

# How To

Industrial Networking

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**Product:**

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- Any RAM or SN 66xx series router with MC5728 modules
- For SN/RAM Firmware 3.16 and lower (Firmware 3.17 does not require Sixnet USB driver)

**Subject:**

Using the SN/RAM 68xx to connect to the Sierra module

**Abstract:**

This document provides a step by step procedure for connecting and communicating with the Sierra cellular module. The process requires loading the Sixnet USB driver followed by the Sierra drivers then using the reset button on the RAM to initiate hardware pass thru mode.

**Pre-requisites:**

- Sixnet BT-68xx
- Sierra Wireless drivers
- Sierra FlashTools
- Sixnet USB Driver
- USB to miniUSB cable
- Windows PC

**Hardware USB to RF pass thru mode**

Before proceeding, please install the Sixnet RNDIS Driver for the following location:

[http://www.sixnet.com/dist/software/SIXNETRNDIS\\_2.0.0.exe](http://www.sixnet.com/dist/software/SIXNETRNDIS_2.0.0.exe)

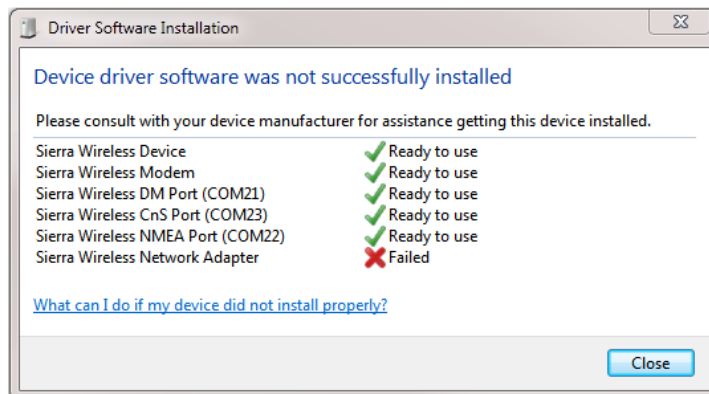
When USB driver has completed, connect the USB cable to SN/RAM device and power on. Ensure that you can ping 192.168.111.1 before proceeding further.

**Installing Sierra Driver**

- Unzip \_CDMA SWI\_Driver\_0\_59.zip onto Desktop
- Double click SWUSBMUX.msi
- Install the driver

### USB Pass through Mode

- Power unit on, if not already
- Hold in reset button until LEDs cycle through to the Signal LED only.
- Release reset button.
- Signal LED should continue to flash (This indicates you are in RF pass thru mode)
- The Sierra driver should begin to install



- When it completes, double click the following executable:
  - FlashCDMA\_MC5728\_01.56\_00\_sprint\_027.011\_000.exe
- The Sierra tool will ask if you are sure you want to upgrade, click Yes.
- The tool will begin to download the firmware and install to module.
- The tool will inform you if the update was successful.



- It is now safe to reboot the SN device
- When reboot is complete, check wireless.cardstats in web UI under Networking -> Cellular -> Status (3.16 or higher) or Provisioning (3.14 and lower)
- Confirm the migration from 1.33.01 to 1.56.01 firmware on the following line under Device Fixed Properties:
  - CELLMODEM\_FIRMWARE\_V=p2815600