Librf21x with JSON-RPC API (Implementation Plan)

# Introduction

Based on standard librf21x API, and support JSON-RPC style API by Python.

# Usage

JSON-RPC is a wild used protocol with lots of implementations.

All API can be accessed with HTTP request.

POST: http://<your-ip>:<your-port>/jsonrpc

GET: http://<your-ip>:<your-port>/jsonrpc?request=<url-encoded-request>

Communication Example:

|  |
| --- |
| **Request:**  {  "method": "echo",  "params": [  "Hello JSON-RPC"  ],  "id": 1  } |
| **Return:**  {  "result": "Hello JSON-RPC",  "error": null,  "id": 1  } |

# Example

Here is an example of a function in librf21x-warp.

|  |
| --- |
|  |
| **Request:**  {  "method": "checkDeviceSerialNumber",  "params": [  "RF219",  "hid://",  "01234567"  ],  "id": 1  } |
| **Return:**  {  "result": "true",  "error": null,  "id": 1  } |

# Details

There are more than 10 functions in librf21x, all of them will be supported by JSON-RPC API like above example.

# Disadvantage

There is a callback function in librf21x, which is used for response of keypads. This callback function supports the good real time performance for keypads. When JSON-RPC is used, this callback will be replaced by an query function which is started by user. The real time response well be not that good in this mode.