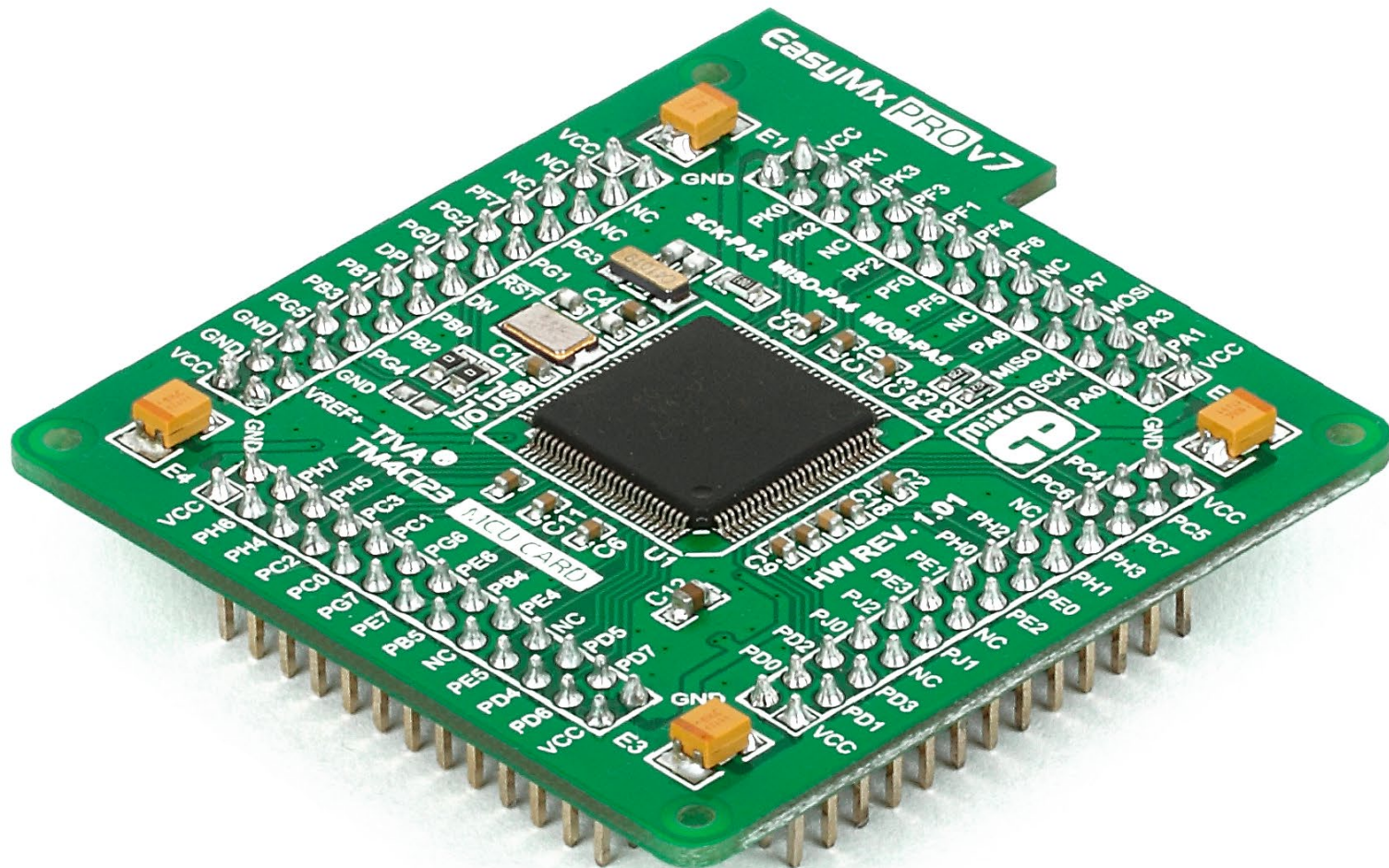


Standard 100-pin MCU card with **TM4C123GH6PZ**



Card information

The **MCU card** is shown on **Figure 1**. It contains **TM4C123GH6PZ** microcontroller which is loaded with on-chip modules and is a great choice for both beginners and professionals. After testing and building the final program, this card can also be taken out of the board socket and used in your final device.

