Standard 80-pin TQFP card with PIC18F8520 MCU

MikroElektronika
DEVELOPMENT TOOLS | COMPILERS | BOOKS

EasyPIC PRO v7
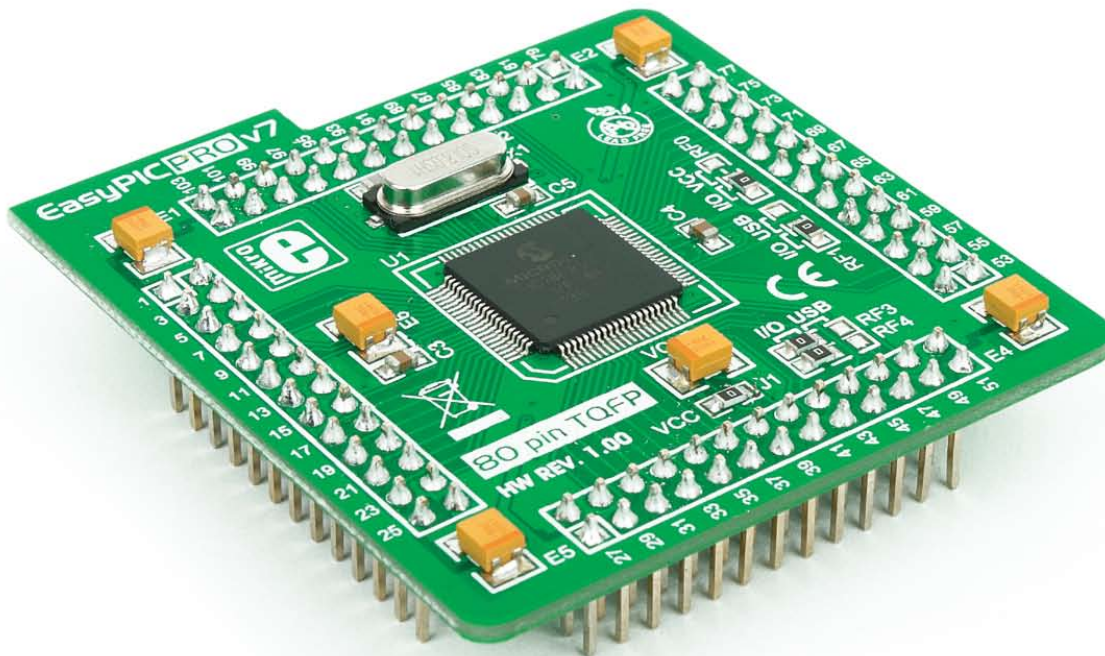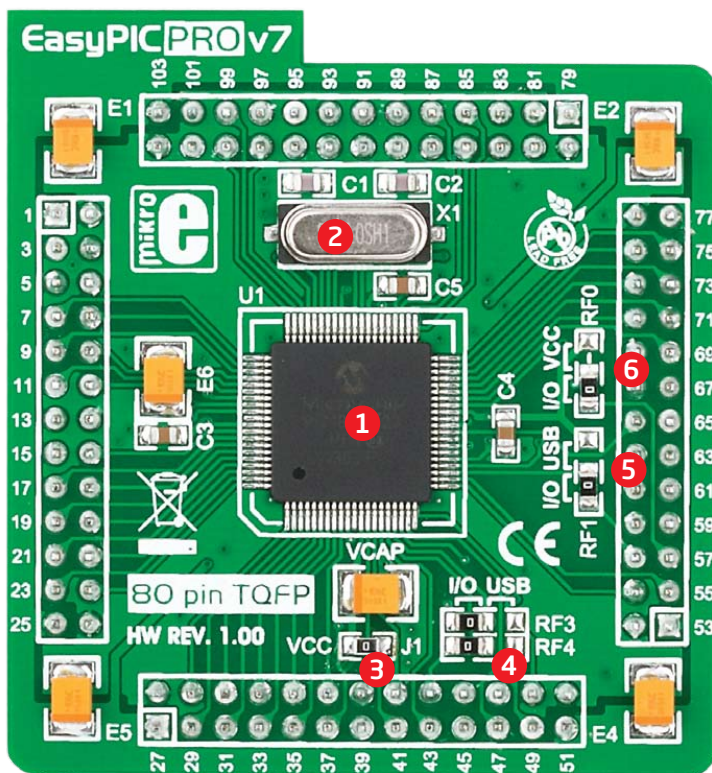
What's on Card

Figure 1: MCU card with PIC18F8520

1   **PIC18F8520 microcontroller.** Featuring nanoWatt technology, it has up to 10 MIPS operation, 128K bytes of linear program memory, 3840 bytes of linear data memory, and lot of internal modules.

