Texas Instruments Code Composer Studio Installation

This document will outline the steps required to install Code Composer Studio on your Windows 10 home machine. The macOS and Linux versions are available but presently don't support the AM3358 device.

CCS install

First, **download** the version 9.0.1 from: https://software-dl.ti.com/ccs/esd/documents/ccs_downloads.html note: https://www.ti.com/tool/CCSTUDIO page contains user guides and application notes for Code Composer Studio. The documentation may be useful in helping you combat any issues you may obtain while using Code Composer Studio as always Google and Stack Overflow are your friends.

Once again there are documentation links to help you install Code composer Studio including full installation instructions on this page under Release information. They may also be found at the following link: https://software-dl.ti.com/ccs/esd/documents/users_guide/ccs_installation.html

Once the software has downloaded, you can follow the installation instructions provided by TI with the following changes:

When asked to *Select Components*, add the *Sitara AMx Processors* before **clicking** *next*.
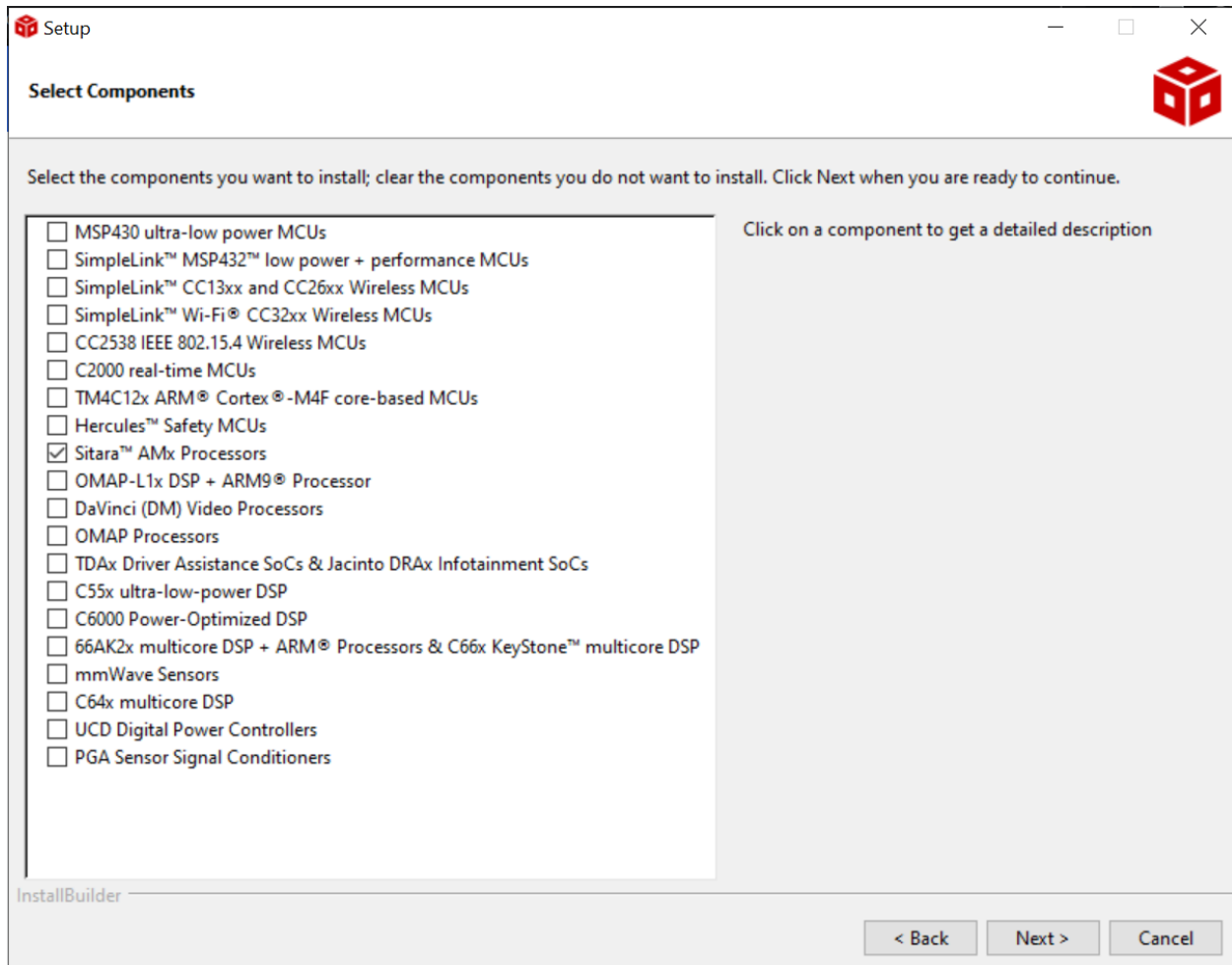
When asked to *Install debug probes*, **select** the *SEGGER J-Link*.
