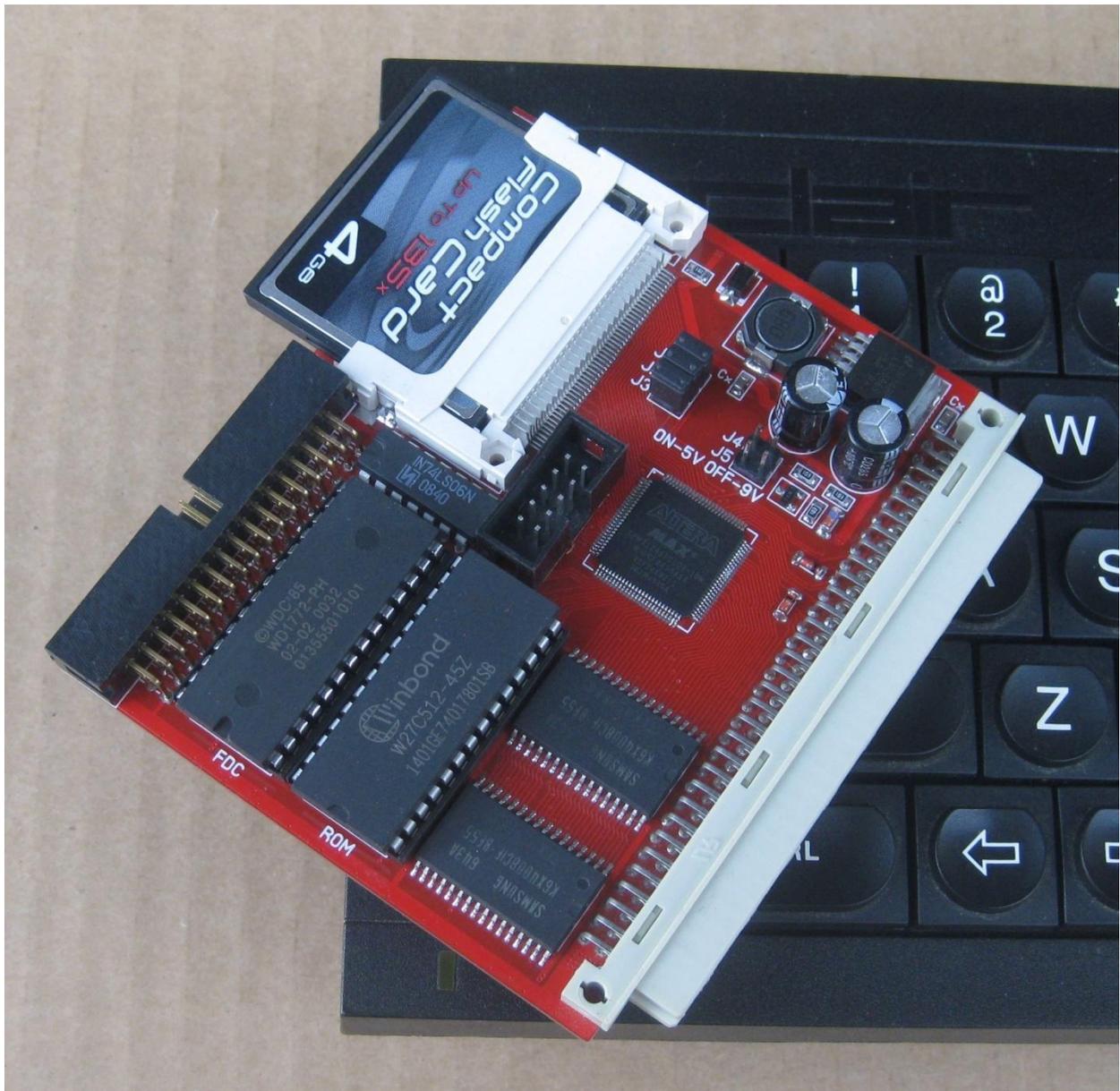


Tetroid disk interface (TDI)

QL Memory expansion, Floppy disk drive and Compact Flash card Interface

Installation and User Guide



Introduction.

TDI interface consist of three hardware parts :

1. 768 Kb memory expansion
2. Floppy disk interface, based on Miracle Trump card interface logic
3. Compact flash card interface, based on QUBIDE/QUBATA interface logic.