2   **10MHz crystal oscillator.** We carefully chose the most convenient crystal value that provides clock frequency which can be used directly, or with the PLL multipliers and dividers to create higher MCU clock value.

3   **VCAP jumper.** Some PIC18FK and all PIC18FJ microcontrollers have cores that work on 1.8V-2.5V voltage range, and peripherals that work with 3.3V and 5V voltages. Internally, those microcontrollers have power regulators which adjust the core voltage levels. In order for those devices to have a stable operation of the core, manufacturer recommends that decoupling capacitive filters should be provided, and connected between specific microcontroller pins designated with VCAP and GND. This MCU card provides a VCAP jumper which is used for this purpose. **Jumper is placed by default.**

4   **USB communication lines.** These two jumpers, when in USB position, connect **D+** and **D-** lines of the on-board USB connector with **RF3** and **RF4** microcontroller pins. Since PIC18F8520 doesn't support USB, **jumpers are in I/O position**.

5   **V$_{USB}$ line jumper**. For PIC18F8xJ5x devices, this jumper should be connected to VCC for enabling internal USB controller. Since PIC18F8520 doesn't support USB, **this jumper is in I/O position**.

6   **ENVREG selection jumper.** PIC18FJ and PIC18FK microcontrollers are using internal voltage regulator which is enabled by placing this jumper in VCC position. **For PIC18F8520 this jumper is in I/O position**.
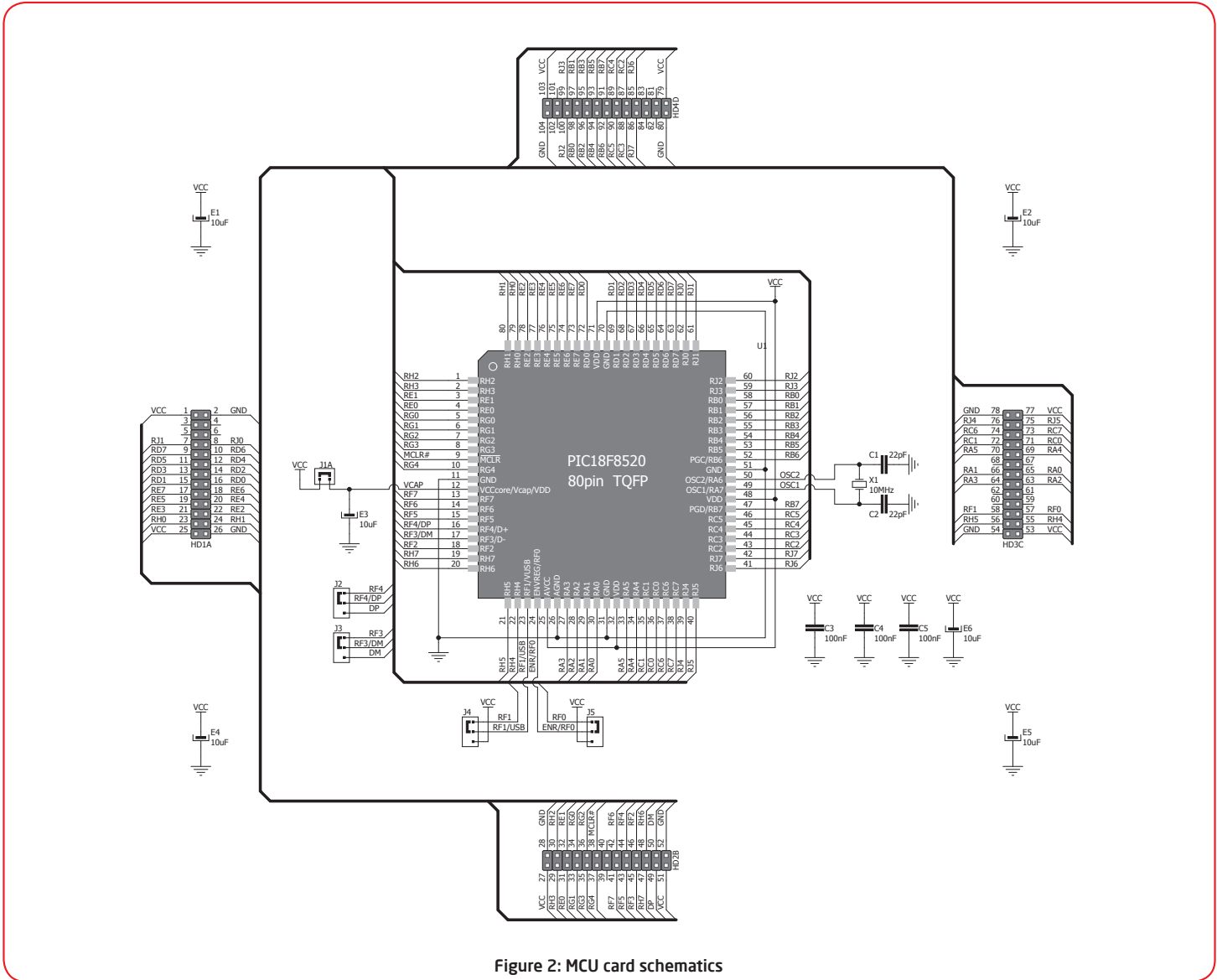
EasyPIC PRO^{v7}

