Qualcomm Developer Project MultiDecoderApp

Project Submission

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| **Project Title**\* | **MultiDecoderApp** | |
| **Images**  *Upload up to 5 images of your project*  *Please submit/send the original JPEG/PNG files for all images included in the document* | **C610.png**   **[alt tag: “MultiDecoderApp using The TurboX C610 Open Kit** ”] **usb.png**   |  | | --- | | **typc** |   [alt tag: “**using the usb line to develop on turbox C610 development board.** ”]  [alt tag: “use DP line to connect display **.**”]  dp  HIKVISION\_Camera.png  HIKVISION_Camera | |
| **Description**\*  *High level description of the project* ***(75 words or less)*** | UsingThe TurboX C610 Open Kit, the data of 1080 cameras are collected by RTSP or local files , decoded and send output to HDMI display. | |
| **Objective**   * *What inspired you to create this project?* * *What is your desired outcome?* | Show the powerful decoding power of turbox c610 through 6 decoding videos. | |
| **Materials Required / Parts List / Tools** | Part Name | Link to purchase |
| TurboX C610 Open Kit, | https://www.thundercomm.com/app\_zh/product/1593776185472315 |
| USB line | https://item.jd.com/40759941966.html |
| HIKVISION\_Camera | https://item.jd.com/100006551428.html |
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| **Source Code / Source Examples / Application Executable**  *Link to open source / shareable code repository* | Description | Link |
| [Source Code](https://github.com/canyudeguang/Home_Automation) | <https://github.com/ThunderSoft-XA/demo-Smart-Motion-detector> |
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| **Additional Resources**  *List related links or resources such as websites, videos, presentations, or other materials* | Resource Title | Link or File Name (and provide file) |
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| **Build / Assembly Instructions** | Sample outline:   1. Overall design framework and Test environment construction method.      1. Software Build Instructions    1. Prepare a PC (Ubuntu 16.04 window MAC);    2. Install adb ;    3. Configure the compilation environment according to the release note document    4. Write BB file(<MultiDecoderApp.bb>), compile the executable file of multidecoderapp into the system image, and burn the system according to the realease note document. 2. Start MultiDecoderApp   Start the multidecoderapp according to the 《Turbox-C610-MultiDecoderApp\_User Guide》document | |
|  | Sample outline:   1. How does it work?   Below are some usage instructions to test the project.Now let's introduce the MultiRtspDecoderApp ’s workflow. It .  Multi decoder app supports 6-channel hardware decoding, including local files and IPC RTSP video stream.  init\_window---->init\_camea---->init\_decoder---->start\_player\_process  MultDecoderApp/MultDecoderApp.cpp  void main( void )  {  /\*step 1 init window for display\*/  init\_window ();  /\*step 2 init viedeo resource\*/  init\_camera(INI\_FILE\_PATH, CAM\_CONFIG\_MAX);  /\*step 3 init decoder resource\*/  init\_decoder();  /\*step 4 start mult decoder process\*/  start\_player\_process();  while(true) sleep(3);  /\*step 5 deinit decoder resource\*/  deinit\_decoder();  return 0;  } | |
| **Usage Instructions** | The display effect is as follows： | |
| **Contributor(s) Info**  *Feel free to include headshots!* | Name | Title  Company |
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Filters and Tags for QDN projects page

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| **Platform/Hardware** | CSR 101x/102x Bluetooth  DragonBoard 410c  mangOH Red/Yellow | 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 |

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