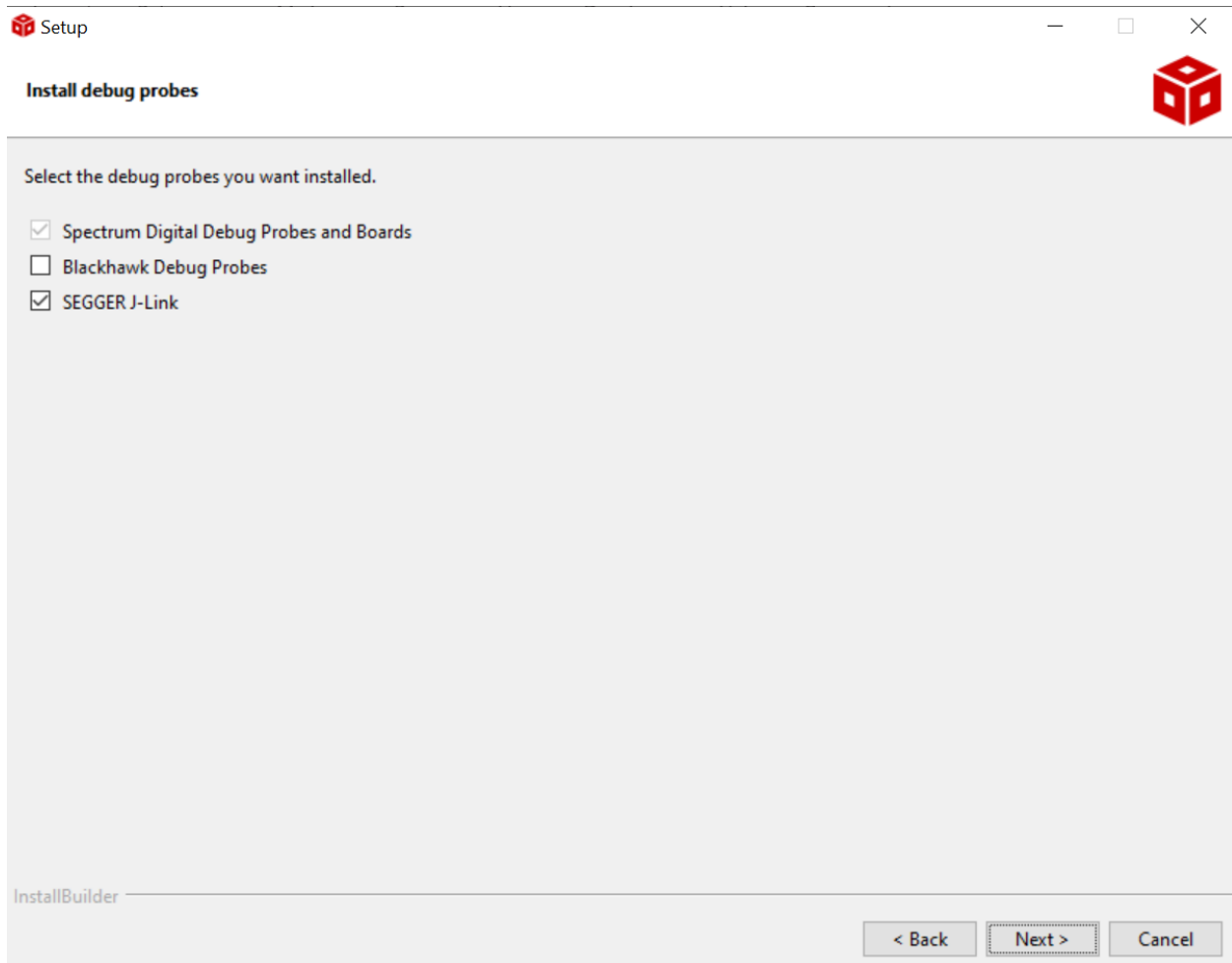
The installation should continue as per the TI guide after this. The installation takes around 30 minutes to complete, including downloading on a reasonable internet connection.