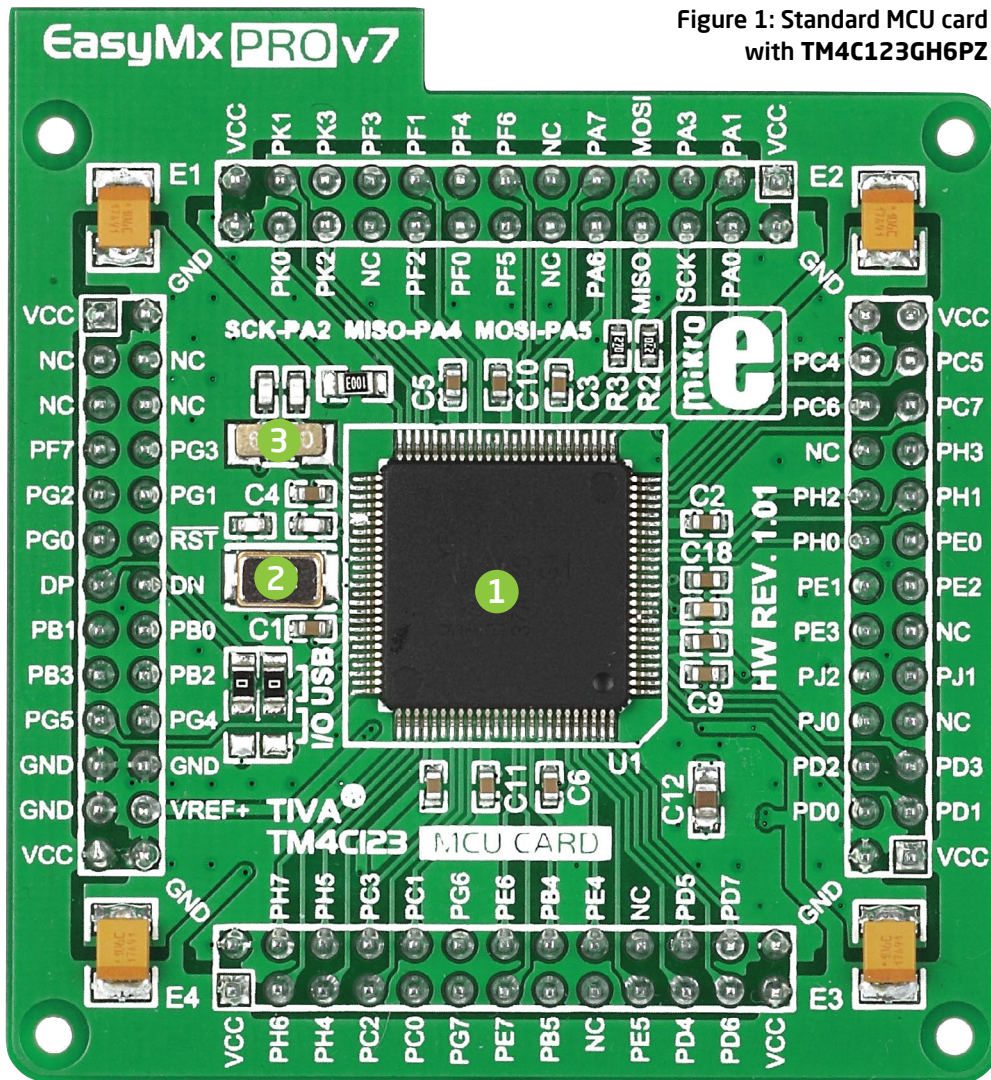


Figure 1: Standard MCU card with TM4C123GH6PZ

- 1 **TM4C123GH6PZ** belongs to the ARM® Cortex™-M4 family. It operates at **80MHz**, has **256 KB** of Flash memory, **32 KB** of single-cycle System SRAM, **USB 2.0** (OTG, Host, Device), Up to 69 General purpose **I/O pins**, 6x16/32-bit **timers**, 2x12-bit **A/D** (22 channels), a 12-bit **D/A**, 8x**UARTs**, internal Real time clock (**RTC**), 4x**I2C**, 4x**SPI** and 2x**CAN** controllers. It has Serial wire debug (SWD) and JTAG interfaces for programming and debugging.
- 2 **8MHz crystal oscillator**. We carefully chose the most convenient crystal value that provides clock frequency which can be used directly, or with the PLL multipliers to create higher MCU clock value.
- 3 **32.768-kHz external crystal oscillator** which provides external clock for the internal hibernation module.

