



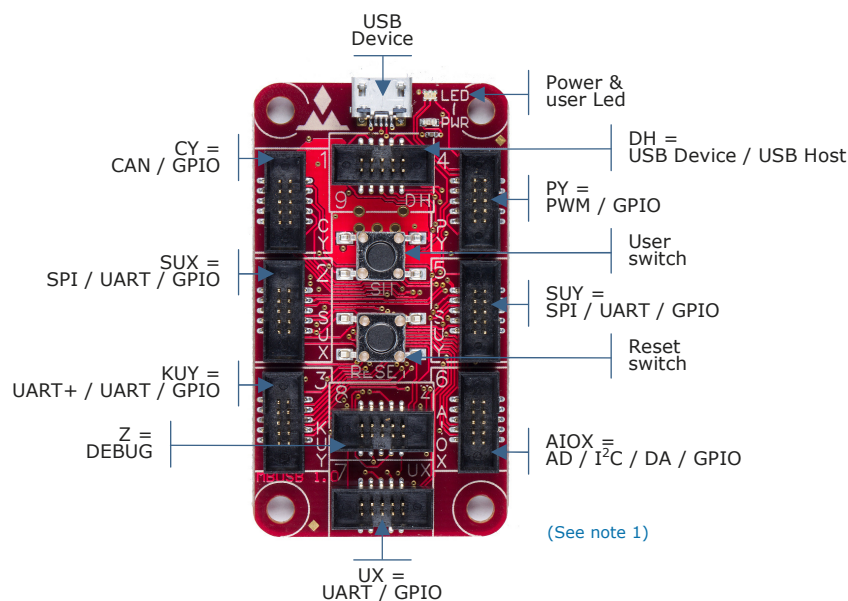
Mountaineer USB Mainboard

.NET Gadgeteer compatible platform

Technical specifications

Features

- o Smallest Gadgeteer mainboard on the market
- o 9 Gadgeteer sockets for: GPIO (34x), CAN, SPI (2x), I²C, UART (4x), AD (3x), DA, PWM (3x), USB Device/Host (independent of the second USB port, see below)
- o Integrated micro USB connector (no separate USB client module needed)
- o 2 pushbutton switches (Reset and User)
- o Embedded 8 MB Flash memory (SPI)
- o Power LED (green) and RGB User LED
- o 100% open source hardware and software
- o Serial Wire Debug (SWD) & boot mode selection on the manufacturer-specific connector (Z)
- o Low power modes



Microcontroller & memory

- o Processor STM32F407
- o Operating frequency: 168 MHz/210 DMIPS
- o Flash: 1 MB (on chip) + 8 MB (on board)
- o RAM: 192 KB (on chip)

Platform & environment

- o Microsoft .NET Micro Framework 4.2
- o Microsoft Visual Studio 2010 or Visual Studio Express 2010

Electrical specifications

- o 5V supply from USB, internally regulated to 3.3 V
- o Current on any IO pin: ±25 mA (total 120 mA max.)
- o Standalone power consumption (168 MHz):
 - Active mode: 70 mA
 - Sleep mode: 26 mA
 - Deep sleep: 2 mA
- o 5V-tolerant IO's except AD4 and AD5 (3.6 V max.)

Board size

- o 57 x 32 mm (2.24" x 1.26")

Board designation

- o USB Mainboard

Environmental directives & temperature range

- o RoHS compliant
- o Lead-free
- o Operating temperature: 0-70°C (32-158°F)

Links

Mountaineer

- o <http://www.mountaineer.org>
- o <http://www.mountaineer-boards.com>

Gadgeteer

- o <http://www.netmf.com/gadgeteer>
- o <http://gadgeteer.codeplex.com>

Note 1: There is currently no NETMF support for the sockets "C", "H" and "O".