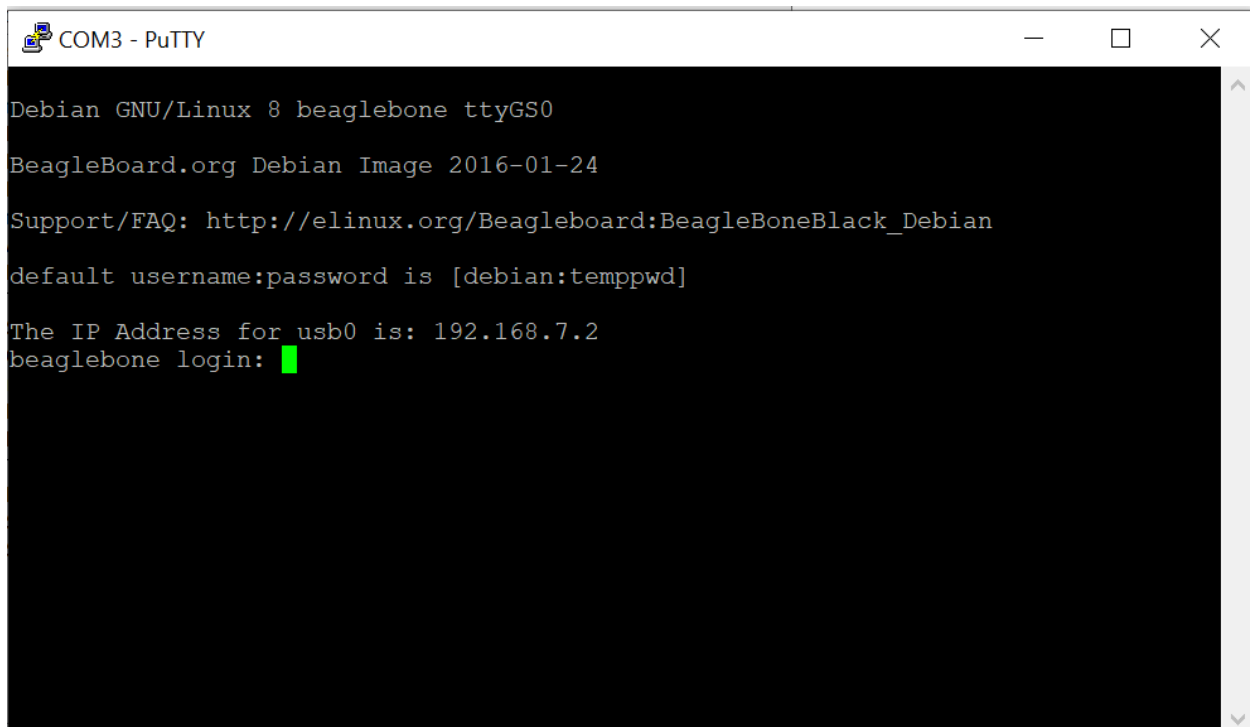
Linaro Cross-Compiler installation

Copy the cross compiler tarball to the installation directory of code composer studio. The default directory is C:\ti\ccs<version>\ccs\tools\compiler where <version> is the version number of code composer studio. This extraction appears to require elevated privileges to create symbolic links, I'm not sure? It is extremely important that the cross compiler software version matches the firmware version on the beaglebone devices. If the device and software have different versions they will not talk to each other. We are currently as of September 2020 using version 5.3-2016.2 of the cross-compiler toolchain which is available from https://releases.linaro.org/components/toolchain/binaries/5.3-2016.02/arm-linux-gnueabihf/gcc-linaro-5.3-2016.02-i686-mingw32_arm-linux-gnueabihf.tar.xz