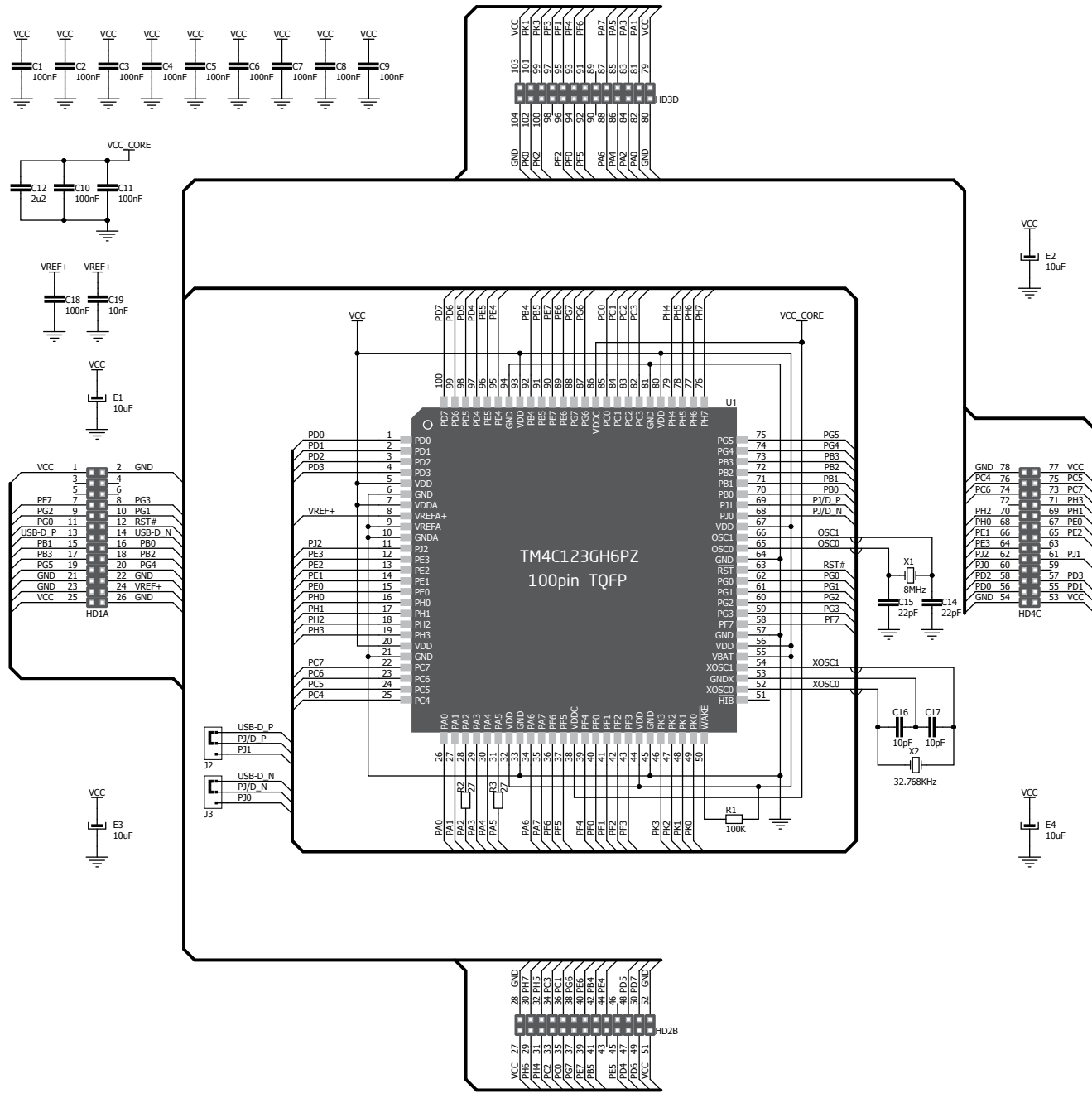


Figure 2: MCU card schematics

Card dimensions

