QUECTEL Coolwatcher IoT Module User Manual

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Foreword

Suitable Condition

Tools	Manufacturer Revision	Applicable Module Type
Coolwatcher	AT+CGMI/RDA_89xx	BC25/BC32/BC35-GR/BC95-B5R/ BC95-B8R/BC65/BC92

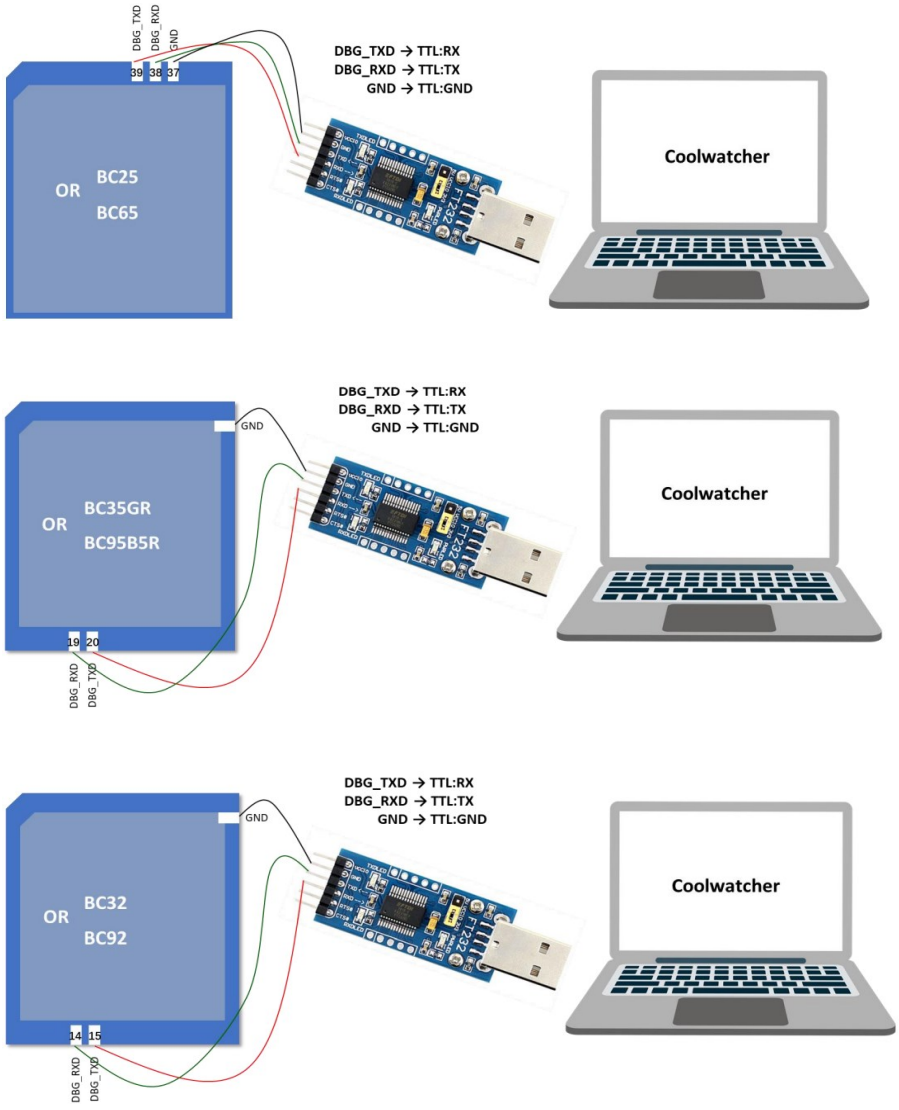
Related to Download

Coolwatcher

https://quectel123 my.sharepoint.cn/:u:/g/personal/aefae_dom_quectel_com_cn/EUj4DJB D9VJrsdRa-DuIFYBTcNyLMrxoyu1EQgTvGShTA?e=QAqe4H

Device Connection

If the module has been welded or debugged separately, it is recommended that you connect to the Coolwatcher and grab the log as shown below. Note that the BC65/BC92 for overseas type, Tx/Rx and TTL_Tx/TTL_Rx directly connect, do not need to cross;



If TE-B corresponding to RDA module is used, from ”Device Manager → Ports” to select the second COM port(XR21V1412 USB UART ChB).

