Qualcomm Developer Project WIFICamera-demo

Project Submission

|  |  |  |
| --- | --- | --- |
| **Attribution:** |  | |
| **Email address** | [yiqiao.sun@thundercomm.com](mailto:yiqiao.sun@thundercomm.com)  [zhanglei0706@thundersoft.com](mailto:sunzhen@thundersoft.com)  hongliang.liu@thundersoft.com | |
| **Project Title**\* | WIFICamera | |
| **Images**  *Upload up to 5 images of your project*  *Please submit/send the original JPEG/PNG files for all images included in the document* | **Qualcomm® CM2290**  IMG_256  [Alt tag: “WIFICamera-demo using The Qualcomm® CM2290 SOC Open Kit”]  **Type-c usb line**   |  | | --- | | **typc** |   [Alt tag: “using the USB line to develop on Qualcomm® CM2290 SOC Open Kit” ]  **charger**  charger  [Alt tag: “using round-hole charger to power Qualcomm® CM2290 SOC Open Kit”] | |
| **Description**\*  *High level description of the project* ***(75 words or less)*** | This project relies on CM2290 development kit, and makes use of the diversified and powerful connection capability of development kit. AP WIFI was enabled through HostAPD and UDHCPD tools, and RTSP streaming function was completed through GStreamer and GST-RTSP-Server, enabling us to remotely view the videos captured by onboard cameras on mobile phones after connecting to WIFI. | |
| **Objective**   * *What inspired you to create this project?* * *What is your desired outcome?* | At present, the development of the Internet of Things is gaining momentum, and there are more and more scenarios that can be applied. I want to remotely check the situation in my home, so I developed this simple project of wificamera. | |
| **Materials Required / Parts List / Tools** | Part Name | Link to purchase |
| Qualcomm® CM2290 SOC Open Kit | https://www.thundercomm.com/zh/product/cm2290-c2290-development-kit |
| USB Line | https://item.jd.com/40759941966.html |
| Charger |  |
| OVA3 camera |  |
| **Source Code / Source Examples / Application Executable**  *Link to open source / shareable code repository* | Description | Link |
| Source Code | https://github.com/ThunderSoft-XA/CM2290-WIFICamera-demo |
|  |  |
|  |  |
|  |  |
| **Additional Resources**  *List related links or resources such as websites, videos, presentations, or other materials* | Resource Title | Link or File Name (and provide file) |
|  |  |
|  |  |
|  |  |
|  |  |

|  |  |  |
| --- | --- | --- |
| **Build / Assembly Instructions** | Sample outline:   1. Quickly build AP WIFI through command line tools 2. Build a simple rtsp udp server 3. Use gstreamer to get camera video and push to RTSP server 4. Connect the mobile phone to wifi, access the rtsp url through EasyPlayer to play the camera video on the CM2290 | |
|  | Sample outline:   1. How does it work?   AP WIFI was enabled through HostAPD and UDHCPD tools, and RTSP streaming function was completed through GStreamer and GST-RTSP-Server, enabling us to remotely view the videos captured by onboard cameras on mobile phones after connecting to WIFI.The above content only needs you to pull the entire project, and then execute the wifi-camera.sh script to achieve. | |
| **Usage Instructions** | The Demo running results are as follows：  final result: | |
| **Contributor(s) Info**  *Feel free to include headshots!* | Name | Title  Company |
|  |  |
|  |  |
|  |  |

––– Continued on next page –––

Filters and Tags for QDN projects page

|  |  |  |
| --- | --- | --- |
| **Platform/Hardware** | CSR 101x/102x Bluetooth  DragonBoard 410c  mangOH Red/Yellow  √ Qualcomm CM2290 | MDM920x LTE for IoT  QCA-402x WiFi/BLE/Zigbee  Qualcomm Robotics RBx Dev Kit |
| **Software Tools** | 3D Audio Plugin for Unity  Adreno GPU SDK  Hexagon DSP SDK | √ Neural Processing SDK for AI  　Snapdragon Profiler |
| **Operating System** | Android  √ Linux  ThreadX RTOS | Ubuntu Core  Windows 10 IoT Core |
| **Cloud Services/Platform** | Sierra Wireless AirVantage  Gizwits Cloud Platform  AT&T M2X  IBM Bluemix | IBM Watson IoT  Microsoft Azure IoT  Amazon AWS IoT |
| **Skill Level Required** | Advanced  Beginner  √ Intermediate |  |
| **Areas of Focus** | 3D Printing & Modeling  Alexa Voice Service  √ Artificial Intelligence  Bluetooth  Computer Vision  Digital Signage  Education  √ Embedded  Gaming | Healthcare  √ IoT  Robotics  Security  Sensors  Smart Cities  √ Smart Home  Toys |

*By submitting your content (“Submission”), you are granting Qualcomm a royalty-free, perpetual, non-exclusive, unrestricted, worldwide license to: (a) post, use, copy, sublicense, adapt, transmit, publicly perform or display any such Submission, (b) use, reproduce, modify, adapt, publish, translate, create derivative works from, distribute, perform, play, host, communicate, make available and publish your Submission without restriction and (c) sublicense to third parties the unrestricted right to exercise any of the foregoing rights granted with respect to the Submission. The foregoing grants shall include the right to exploit any ideas, concepts, intellectual property, or proprietary rights in such Submission, including but not limited to rights under copyright, trademark, servicemark or patent laws under any relevant jurisdiction without Qualcomm owing any monies to you whatsoever. You represent and warrant that you own all right, title and interest in and to the Submission, or you have been granted sufficient rights in and to the Submission allowing the foregoing use of such Submission.*