPixel(rRev, cRev)
 setRow(r, b) -> setRow(rRev, inv(b))
 setCol(c, b) -> setCol(cRev, inv(b))

r: row number (0 – maxRows)

c: column number (0 – maxCols)

b: bit representation of row or column LEDs to switch on or off in a single byte, word, etc. depending on num LEDs in the row/col

rRev: reversed row number = (maxRows – r)

cRev: reversed col number = (maxCols – c)

inv(b): function to invert a bit representation such that inv(b10011100) = b00111001