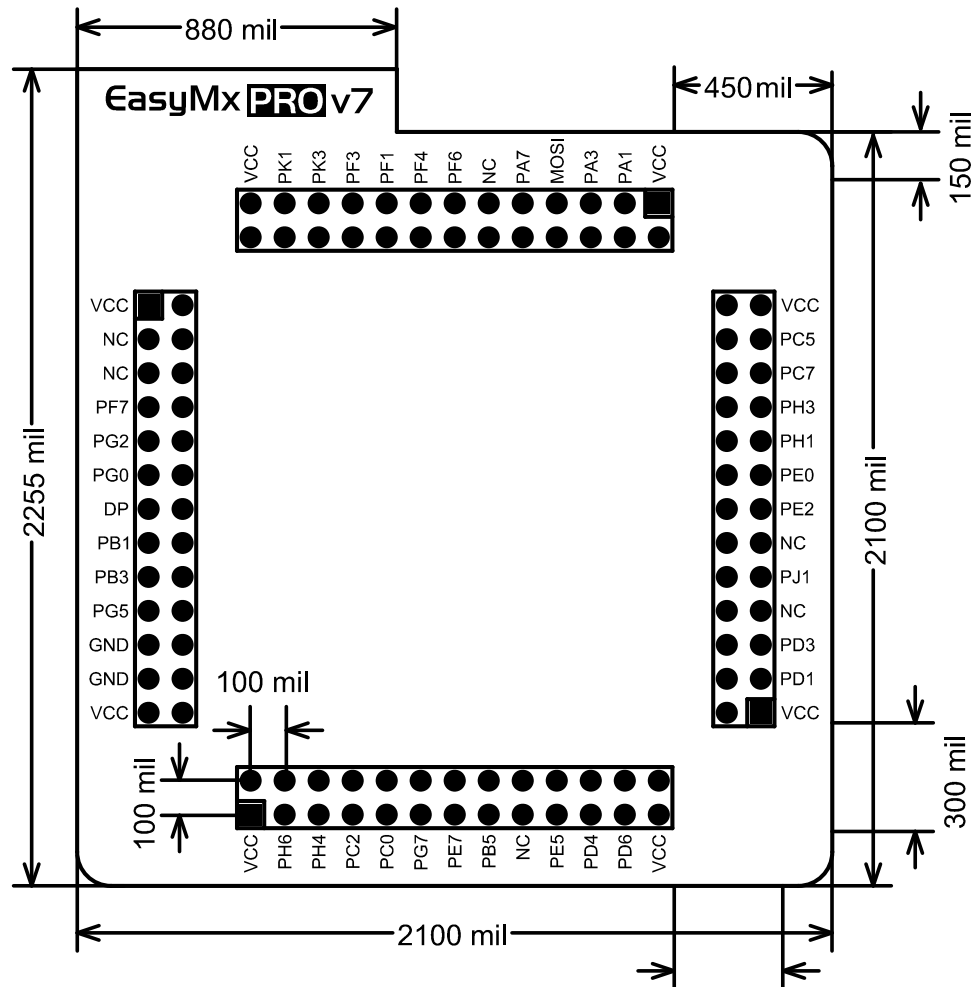


Figure 3: MCU card dimensions. Values are in mils.