

## TWTMC-ST5-FSDO Sine to square converter fanout/switched output

The board converts the sine wave output of 2 oscillators or frequency doublers into square wave. It provides 2 outputs for each input (fanout) or 2 switched output between the 2 inputs. It can be controlled via a single fixed on-off signal or via two independent fixed/pulse signals.

It accepts sine wave or square wave inputs, the outputs are 3V3 CMOS.

Oscillator type: any

Input: sine wave (max +16 dBm) or square wave (CMOS 3V3 or 5V)

Frequencies: 5.6448 MHz to 98.304 MHz

Output: square wave (CMOS 3V3 +15 dBm)

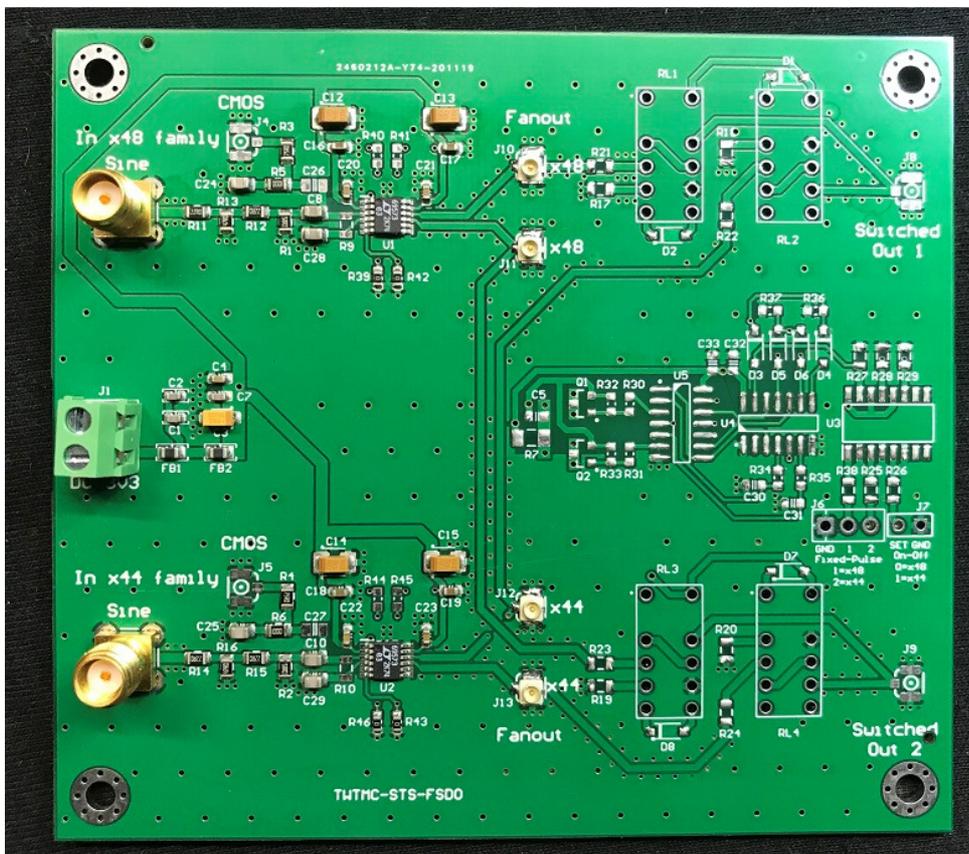
Controls: 3V3 (5V tolerant)

Board size: 100mm x 90mm

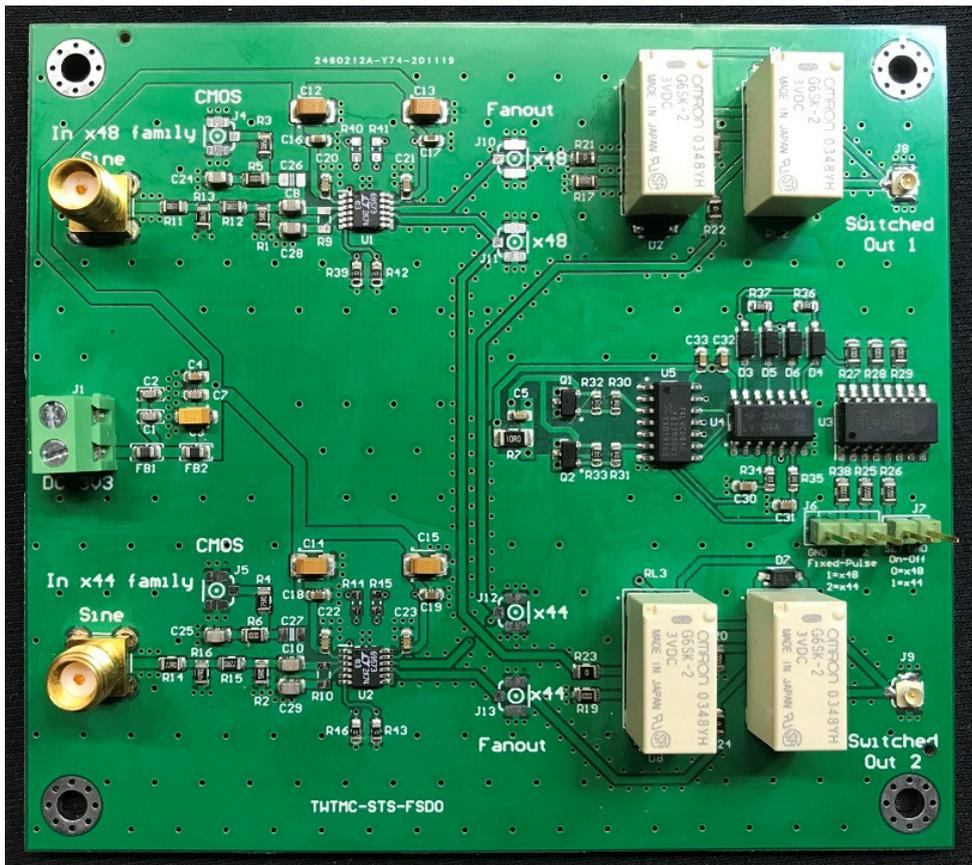
Power supply: 3.3 Vdc 50 mA (150 mA peak when relays switch)

