

## B. T-Minus $\mu$ C board

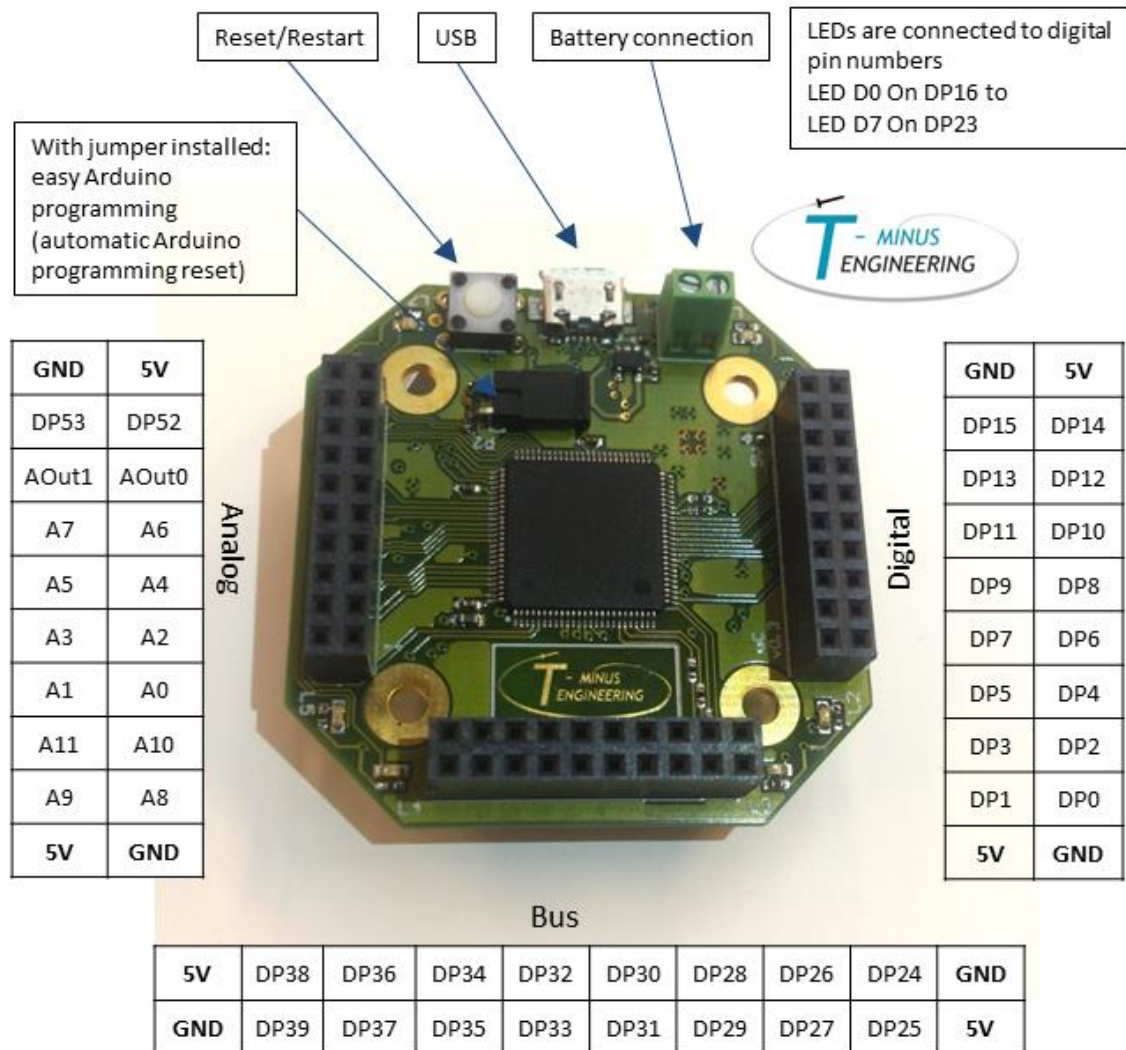


Figure 45 The T-Minus Engineering B.V.  $\mu$ C board pin layout

The T-Minus  $\mu$ C board uses an Atmega 2560 micro controller. For more information on this micro controller the datasheet can be found on the Atmel website. Table 3 shows which pin of the board is connected to what pin of the micro controller.