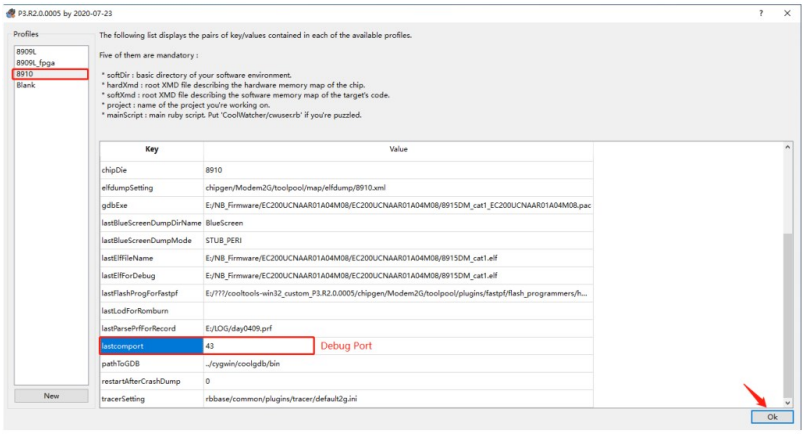
Coolwatcher

Coolwatcher is installation-free and can be used after decompression. Run coolwatcher_debughost.exe in the \cooltoolswin32_custom_P3.R2.0.0005 path.

Coolwatcher Connection

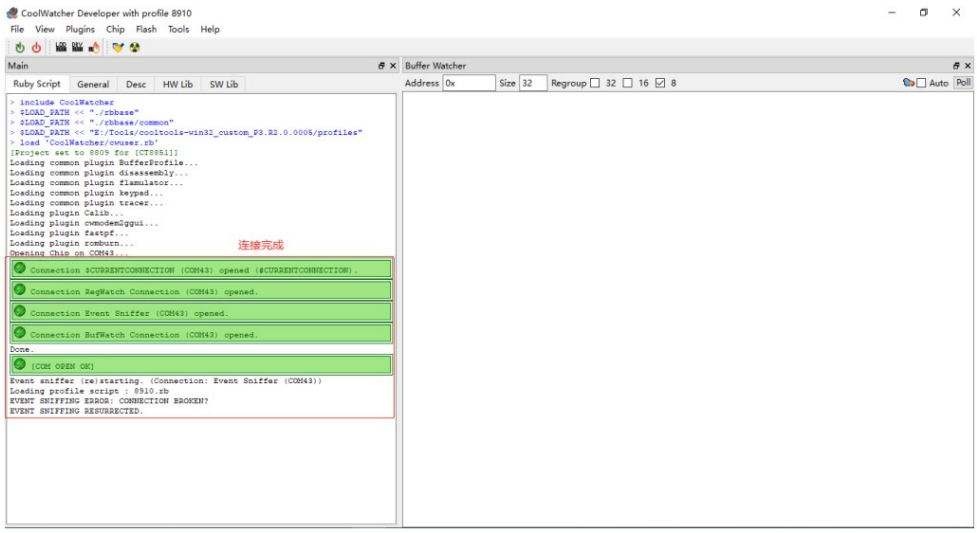
Before connecting the device, run the AT^TRACECTRL=1 via the main UART to enable debugging output. After capturing logs, to run AT^TRACECTRL=0 to disable debug output.

Click the Coolwatcher icon above, and then the configuration window as shown below pops up. Select “8910” for Profiles and the corresponding Debug port for lastcomport,then to click ”OK”;

