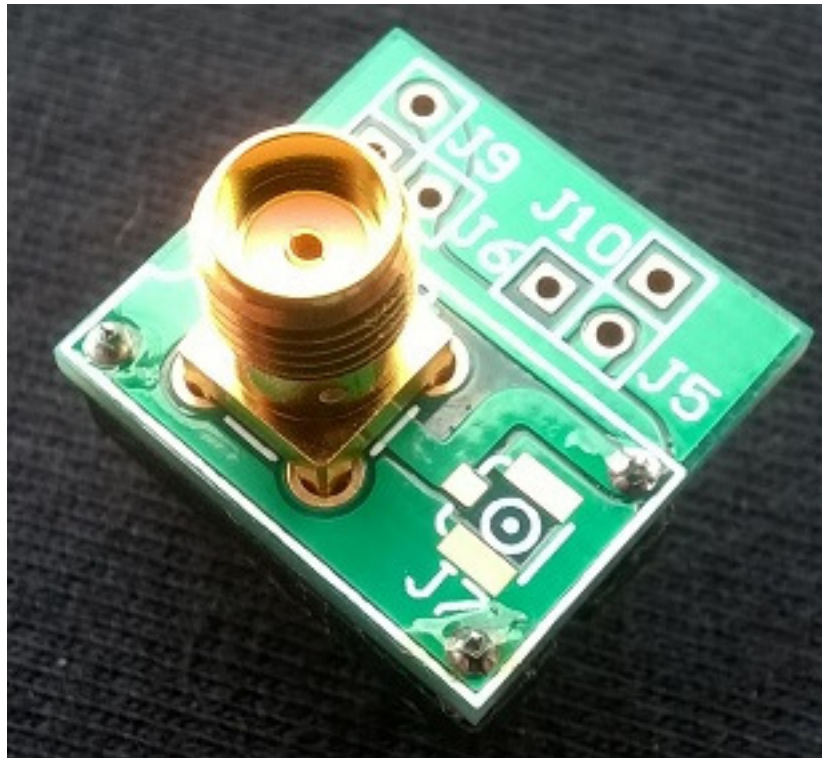
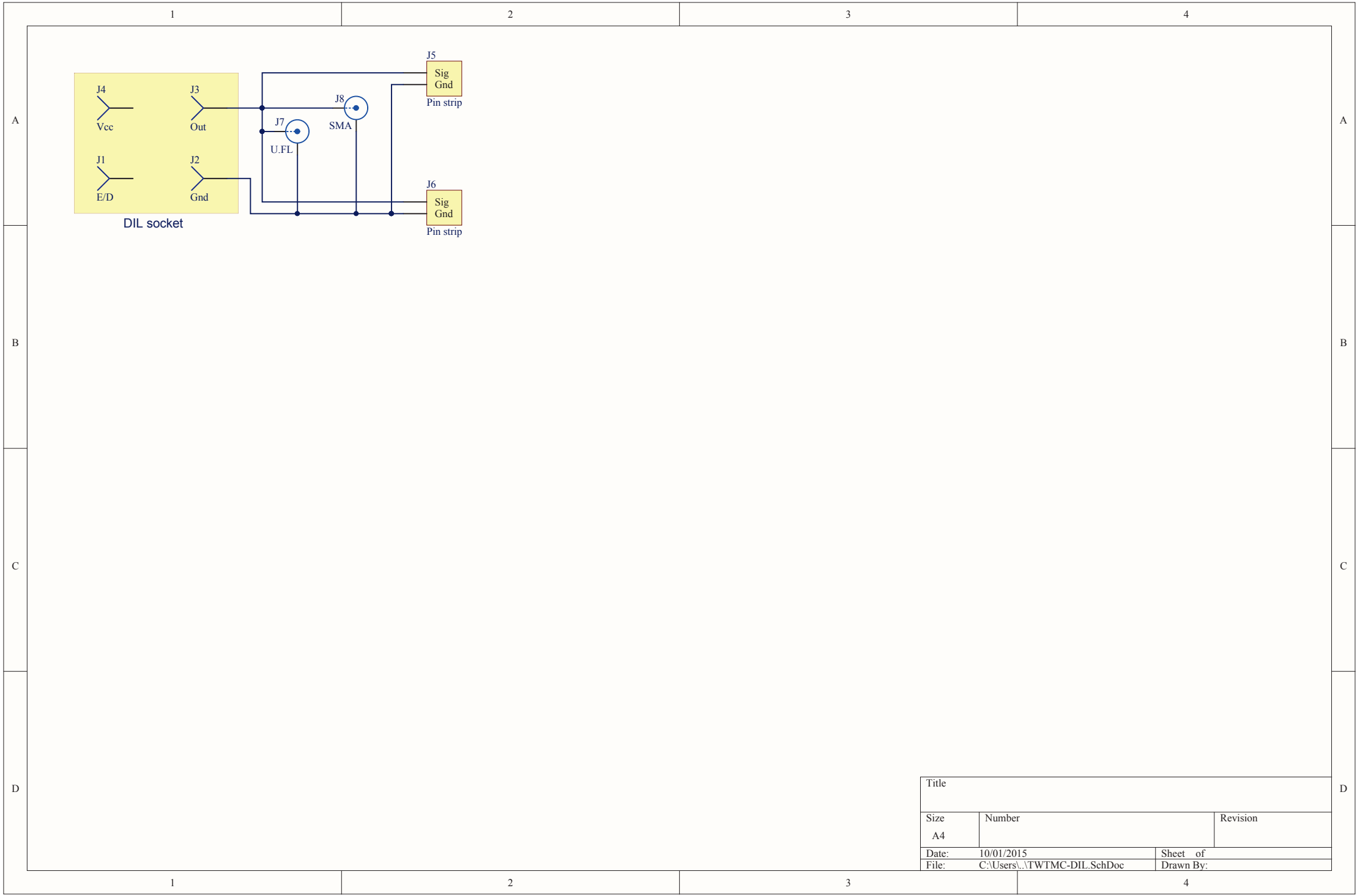