Figure 2: MCU card schematics
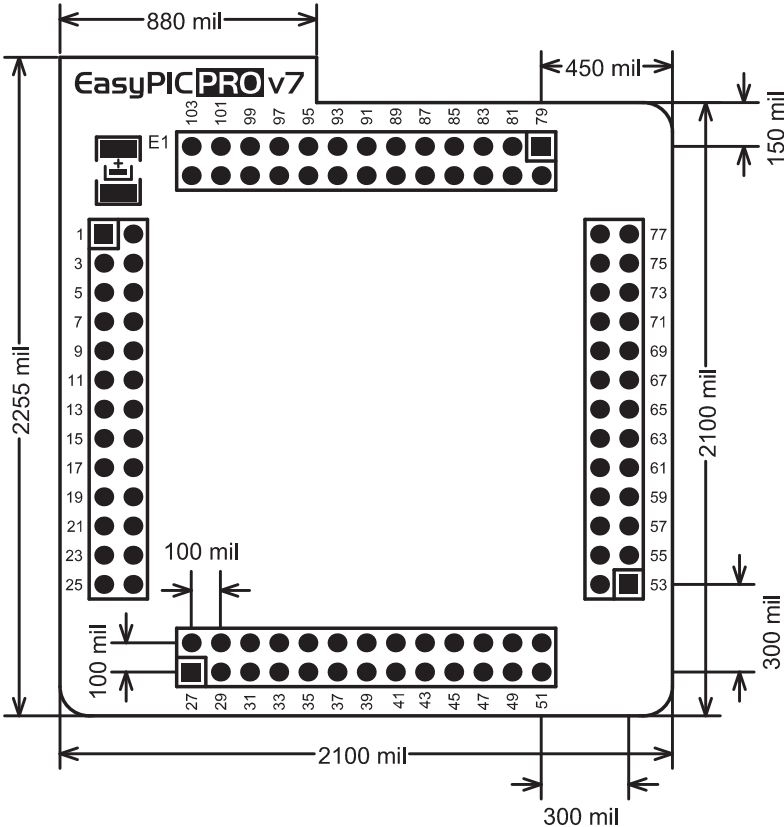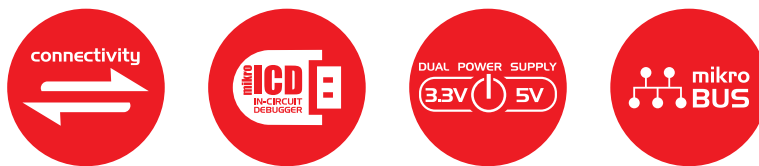
EasyPIC PRO v7

Card dimensions

Figure 3: MCU card dimensions. Values are in mils.

EasyPIC PRO v7

If you want to learn more about our products, please visit our website at www.mikroe.com
If you are experiencing some problems with any of our products or just need additional
information, please place your ticket at www.mikroe.com/esupport
If you have any questions, comments or business proposals,
do not hesitate to contact us at office@mikroe.com