Firmware modification requirement

固件 修改要求

Hans Kim 2024-06-04 draft

1. Model name change (uboot)

ethact=sstar\_emac

ethaddr=00:30:1b:ba:02:db

fileaddr=23a02750

filesize=1c2

gatewayip=192.168.101.1

ipaddr=192.168.101.220

…

…

model=SC6104QH-6211

model=SC6104QH-6212

...

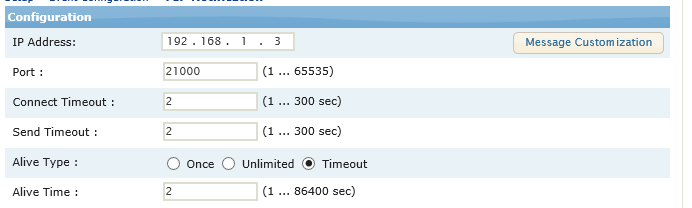
1. Human detection

* enable /disable 卡开/关闭
* show object 显示 物体（人体）
* show zone 显示 区域

1. TCP server or Client(Message server or client)

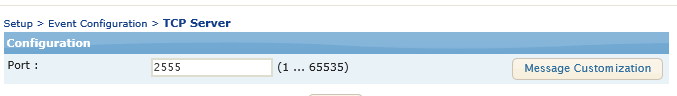
* Push:

|  |  |  |
| --- | --- | --- |
| parameter | Values | Description |
| IP address | Aaa.bbb.ccc.ddd | Destination Ip address of server |
| Port | (1~65535) | Server port |
| Connection Timeout | (0~300 secs) | Connection timeout |
| Send Timeout | (0~300secs) | Send timeout |
| Alive Type | Once/Unlimited/Timeout | Once: send one time and ignore ACK  Unlimited: send repeatlt while no ACK, if receiveing ACK stop sending message  Timeout: send repeatly which no ACK, when timeout, stop sending messages |
| Alive timeout | (1~86400 secs) | When Alive type == timeout, set timeout |



* Server

|  |  |  |
| --- | --- | --- |
| Parameter | values | Description |
| Port | (1~65535) | Port of device message server |



1. Message server & event source 联动

Multiple select event source

* Human detect
* Motion detect
* DI (digital iput)
* Tamper detection
* Other detections

Format:

{  
category: “human detection”,  
frame\_no:12345678,  
timestamp: 123456789,  
objects : [  
 { class: “human”, score: 0.65, coords:[1054, 30, 1090, 654] },  
 { class: “human”, score: 0.70, coords:[254,630, 482, 800] },  
 …..  
]

}

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Cateory | VCA, DO, DI, MD, Tamper, etc |  |
| Frame\_no | Frame number of stream |  |
| timestamp | Timestamp of event triggered |  |
| Object | Description of event source, |  |

Ex)

{

category: “human detection”,

frame\_no:12345678,

timestamp: 123456789,

objects : [

{ class: “human”, score: 0.65, coords:[1054, 30, 1090, 654] },

{ class: “human”, score: 0.70, coords:[254,630, 482, 800] },

……  
]

}

{

category: “motion detection”,

frame\_no:12345678,

timestamp: 123456789,

zones: [

{ coords:[1054, 30, 1090, 654] },

{ coords:[254,630, 482, 800] },

……  
]

}

{

category: “tamper detetction”,

frame\_no:12345678,

timestamp: 123456789,

zones: [

{ coords:[1054, 30, 1090, 654] },

{ coords:[254,630, 482, 800] },

……  
]

}

1. DI/DO API (cgi)

|  |  |  |  |
| --- | --- | --- | --- |
| action | Cgi command | method | Response |
| Get  do status | /api/v1/peripherial/query?channel=do | get | {  ‘code’ 20000,  ‘status’: ‘on/off’  } |
| Put  do command | /api/v1/peripherial/update?data=do&action=on  /api/v1/peripherial/update?data=do&action=off  /api/v1/peripherial/update?data=do&trigger=1 | get | {‘code’:20000} |
| Get DI  status | /api/v1/peripherial/query?channel=di | get | {‘code’:20000, ‘status’: 1/0} |

1. AI ISP enable/disable and calibrate parameter

Cgi command : /api/v1/isp/~~~~

* enable AI ISP (打开 AI ISP)
* disable AI ISP （关闭 AI ISP）
* Modify parameters（可调整参数）

1. Init.d (Server side SDK)

支持 运行 定做的程序

/etc/init.d/rcS

…

…

if [ -e /customer/prescript.sh ]; then

/customer/prescript.sh

fi;

1. Set default parameters

可以 设置 “工厂回复参数”

Factory default 🡺 read some parameter json

1. Enable / disable audio 打开/关闭 音频 （包括 rtsp）

/api/v1/media/update

        payload = {

            "type":"audio\_capture",

            "settings":{

“enable”: ‘y’

                "collect\_volume":check\_int(self.parent.collect\_volume.text()),

                "input\_method":"mic",

                "play\_volume":check\_int(self.parent.play\_volume.text()),

                "sample\_bit":16,

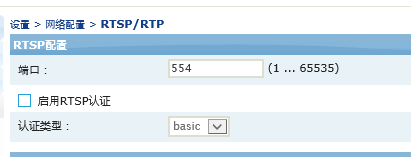
                "sample\_rate":8000

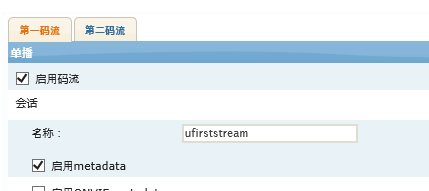
            }

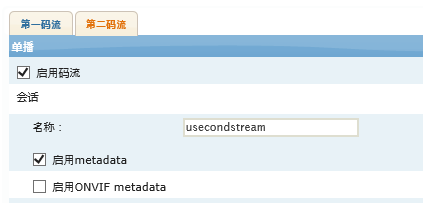
        }

1. RTSP 设置：

可以 设置 rtsp stream 名称， rtsp 端口。 Rtsp认证







1. Built in Text (Korean)

OSD : 支持 韩语



1. Webpage 端口

Api: ~~



1. Ssh 功能（if possible）