The Well Tempered Master Clock

TWTMC-DIL

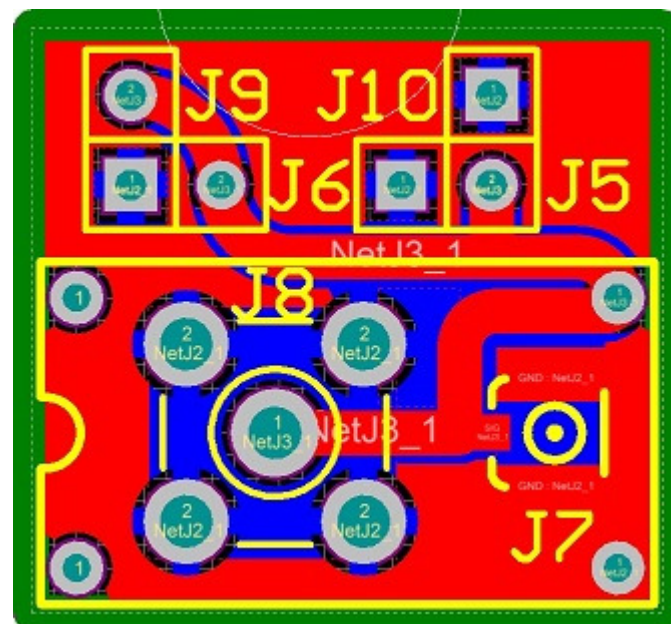


14 DIL XO adapter



| Title | | |
|-------|-------------------------------|-----------|
| Size | Number | Revision |
| A4 | | |
| Date: | 10/01/2015 | Sheet of |
| File: | C:\Users\...\TWTMC-DIL.SchDoc | Drawn By: |