Board options: finished only

Note: 2 versions available, TWTMC-ST5-FSDO-F (fanout option) and TWTMC-ST5-FSDO-S (switched out option)



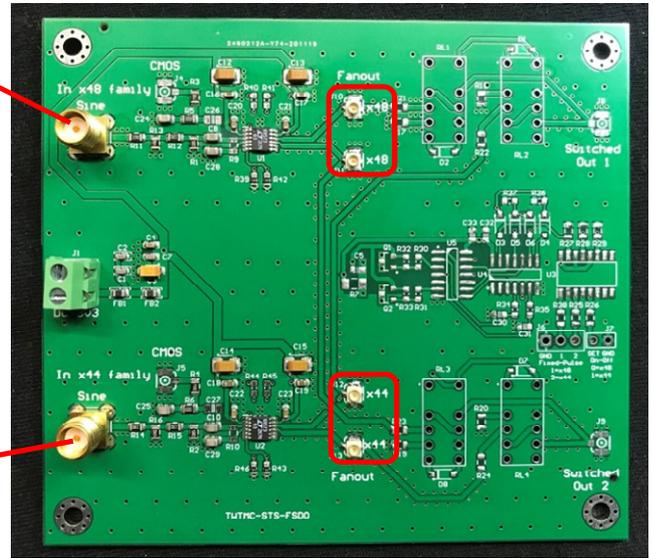
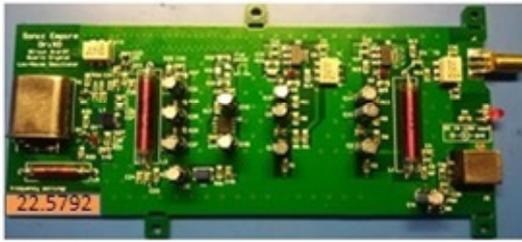
TWTMC-ST5-FSDO-F



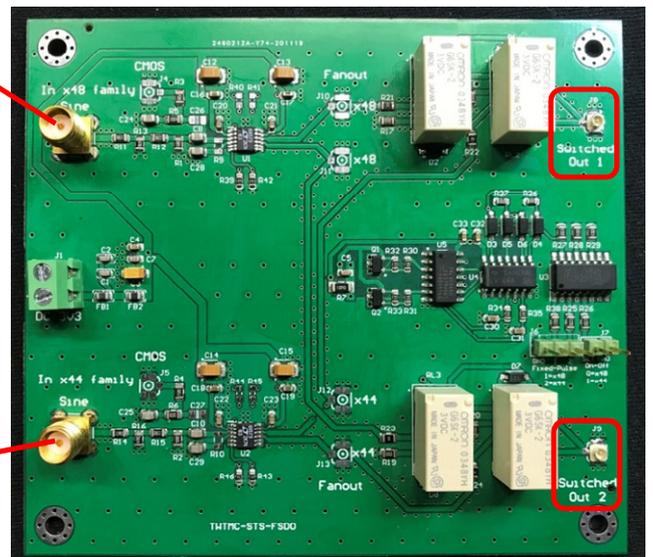
TWTMC-ST5\_FSDO-S

The control options headers J7 and J6 are alternatives to each other:

1. J7 On-Off option, connect a single control signal (3V3 or 5V) to pin SET and connect the pin GND to the ground of the controller. When the control signal is low the x44 family is selected, while when the control signal goes high the x48 family is selected.
2. J6 Fixed-Pulse option, connect the control signal of the x44 family (3V3 or 5V) to pin 1, connect the control signal of the x48 family (3V3 or 5V) to pin 2 and connect the pin GND to the ground of the controller. When the control signal connected to pin 1 goes high (continuous or pulse > 30 ms) the x44 family is selected, while when the control signal connected to pin 2 goes high (continuous or pulse > 30 ms) the x48 family is selected. Both controls high does not change the selected family.



Option 1: fanout both sample rate families



Option 2: fanout switched sample rate families