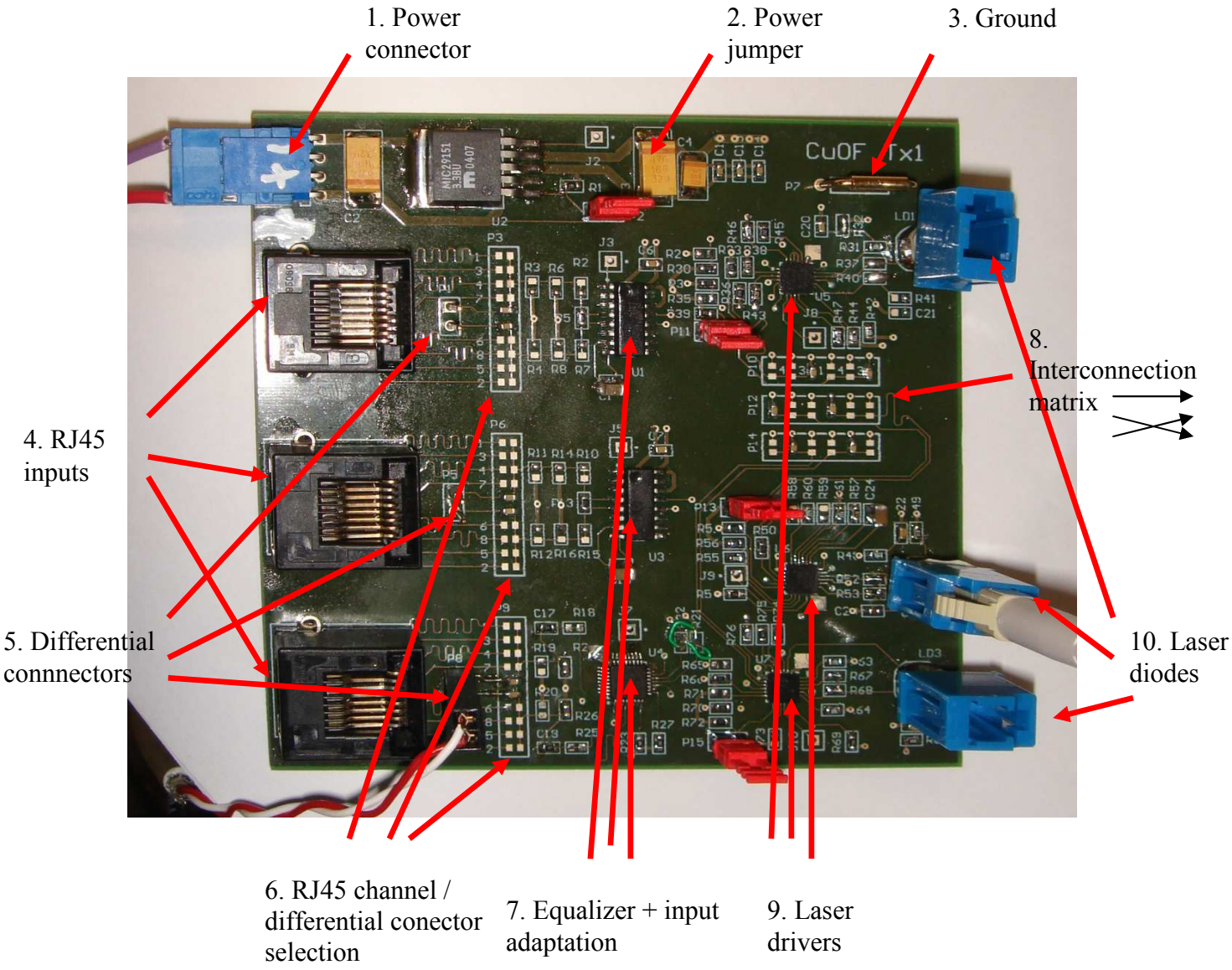
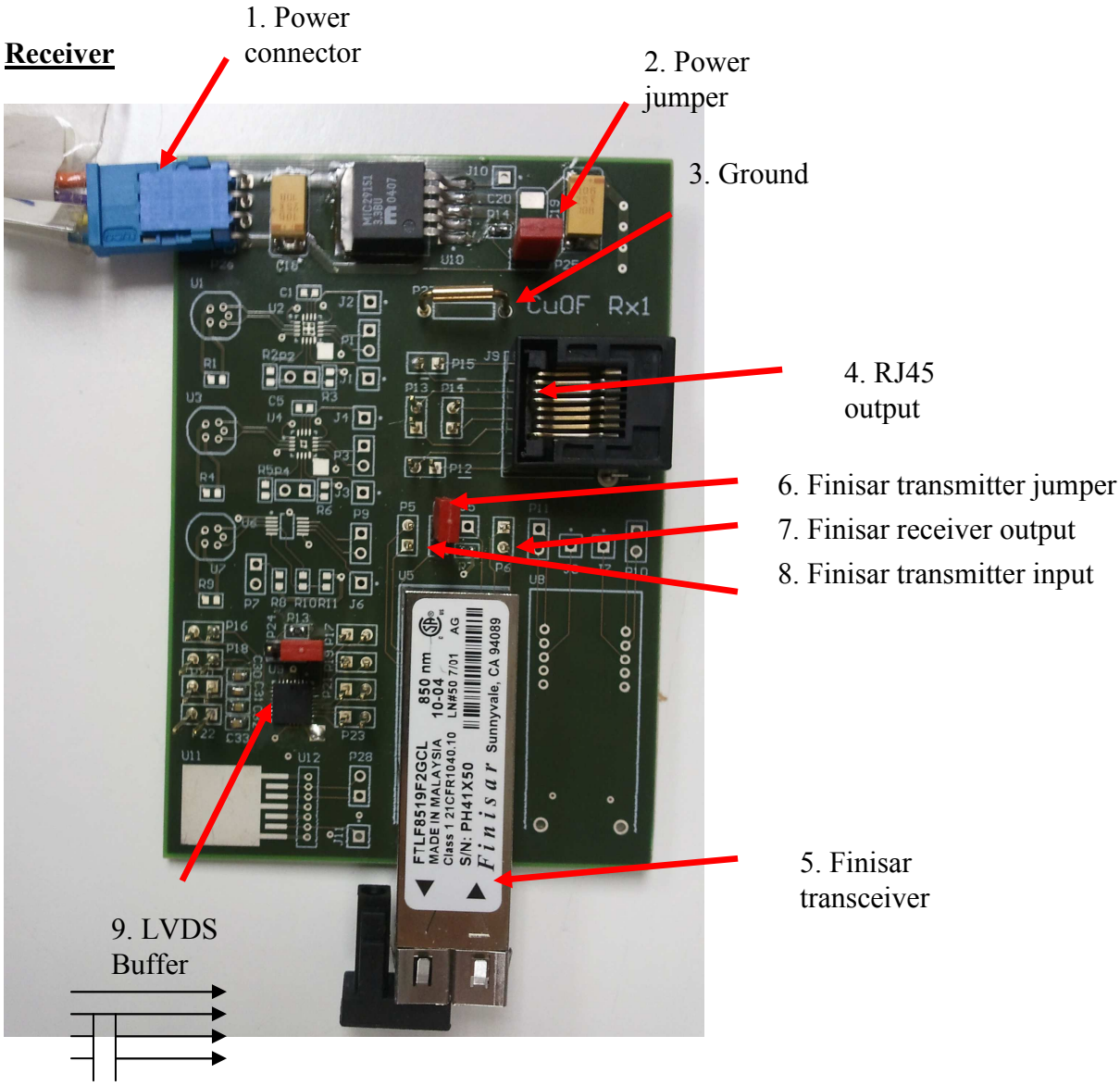
Transmitter



