ACN PROG

USB programmer for ARM based microcontrollers using Tag-Connect

MA:DE IN
GERMANY

aconno™

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ACN PROG

The aconno ACN PROG USB dongle is the easiest way to program our ACN52832 modules. It features drag & drop programming, easy to use TAG-Connect connector and compatibility with all famous development suites.

Product Overview:

aconno's ACN PROG is making the programming process simple, efficient, and fast.

It's a compact programmer for our ACN52832 (future compatibility for ACN52840) BLE module and any ARM Cortex based microcontroller featuring TAG-Connect. To make the programming process even more comfortable, the ACN PROG will be recognized as an USB-Storage device after plugged into your computer. Simply drag your compiled file onto the ACN PROG's storage device and the programming process starts … easy, fast and without annoying driver issues.

Based on the open source & open hardware project CMSIS-DAP, the ACN PROG offers a vendor independent CoreSight debug interface for ARM 32-bit Cortex microcontrollers over the JTAG / SWD interface.
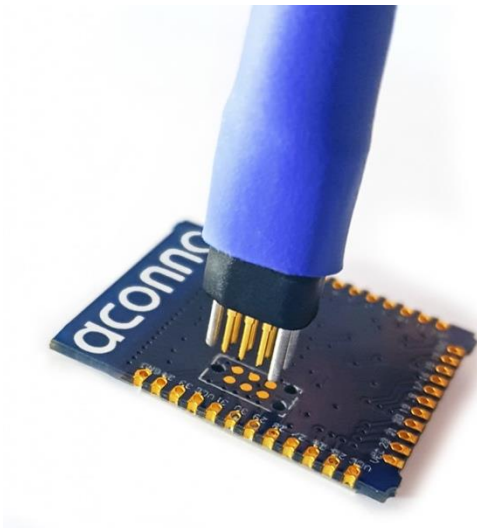
It also allows you to use debugging functions like stepping, breakpoints, watch points to get rid of bugs in your firmware faster, smarter and simpler than ever

Key Features:

- USB interface to standard ARM® CoreSight™ Serial Wire Debug Port (SW-DP)
- Powerful NXP microcontroller with 48 MHz clock rate and low power consumption
- Full debug support for ARM® Cortex™ based microcontrollers
- Programming through drag & drop or directly through your programming suite
- No external power supply needed for the programming target, since the programmer offers 3.3V / 50mA power source
- TAG-Connect connector
- Firmware upgradeable
- Available in several funky neon colors
- Quality Made in Germany

Compatible Development environments:

- KEIL uVision
- OpenOCD
- GNU GDB
- iAR
- mbed.org online compiler

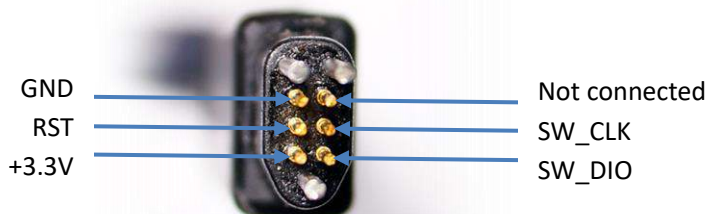# aconno ACN PROG

Firmware Upgrade procedure (Windows/Linux):

1 Go to the aconno website and download the actual ACN PROG firmware.
2 Place a magnet onto the top side (were the "aconno" label is located) of the ACN PROG. The location of the magnet should be on top of the two "n" within the "aconno" label.
3 Plug the ACN PROG with the magnet on it into an USB Port of an PC.
4 A new device called "CRP DISABLD" should appear. (If it doesn't show up, flip the magnet and try again. This can happen by the different polarity of certain magnets ☺)
5 Remove the magnet and open the device "CRP DISABLED" with a file manager
6 Delete the file "firmware.bin"
7 Installation of firmware:
   a. Windows:
       - Copy the firmware you just downloaded onto the device. It should be named like "ACNPROG_FW_VXXX.bin" were "XXX" stands for the firmware version
   b. Linux:
       - Open the terminal
       - Enter the following command: "sudo dd if=ACNPROG_FW_VXXX.bin of=/dev/disk/by-label/CRP\\x20DISABLD bs=512 seek=4 && sync"
       - Close the terminal when the command executes
8 When the copy process is finished, disconnect the ACN PROG from the PC
9 Reconnect the ACN PROG and enjoy your upgraded programmer 😊

Firmware Upgrade procedure (macOS):

1 Follow Windows/Linux Steps 1-4
2 Remove the magnet
3 Open the terminal
4 Execute the following commands: "rm /Volumes/CRP\ DISABLD/* && cp ACNPROG_FW_VXXX.bin /Volumes/CRP\ DISABLD/ && sync"
5 Follow Windows/Linux Steps 8-9

Tag-Connect Pinout:
(as seen on the connector pins)

GND	Not connected
RST	SW_CLK
+3.3V	SW_DIO

Let's do I(o)T together!

www.aconno.de
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