Quick Start Guide Toolchain Setup

```
for MIOS application development on Windows
```

Most users just want to download the source, configure the code for their hardware, and compile it. If that's you, and you're familiar with Windows, the Quick Start Guide will get you up and running, quick and easy. If you have any problems, or want to know all the gory step-by-step details, you may prefer the Detailed Setup Guides

Go! :)

Install Tools

Small Device C Compiler (SDCC)

You only need SDCC if you are compiling a C application. For ASM-only applications you can skip this.

- Download SDCC 2.80 Installer
- Install using defaults

MinGW make

- Download MinGW 5.1.4 Installer
- Install, taking the 'Download and Install' option, Agree to the license, and select the 'Candidate' package.
- When you are prompted to 'Choose Components':
  - Tick the box at the bottom labelled "MinGW make".
  - Un tick the box at the top labelled "MinGW Base Tools".

MSYS

- Download MSYS 1.0.10 Installer
- Install using the defaults.
  - When the install is almost complete, you will see a DOS console window open, and you will be prompted: "Do you wish to continue with the post install? [yn]". Type 'n' (without the quotes) and hit Enter.

Overwriting make.exe of MSYS

- When MSYS install is complete, Click 'Start... Run'.
- Paste in the following command. Don't type it by hand, just copy and paste it:

```
cmd.exe /k "copy c:\MinGW\bin\mingw32-make.exe c:\msys\1.0\bin\make.exe /y"
```

- Click 'OK'.

GNU PIC Utilities (GPUtils)

- Download gputils-win32 Installer
- Install the complete application using the 'Full' option.

You have now finished installing the required tools for building a MIOS application. Now let's go ahead and do that!

Build Application

One-time Build

If you made it this far, you've actually done enough. You can code C or ASM apps in wordpad.exe (or another text editor, *Please note that notepad.exe is not suitable for editing MIOS apps*), and run 'make' to create your app.
The following instructions will allow you to quickly build an application one time without making permanent changes to your system. If you just want to build the app once, this is the easiest way.

To build your application:

- Click 'Start... Run'.
- Type in “cmd” (without the quotes)
- Click 'OK'.
- Type the following:

On the next line, replace <your application directory> *with the location where you have unzipped the files you downloaded from ucapps.de. For example C:\MIOS\midibox_sid_v2_0_rc18>. Otherwise, it should be* exactly *the same as you see here.*

```
cd c:\<your application directory>
SET
PATH=C:\MSYS\1.0\bin;C:\MinGW\bin;%programfiles%\gputils\bin;%programfiles%\S
DCC\bin;%PATH%
make
```

Your .hex file(s) will be ready.

PATH Environment Variables

If you build lots of apps, you may not want to have to type that long “SET PATH=BLAH BLAH BLAH”, every time you build your app. Fortunately, you can make that setting permanent, so that now you only have to do the following:

```
cd c:\<your application directory>
make
```

If you would like to do this, you can find instructions in the Detailed Setup Guide. Those instructions are far more detailed than these, but don't be scared by all that, if you follow the instructions you should be fine.

MIOS Studio

You should visit The MIOS Studio Page for instructions on how to install MIOS Studio to upload the app to your midibox.

Quick Start Guide Complete

If you'd like to have a more advanced tool set in your hands, please read on to install and configure an IDE. Currently, there is documentation for:
Code::Blocks - An open-source tool for developing C apps (Recommended for AC-Sim users)
NotePad++ - An open-source tool suitable for either ASM or C apps, or those that mix both.
You can find more info at Setup & Install Section of the Application Development page.
You may also like to see the documents for the additional tools:
TortoiseSVN
MIOS Studio

From:
https://www.midibox.org/dokuwiki/ - **MIDIbox**

Permanent link:
https://www.midibox.org/dokuwiki/doku.php?id=windows_toolchain_quickstart&rev=1217380110

Last update: **2009/11/12 20:31**