1. Power connector: >4 V, positive is lower conductor (red in the photo).
2. Power jumper: when connected, enables the regulator.
3. Ground, to allow for easy probing.
4. RJ45 inputs: any of the 4 pairs can be used, wiring is the standard for cat-5e cables
5. Differential connectors: a differential input from a twisted copper pair can also be directly connected. Positive conductor is the top one (square footprint).
6. Channel selection: solder two capacitors to the desired pair; right now the differential connector is selected for the three equalizers.
7. Equalizers: all of them are enabled and powered. The typical input network has been soldered in all of them. The MAX3800 needs to have its differential pair crossed.
8. Interconnection matrix. In the photo, top equalizer goes to top LD, middle equalizer goes to bottom LD and bottom equalizer goes to bottom LD.
9. Laser drivers: each jumper enables its laser driver (jumper connected = laser driver enabled).
10. Laser diodes: LC connectorized.

Receiver



1. Power connector: >4 V, positive is lower conductor
2. Power jumper: when connected, enables the regulator.
3. Ground, to allow for easy probing.
4. RJ45 otuput eases the introduction of the received signal into a cat-5e cable. Any of the 4 twisted pairs can be accessed through one of the 2-pin connectors on the left. Polarity is the same as in all the design: square footprint = positive.
5. Finisar transceiver. It has two channels, transmitter and receiver. The receiver is always enabled, and the transmitter can be enabled by connecting the jumper (6).
7. Receiver: signal is 700mVpp typical, 100 Ω differential, AC coupled
8. Transmitter input: 250 – 1200 mVpp, 100 Ω differential
9. LVDS buffer to allow level conversion, 4 channels. The two lower channels are AC coupled at input. Connecting the jumper enables the buffer.