Table 3 Pin names and numbers of the  $\mu$ C board

| Arduino digital pin numbers | Atmel pin number | connected to connector | function         |  | Arduino digital pin numbers | Atmel pin number | connected to connector | function |
|-----------------------------|------------------|------------------------|------------------|--|-----------------------------|------------------|------------------------|----------|
| DP0                         | PH0              | Digital                | digital I/O      |  | DP 30                       | PD6              | BUS                    | T1       |
| DP 1                        | PH1              | Digital                | digital I/O      |  | DP 31                       | PB5              | BUS                    | PWM      |
| DP 2                        | PH2              | Digital                | digital I/O      |  | DP 32                       | PD1              | BUS                    | SDA      |
| DP 3                        | PH3              | Digital                | digital I/O/ PWM |  | DP 33                       | PD0              | BUS                    | SCL      |
| DP 4                        | PH4              | Digital                | digital I/O/ PWM |  | DP 34                       | PD2              | BUS                    | RXD1     |
| DP 5                        | PH5              | Digital                | digital I/O/ PWM |  | DP 35                       | PD3              | BUS                    | TXD2     |
| DP 6                        | PH6              | Digital                | digital I/O/ PWM |  | DP 36                       | PD5              | BUS                    | XCK1     |
| DP 7                        | PH7              | Digital                | digital I/O      |  | DP 37                       | PJ0              | BUS                    | RXD3     |
| DP 8                        | PL0              | Digital                | digital I/O      |  | DP 38                       | PJ1              | BUS                    | TXD3     |
| DP 9                        | PL1              | Digital                | digital I/O      |  | DP 39                       | PJ2              | BUS                    | XCK3     |
| DP 10                       | PL2              | Digital                | digital I/O      |  | DP 40                       | PF0              | Analog                 | A8       |
| DP 11                       | PL3              | Digital                | digital I/O/ PWM |  | DP 41                       | PF1              | Analog                 | A9       |
| DP 12                       | PL4              | Digital                | digital I/O/ PWM |  | DP 42                       | PF2              | Analog                 | A10      |
| DP 13                       | PL5              | Digital                | digital I/O/ PWM |  | DP 43                       | PF3              | Analog                 | A11      |
| DP 14                       | PL6              | Digital                | digital I/O      |  | DP 44                       | PK0              | Analog                 | A0       |
| DP 15                       | PL7              | Digital                | digital I/O      |  | DP 45                       | PK1              | Analog                 | A1       |
| DP 16                       | PA0              | Onboard LED            |                  |  | DP 46                       | PK2              | Analog                 | A2       |
| DP 17                       | PA1              | Onboard LED            |                  |  | DP 47                       | PK3              | Analog                 | A3       |
| DP 18                       | PA2              | Onboard LED            |                  |  | DP 48                       | PK4              | Analog                 | A4       |
| DP 19                       | PA3              | Onboard LED            |                  |  | DP 49                       | PK5              | Analog                 | A5       |
| DP 20                       | PA4              | Onboard LED            |                  |  | DP 50                       | PK6              | Analog                 | A6       |
| DP 21                       | PA5              | Onboard LED            |                  |  | DP 51                       | PK7              | Analog                 | A7       |
| DP 22                       | PA6              | Onboard LED            |                  |  | DP 52                       | PE2              | Analog                 | AIN0     |
| DP 23                       | PA7              | Onboard LED            |                  |  | DP 53                       | PE3              | Analog                 | PWM/AIN1 |
| DP 24                       | PB3              | BUS                    | MISO             |  | DP 54                       | PE0              | USB                    | TXD0     |
| DP 25                       | PB2              | BUS                    | MOSI             |  | DP 55                       | PE1              | USB                    | RXD0     |
| DP 26                       | PB1              | BUS                    | SCK              |  |                             |                  |                        |          |
| DP 27                       | PB0              | BUS                    | /SS              |  |                             |                  |                        |          |
| DP 28                       | PD7              | BUS                    | T0               |  |                             |                  |                        |          |
| DP 29                       | PB7              | BUS                    | OC0A             |  |                             |                  |                        |          |