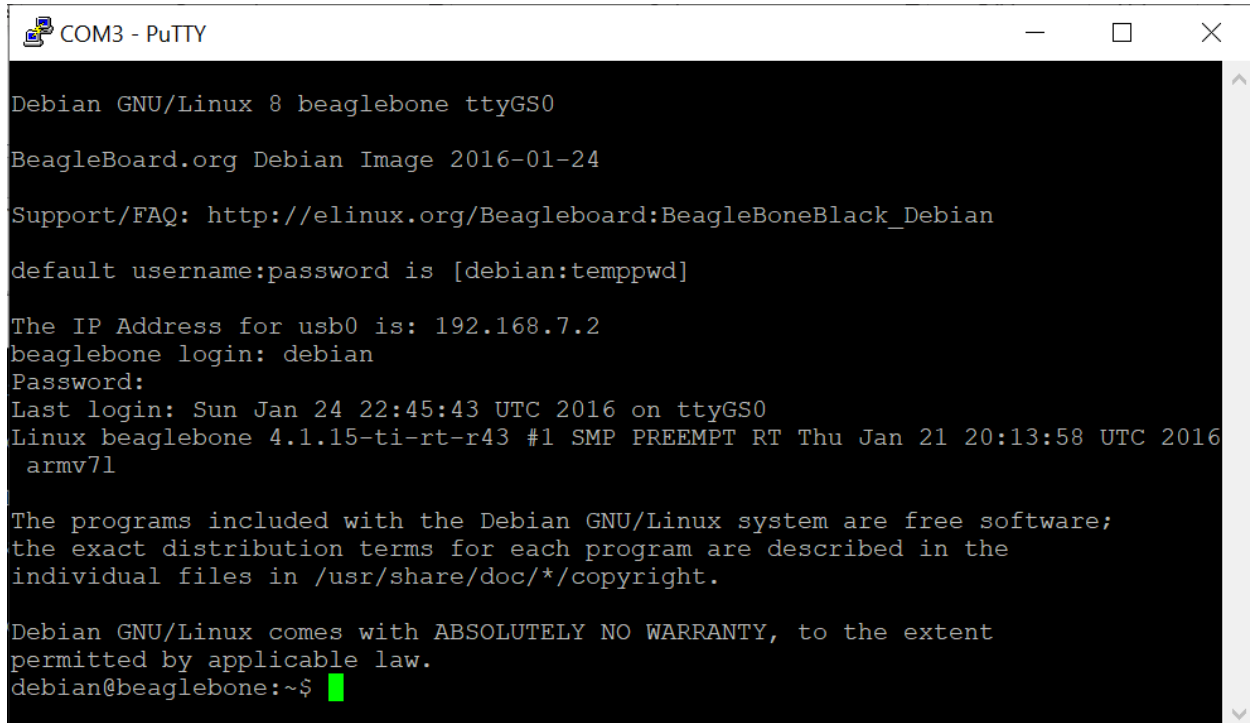
To check the firmware on the beaglebone we can connect to it over serial. With the Mini-USB plug connected. Open putty and connect to the com port of the beaglebone.
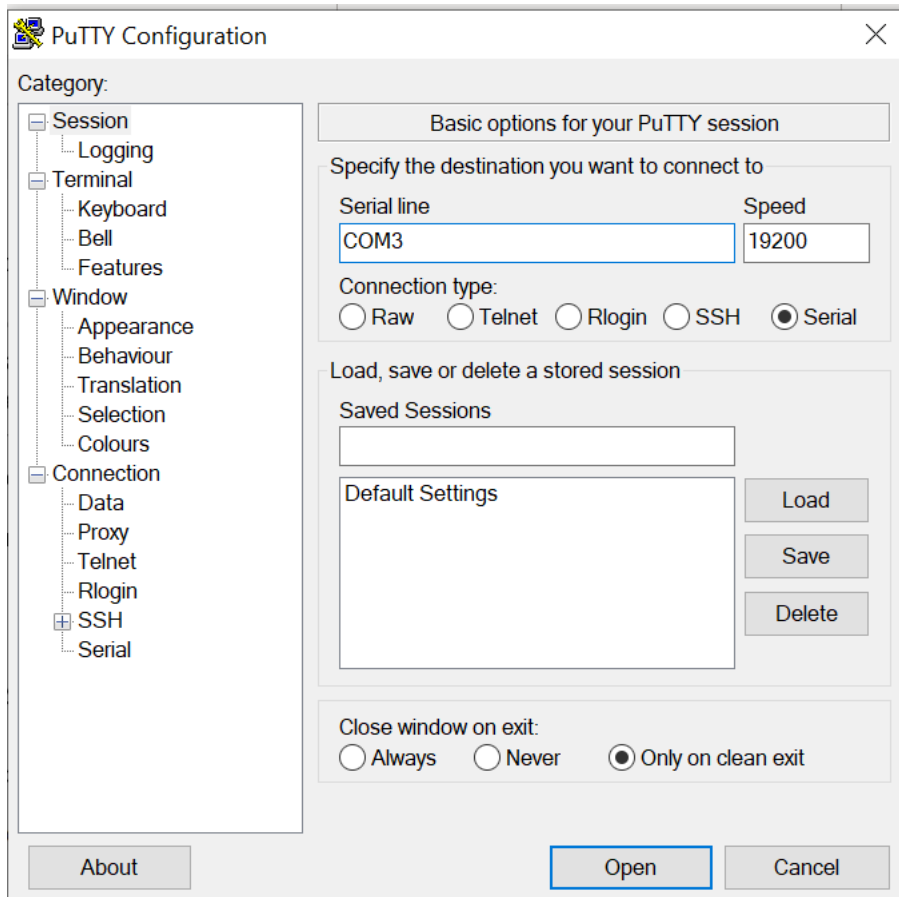
You will be presented with a login screen. This contains the image date.


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Debian GNU/Linux 8 beaglebone ttyGS0

BeagleBoard.org Debian Image 2016-01-24

Support/FAQ: http://elinux.org/Beagleboard:BeagleBoneBlack_Debian

default username:password is [debian:temppwd]

The IP Address for usb0 is: 192.168.7.2
beaglebone login:
```

