QUAIL

click™ boards meet .NET Micro framework
What’s on board

1. RTC battery connector
2. mikroBUS™ sockets 1, 2, 3 and 4
3. 3.3V voltage regulator
4. 100pin STM32F427 MCU
5. 32.768 KHz crystal oscillator
6. USB A connector
7. 12 MHz crystal oscillator
8. Flash memory [64 Mbit]
9. Connecting terminals
10. Additional indication LEDs
11. USB Mini-B connector
12. Power indication LED
13. External power supply [+20V max]
14. 5V voltage regulator
15. BOOT button
16. RESET button

System specification

- **power supply**: via USB cable (5V DC)
- **board dimensions**: 72 x 97 mm (2.83 x 3.82 inch)
- **weight**: ≈ 50g
- **mikroBUS™**: 4 sockets available
What is the Quail board?

Quail is a hardware development board equipped with four mikroBUS™ sockets and a 32-bit ARM® Cortex®-M4 STM32 microcontroller. The edges of the board are lined with screw terminals and USB ports for additional connectivity.

What’s it for?

Quail offers a simplified way of developing hardware prototypes with C# managed code. It brings together MikroElektronika click™ boards and Microsoft’s .NET Micro Framework for embedded devices (NETMF). MikroElektronika is constantly expanding the range of click™ boards to include all sorts of sensors, tranceivers, displays... and the MikroBUS.NET team is supporting them with high-quality drivers to make them compatible with NETMF and the Microsoft Visual Studio IDE.

1. Install the required software

To start using Quail, download the following three pieces of software:

The Microsoft .NET Micro Framework
Open source platform that enables you to write managed C# code for embedded applications.
www.netmf.com

Visual Studio Community 2013
A full-featured free cross-platform IDE from Microsoft.
www.visualstudio.com

MBN Core Assembly
www.mikrobusnet.org/downloads-2
2. Get the click™ boards and corresponding drivers

Buzzer, Relays, WiFi, RFID, OLED, Speech recognition - you name it, we got it! There are more than a hundred click™ boards available. About 50 are supported so far with mikroBUS.NET drivers. More drivers are coming up all the time but if you’re in a hurry instructions for building your own drivers are also available.

All available click™ boards:

🌐 www.mikroe.com/click

MikroBUS.NET click™ board drivers:

🌐 www.mikrobusnet.org/downloads-2

3. Building your first application

After you’re done setting up the development environment with steps 1 and 2, you are ready to start building your first application.

A detailed walkthrough on how to start a project in Visual Studio, include the necessary drivers and reference the needed assembies in your source code is available at:

🌐 www.mikrobusnet.org/getting-started/writing-an-application
If you want to learn more about our products, please visit our web site 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/support.
If you have any questions, comments or business proposals, do not hesitate to contact us at office@mikroe.com.