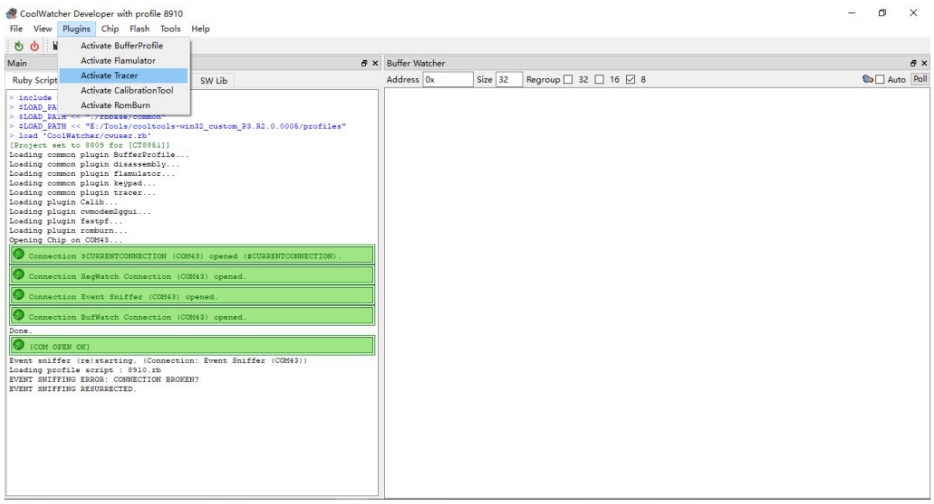


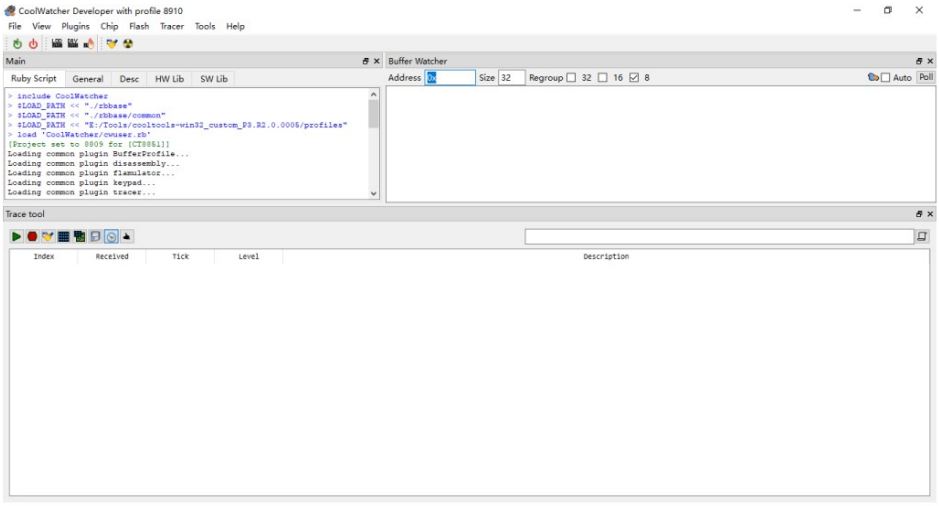
The message shown below is output after the device is successfully connected.

Coolwatcher

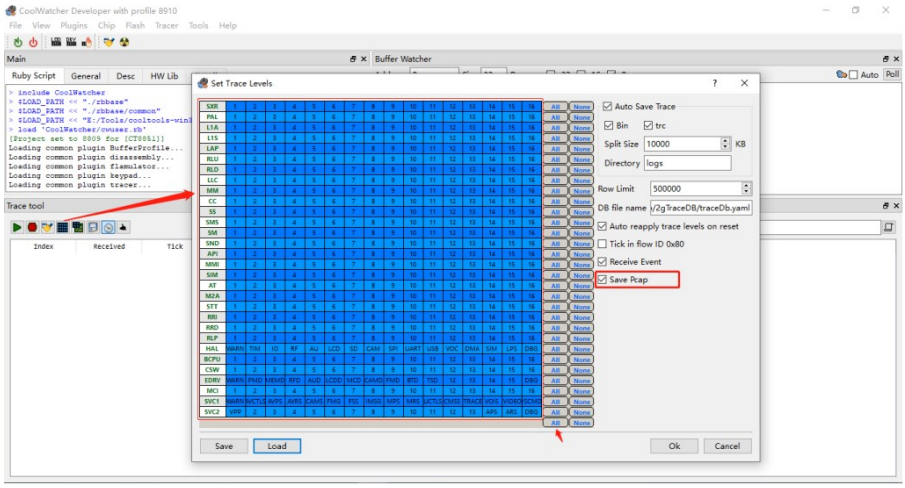


Select “Plugins→Activate Tracer” from the menu bar, as shown below, and open the log trace window.