PCB layout



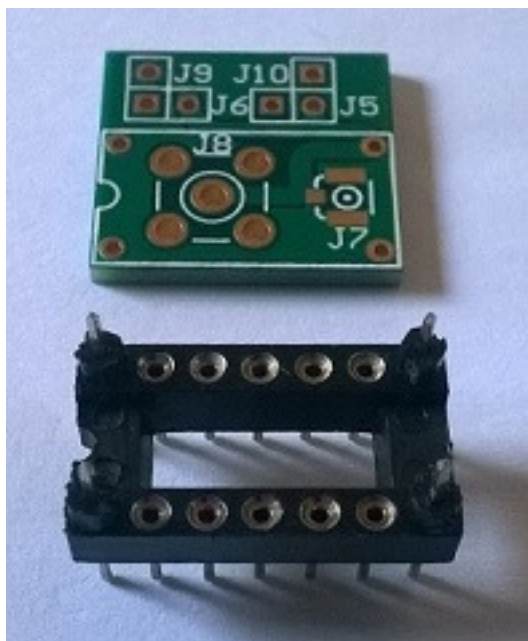
BOM

| Label | Item | Package | Manufacturer | Manufacturer part | Supplier | Supplier part | Quantity | Note |
|-------------|-----------------|---------|--------------|-------------------|----------|--------------------|----------|-----------------|
| J1 J2 J3 J4 | 5 pin strip | - | 3M | 951105-8622-AR | Mouser | 517-951105-8622-AR | 1 | |
| J5 J6 | 2 pin header | | AMP | 826646-2 | Mouser | 571-826646-2 | 1 | direct mounting |
| J7 | u.fl. Connector | | Hirose | U.FL-R-SMT(10) | Mouser | 798-U.FL-R-SMT10 | 1 | u.fl cable |
| J8 | SMA connector | - | Molex | 73391-0070 | Mouser | 538-73391-0070 | 1 | SMA cable |

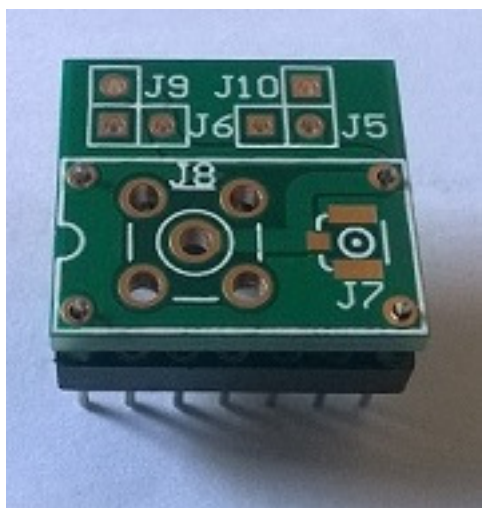
Assembly guide

Firstly divide the pin strip header using a cutter. You get 4 single pin to solder (J1, J2, J3, J4).

A 14 DIL socket helps to hold the pins in the right place.



PCB ready to solder with the pin headers.



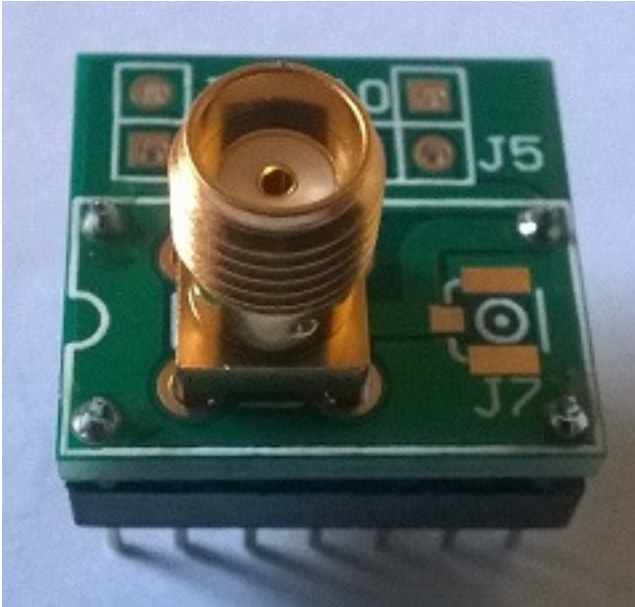
Install the connector you have chosen to connect to TWTMC-C Xo:

1. J7 u.fl connector if you are planning to use u.fl cable
2. J8 SMA connector if you are planning to use SMA cable
3. J5 or J6 pin strip header (vertical), J9 or J10 pin strip header (right angle), if you want solder directly the TWTMC-C Xo to the adapter board.