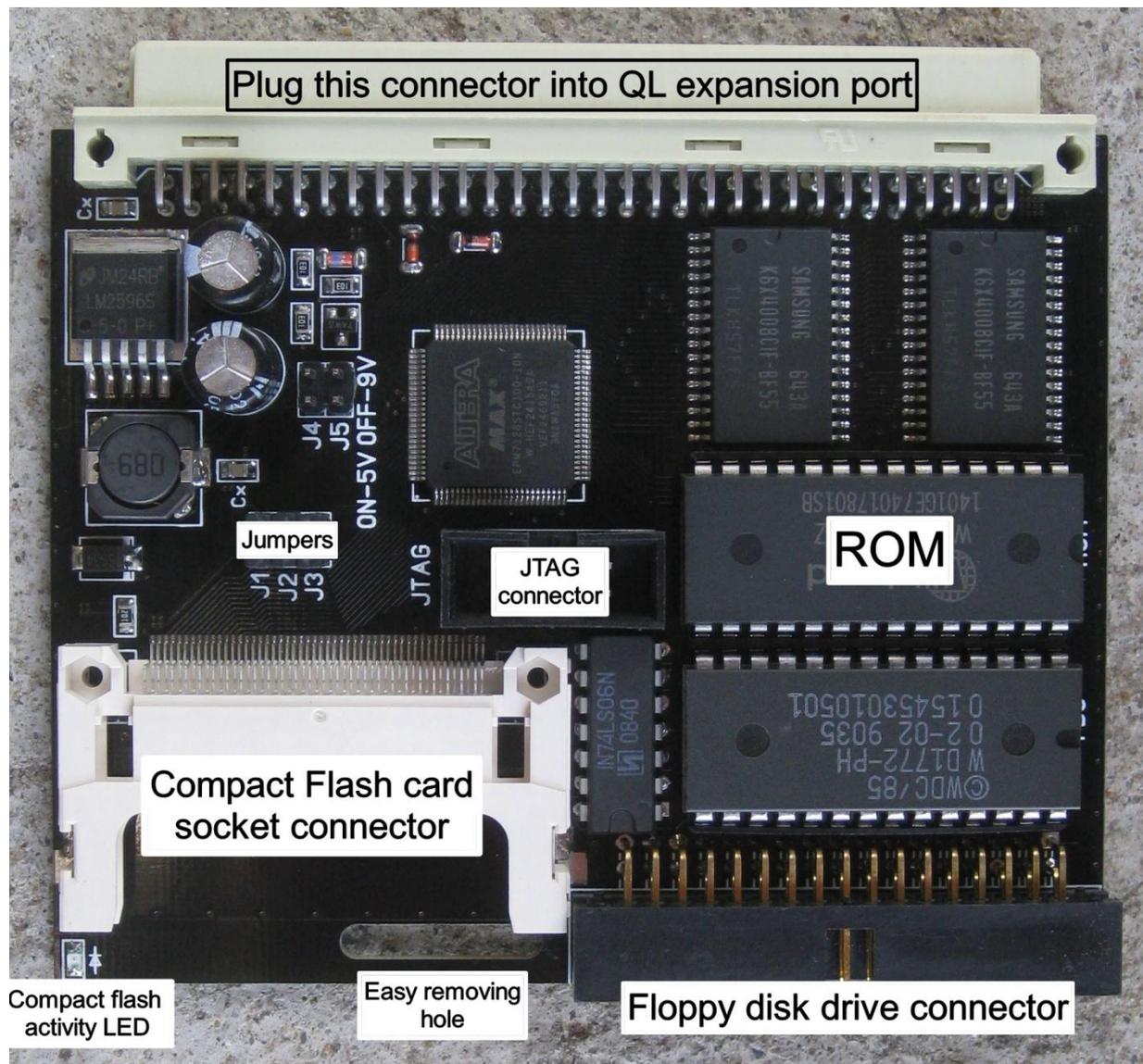
You can enable and disable any of those parts for your needs.

Power Requirement

TDI uses power from the QL. We have taken all the steps we could think of to keep the power drain to a minimum. The interface has switch-mode power supply and should represent a negligible power drain on your system.