Logging in with the default password provided allows us to see the version of beaglebone installed on the system.

This display shows the version of the linux kernel running on the beaglebone, it should match the version of the cross compiler you're using to avoid issues? (older version could be fine? Newer version not fine?)

Remote NDIS driver installation

Install the RNDIS device driver within Windows. With the beaglebone plugged in, go to Device Manager. After a moment a device with no driver will appear.
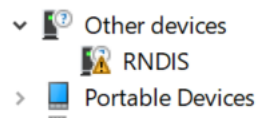
We need to install the default Microsoft RNDIS driver. Right click on RNDIS and click update driver.
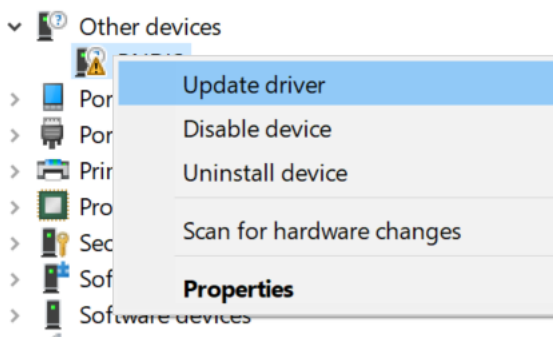
Searching online for drivers is not necessary as it should already exist so we just need to manually install it.