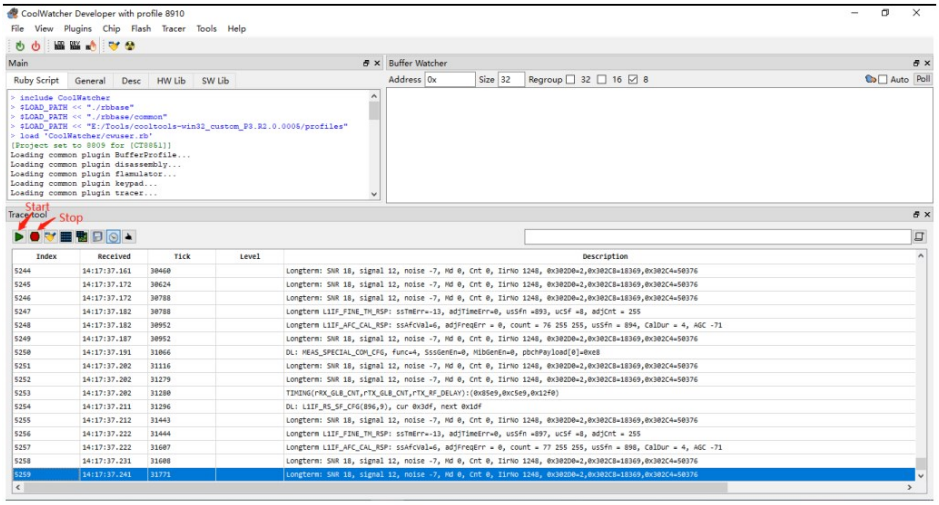




Select “Tracer→Set Trace Levels” from the menu bar, or select all log types, and to select “Save Pcap”. Then to click OK;



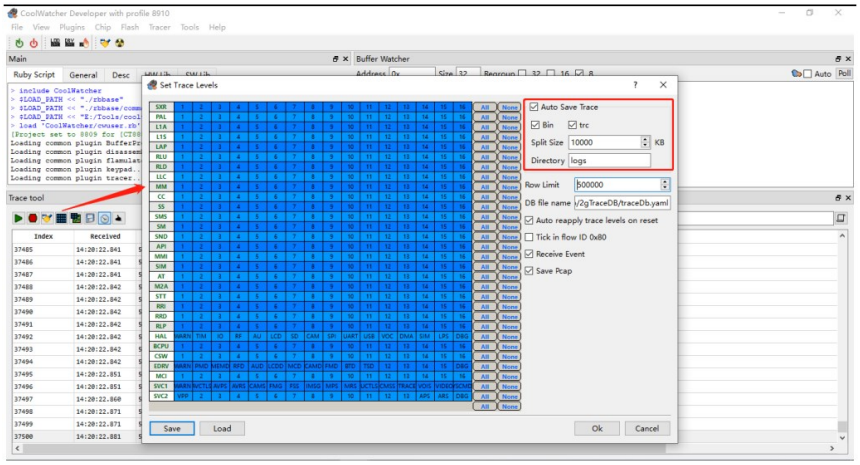
Choose “Tracer→Start Tracer/Stop Tracer” in the menu bar, or the icon as shown below, to Start tracing logs or Stop tracing.