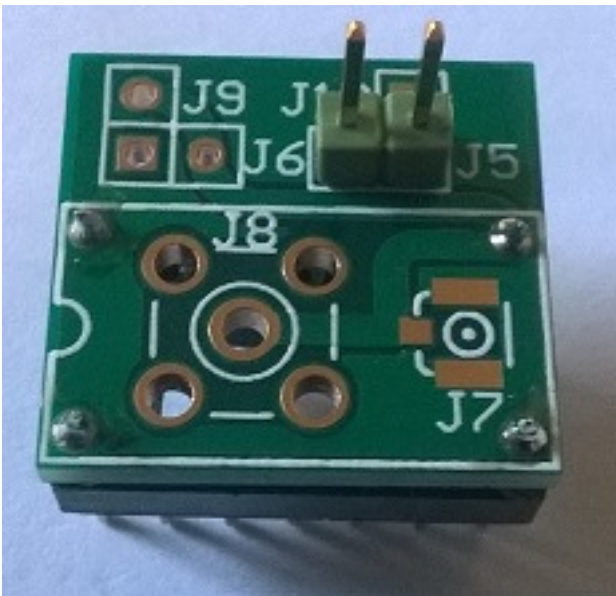
If you are using u.fl or SMA connector, please, **keep the cable as short as possible**.

If you choose to solder directly TWTMC-C Xo to adapter board, please, **pay attention to the pin strip header polarity**: the squared pad of J5/J6/J9/J10 is ground.

Finished board using SMA connector.

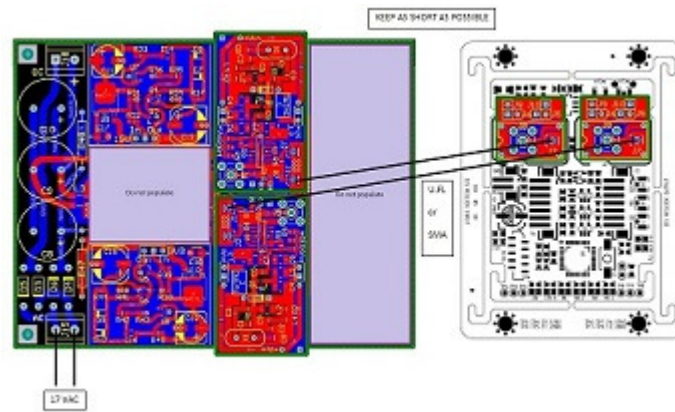


Finished board using pin strip header for direct soldering.

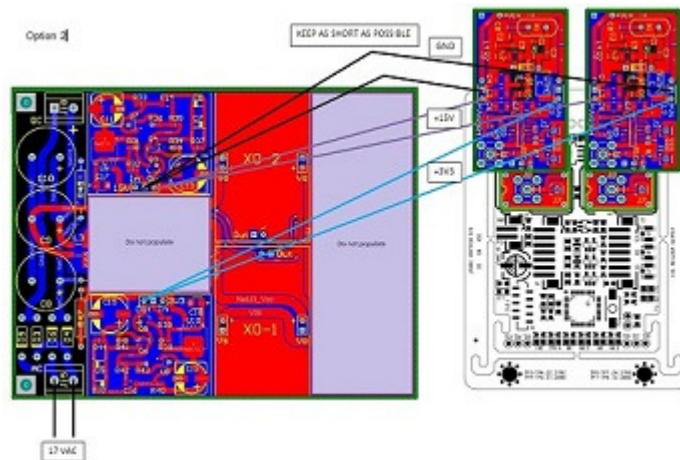


Since most people would use this adapter to connect TWTMC XO to Ian's Dual clock board, follows a few pictures showing how to do the connection.

Option 1: fit 2 TWTMC-C XO on the TWTMC-D&D daughter board, then connect them to the adapters using u.fl or SMA cables. Keep cables as short as possible. You don't need to populate the switching logic and the dividers/delay of the daughter board.



Option 2: fit 2 TWTMC-C XO directly on the TWTMC-DIL adapter board, then connect the power supply of the XOs to the TWTMC-D&D daughter board regulators. Keep power supply cables as short as possible. **Pay attention to the polarity of the power supply of each board.** You don't need to populate the switching logic and the dividers/delay of the daughter board.



Option 3: you need to get 4 regulators and 2 rectification/filtering boards, cutting a pair of TWTMC-D&D daughter board. Solder 2 supply regulators (+15V and +3V3/+5V) directly to each TWTMC-C XO. **Pay attention to the polarity.** You need to short the pads at the top-left side of each XO with a jumper (0R0). Then connect the power supply pins of each XO (+Vin) to the output of the rectification/filtering part of each TWTMC-D&D daughter board (+/-). Keep power supply cables as short as possible. **Again, pay attention to the polarity of each board.** You don't need to populate the switching logic and the dividers/delay of the daughter board.