Connectors and jumpers

TDI has four Connectors and two jumper blocks, one of which consists of 3 jumpers (J1, J2, J3 used to configure the card) the other consisting of 2 jumpers (J4 & J5). The location of these are shown below.



Configuring the card

Be sure to configure the card BEFORE you fit it into your system, because the jumpers might be inaccessible once the card is plugged in !

Jumper J1 – J3 settings :

Jumper	Open	Close
J1	768Kb memory expansion disable	768Kb memory expansion enable
J2	Floppy disk interface disable	Floppy disk interface enable
J3	QUBIDE / QUBATA interface disable	QUBIDE / QUBATA interface enable

Selecting the base address of QUBIDE / QUBATA

Because of the need to ensure compatibility of QUBIDE/QUBATA and Trump card, the QUBIDE address-space is fixed at 0C000h. This means that the external ROM port will no longer be usable and any ROM cartridge plugged-in will not be detected by the QL.

Running the board from +5v

There are two connectors (J4 & J5) which, when left open, (default setting) allow TDI to convert the 9v unregulated supply given out by the QL into +5v via Voltage Regulator on board TDI.

If you have a powered backplane, where the 9V rail is being supplied with +5v, TDI will cease to function. To get TDI functioning again you must place a jumper on both J4 & J5. This will by-pass the on board Voltage Regulator and supply the interface directly with +5v.

WARNING !!!!! If these jumpers are not removed when plugged into a standard QL arrangement there will be FATAL consequences to TDI and possibly any Compact flash card connected to TDI.

Fitting and removing the interface.

Before you do any connecting or disconnecting of your system's parts **BE SURE TO SWITCH OFF ALL THE POWER TO YOUR SYSTEM!!!**

If you have a bare QL (which is unlikely, but possible) remove the expansion port plastic cover by pulling the small protrusion under the left-hand edge of the keyboard. This should expose the QL's expansion port. Carefully plug TDI into the exposed expansion port, taking care not to apply excessive force.

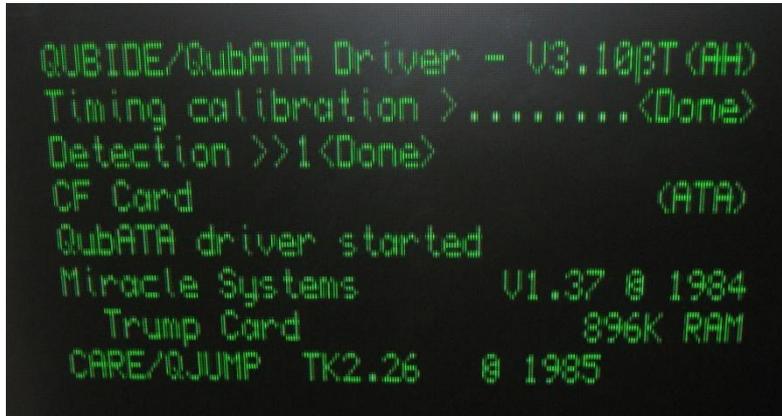
Fitting and removing the Compact flash card into the TDI

Before you fitting and removing the Compact Flash card **BE SURE TO SWITCH OFF ALL THE POWER TO YOUR SYSTEM!!!**

Getting up and running

Once you have set up TDI by jumpers you have chosen, connected TDI to your QL and connected a CF card and / or Floppy Disk Drive to TDI, you can now power up your QL and Floppy Disk Drive.

The following messages will appear on your screen:



QUBIDE / QUBATA and/or Floppy disk interface messages, depending on chosen Jumpers settings (J1 - J3).

If the expected messages do not appear, switch everything off and check the jumpers settings and the physical connection with the QL.

Using your CF card.

For using your CF card please refer to QUBIDE / QUBATA software manuals.

Using your Floppy disk drives.

For using your Floppy disk drives please refer to Miracle Trump card user software manuals.

TDI ROM mapping

TDI has 64 Kbytes of ROM, for which you can use any versions of Trump card and QUBIDE / QUBATA ROM images, according the following mapping :

Internal ROM address ranges	Image
0000h - 7FFFh	Trump card ROM
8000h - BFFFh	QUBIDE / QUBATA ROM
C000h - FFFFh	Not used

Internal ROM Address ranges - remapped to the appropriate address-space within the QL Memory map.