Save Log

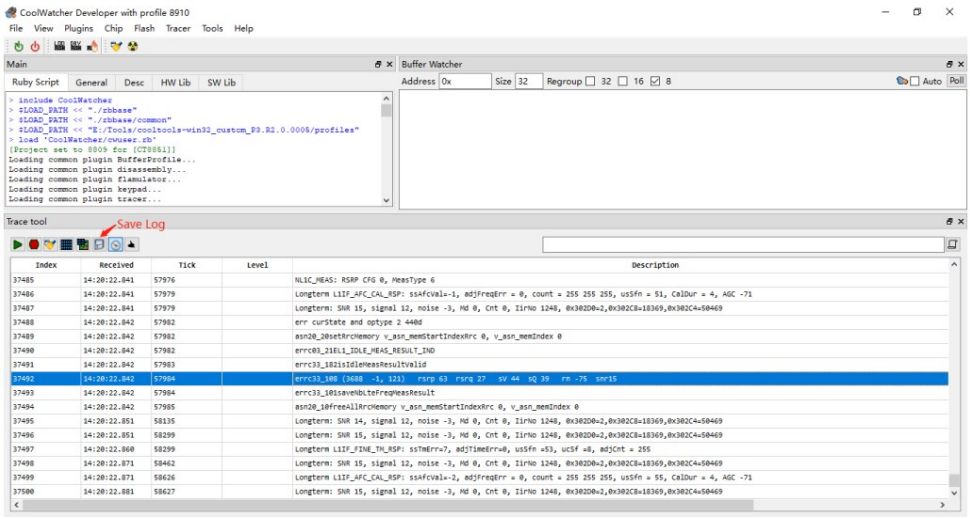
Automatically Save

Select “Tracer→Set Trace Levels” in the menu bar, or the icon as shown below, select Auto Save, and Set the save path. By default, log path \coolTools-win32_custom_p3.r2.0.0005 \logs; Where \ cooltools-win32_custom_p3.r2.0.0005 \logs\cap is saved as Pcap file;



Manual save

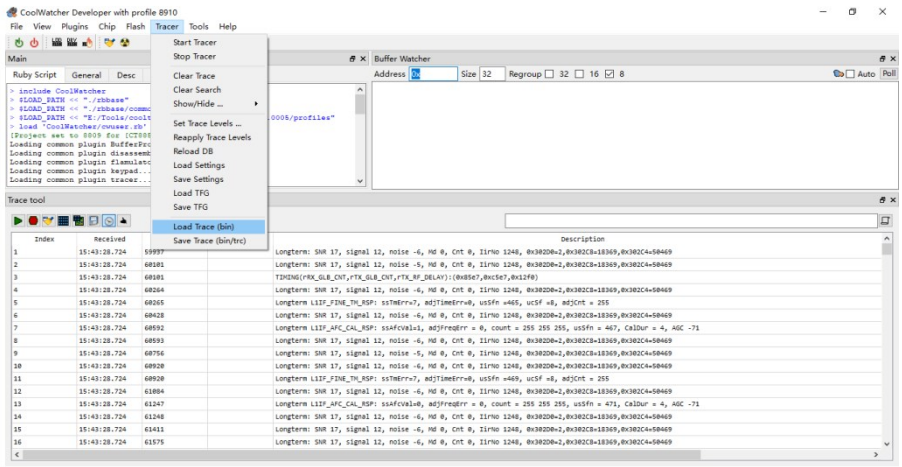
You can also choose“Tracer→Save”Trace from the menu bar, or Save the log as shown below.



Common Analytical Application

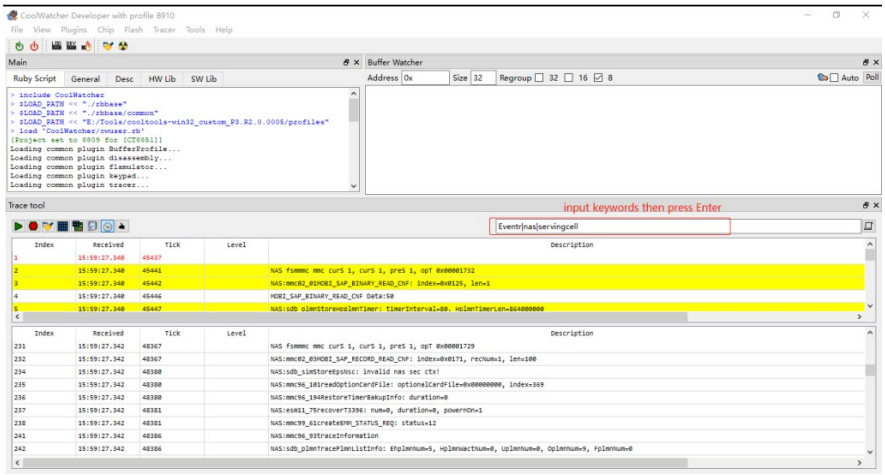
Import Log

Currently Notepad++ or UltraEdit is commonly used to view or analyze the Log;You can also import logs using Coolwatcher; On the menu bar, choose “Tracer→Load Trace (bin)” and select the corresponding xxx.bin file