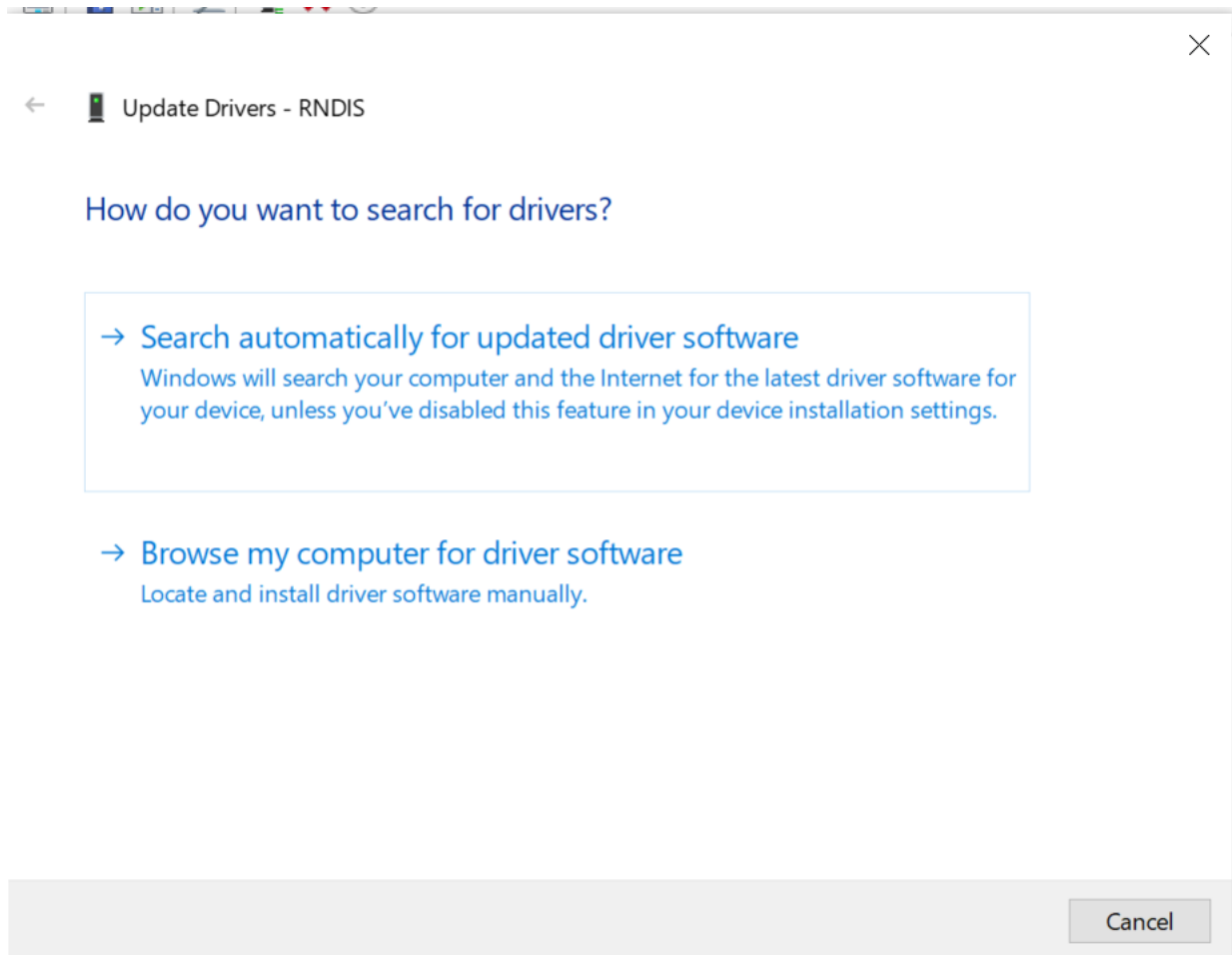
Click browse my computer for driver software.
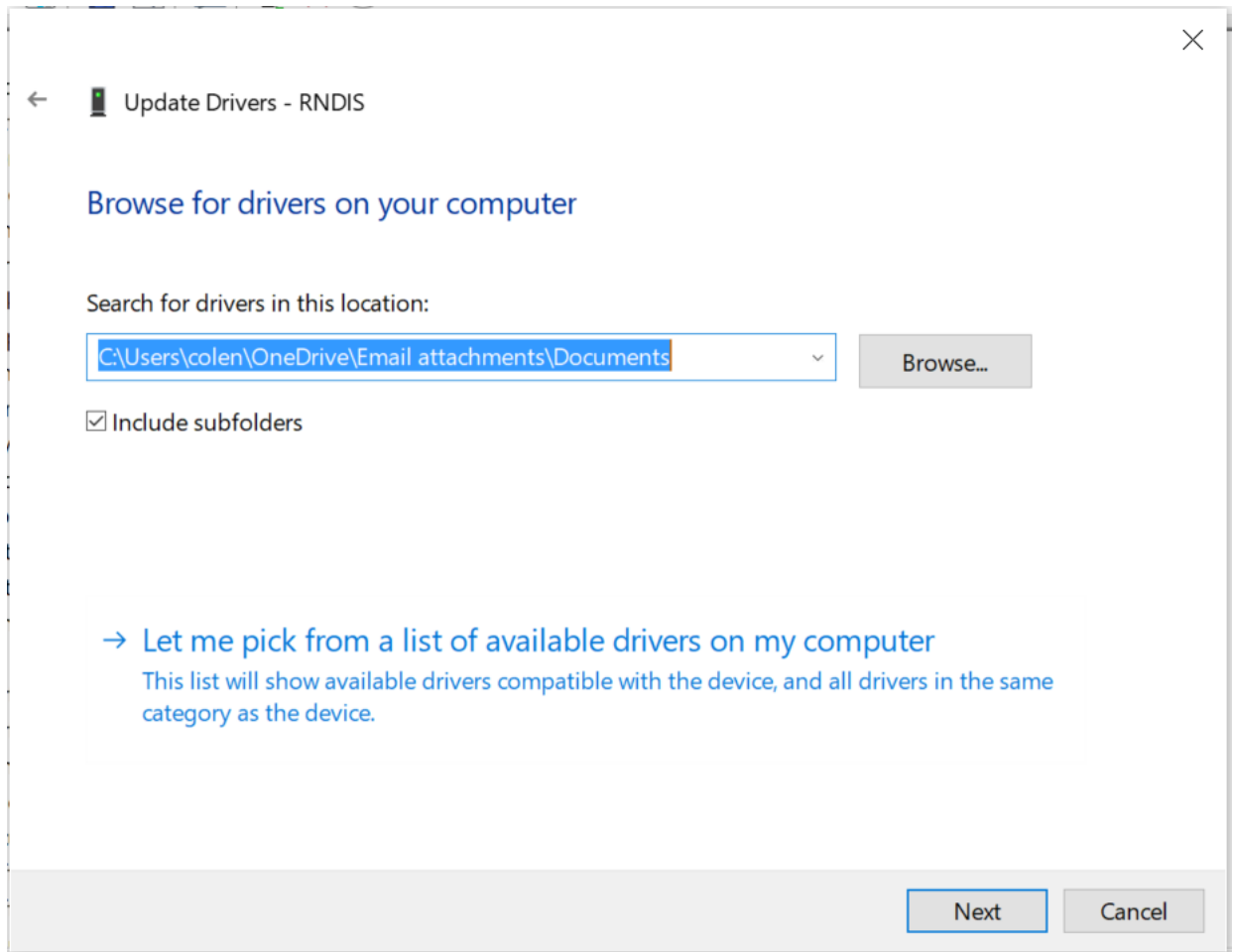
Click let me pick from a list of available drivers on my computer

← ▯ Update Drivers - RNDIS

Select your device's type from the list below.

Common hardware types:

- Miracast display devices
- Mixed Reality devices
- Mobile devices
- Modems
- Monitors