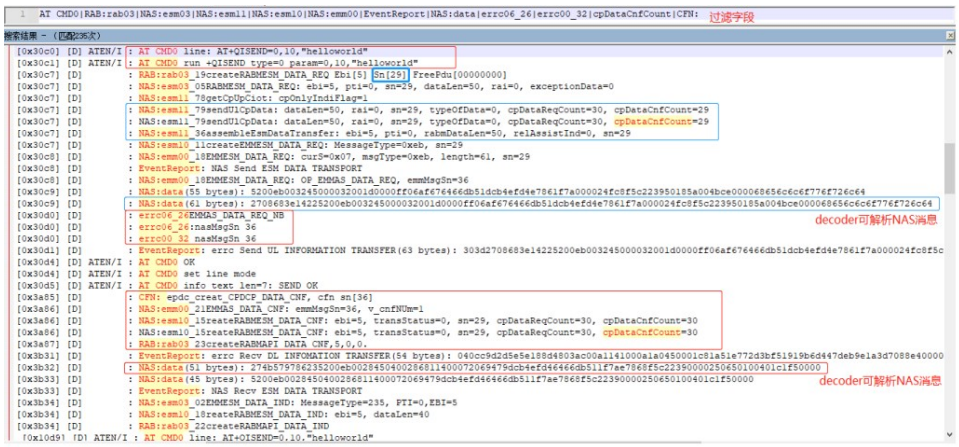
LOG Filter Log

Coolwatcher Log filter as shown below, input filtering keywords then press Enter,and support the use of a single vertical bar the regular filtering;



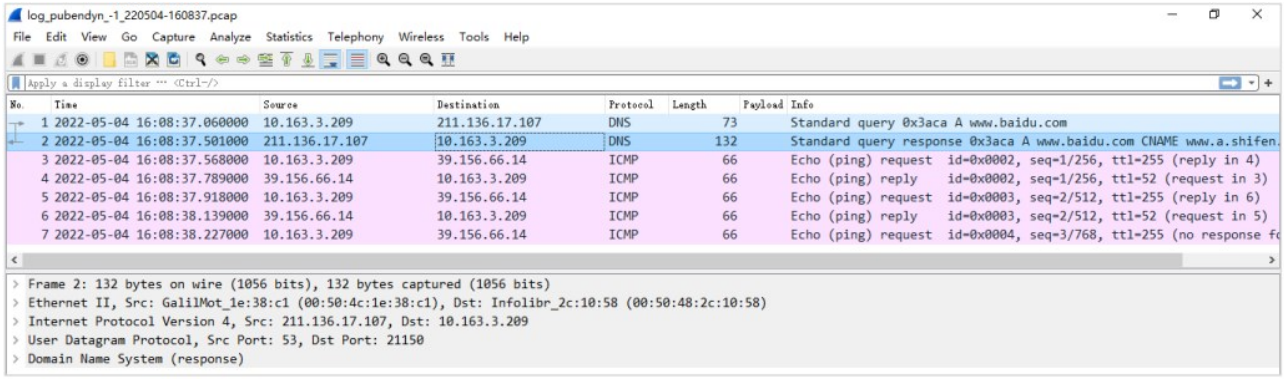
Common filtering keyword

Camp Cell	cell search|Servcell frequency|ServingRSRP
AT Command	AT CMD0
NAS/AS message	EventReport|NAS:data
Data Analysis	AT CMD0|RAB:rab03|NAS:esm03|NAS:esm11|NAS:esm10 |NAS:emm00|EventReport|NAS:data |errc06_26|errc00_32|cpDataCnfCount|CFN:



Pcap(Output Pcap)

Select “Tracer→Set Trace Levels” from the menu bar, and to select “Save Pcap”. Then to click OK; Pcap Default save\ path\cooltools-win32_custom_P3.R2.0.0005\logs\cap; Pcap can be analyzed using Wireshark for data interaction



Documents / Resources

	QUECTEL Coolwatcher IoT Module [pdf] User Manual Coolwatcher IoT Module, Coolwatcher, IoT Module, Module