- Multifunction adapters
- Multi-port serial adapters
- **Network adapters**
- Network Client
- Network Infrastructure Devices
- Network Protocol
- Network Service
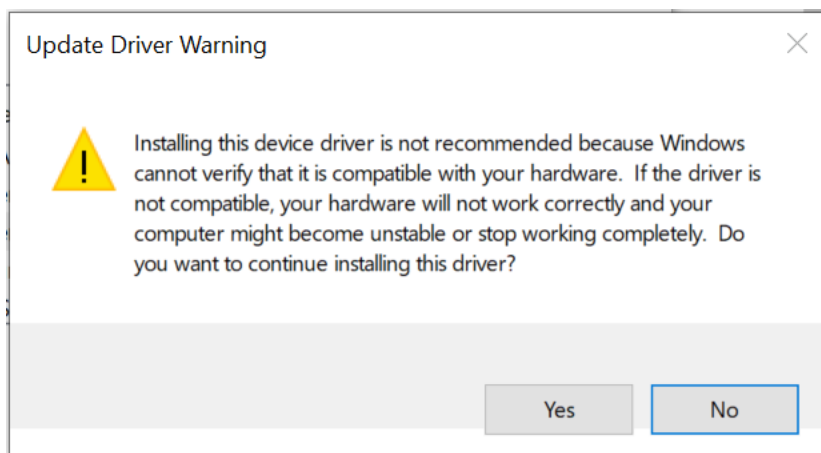- Non-Plug and Play drivers

Next   Cancel

Select network adapters then click next
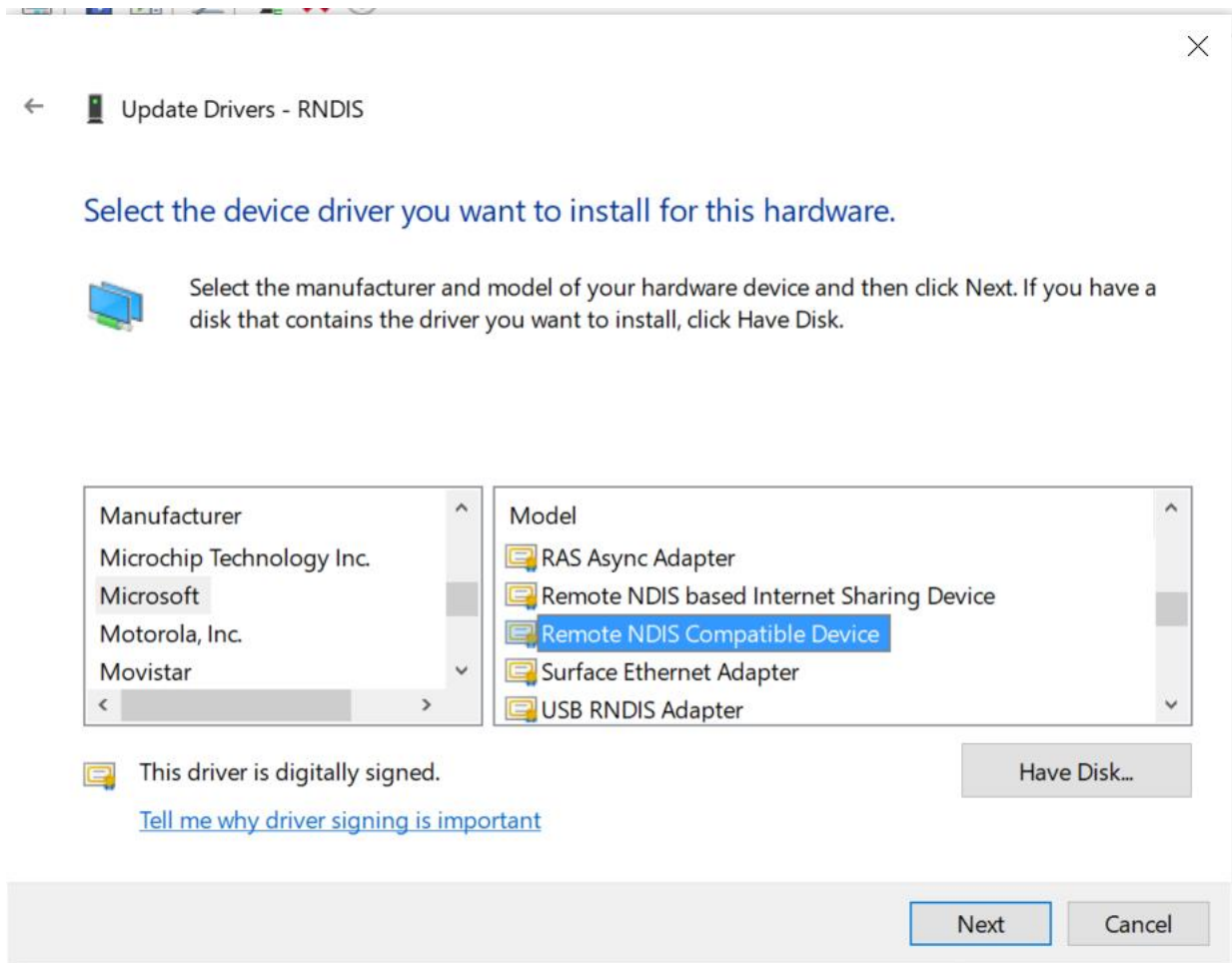
Under manufacturer Microsoft select Remote NDIS compatible device.

Click Yes to confirm, we know this driver is an RNDIS compatible device.

Update Drivers - Remote NDIS Compatible Device

✕

← Update Drivers - Remote NDIS Compatible Device

Windows has successfully updated your drivers

Windows has finished installing the drivers for this device:

Remote NDIS Compatible Device

Close

The system will say it was successful.