

UART Command Control

The screenshot shows a web browser window at `http://192.168.0.25` with a navigation menu (HOME, SETTING, APPLICATION, INFO, ABOUT) and a 'Connected' status indicator. A sidebar on the left contains menu items: System, Audio, Data, Log, and Cameras. The main content area is titled 'Next Vision camera settings' and features a 'Command Control UART' section. This section includes several dropdown menus: 'UART Control' (set to 'ttymxc0'), 'State' (set to 'On'), 'Baud Rate' (set to '115200'), 'Flow Control' (set to 'None'), 'Parity' (set to 'None'), and 'Size' (set to '8 bit'). Below this section are expandable sections for 'Network', 'Time and Date', 'RTSP/RTMP Server', 'Display Drivers', and 'Auto-delete old files', each with a plus sign icon.

Select the UART (TTY) of the board
Use for the command interface

Start UART Command (ON) Task
Currently Need to restart the system

Maris IMX8 API Test

What does the Maris API Test include?

- PC QT Source code to test the imx8 API
- PC compile version that can be used immediately.
- The document of the test command includes parameters.

```
imx > help
```

```
help
```

```
The following commands and macros are defined:
```

HELP command

```
HELP          - <commandname> Displays help string for named commands and macros
version       - get test application version
list         - list maris board
select       - connect to <"ip">
uart_list    - uart list
uart_select  - connect to <"uart dev">
gversion     - f(11)get maris application version
reboot       - f(15)reboot maris
sdate       - f(09)set date[]
gdate       - f(10)get date[]
update       - update version<"source file(full path)">
glistcam     - f(18)get list of camera types (get csi name)
scsicng     - f(16)set csi config<csi_0-camera_num><csi_1-camera_num> (get camera_number from command 18)
gcsicng     - f(17)get csi config
glistsensorinfo - f(186)get information about all cameras
gsensorinfo - f(186)get the currently selected video information for all active cameras
ssensorinfo - f(187)set video info for the selected active cam<device_num 0-N> <mode index>
snet        - f(27)set network params<net 0=eth0,1=usb0,2=wlan0,3=eth1><enabled 0/1><mode 0=dhcp 1>manual 2=dhcp server><usb 0=client 1=OST>
snetman     - f(27)set manual<net 0=eth0,1=usb0,2=wlan0,3=eth1><"ip"><"mask"><"gateway">
snetdhcps   - f(27)set dhcp server<net 0=eth0,1=usb0,2=wlan0,3=eth1><"subnet"><"range min"><"range max">
gnet        - f(28)get net params<net 0=eth0,1=usb0,2=wlan0,3=eth1>
sstreamparam - f(41)set stream<mux_id><video ch><audio -1=none 0=ch1 1=ch2><protocol 1=TS 2=RTP 3=RTPS 4=RTMP><"dest ip"><dest port>
gcaminfo    - f(22)get camera info<id>
gchinfo     - f(22)get video channel info
setstream   - f(41)set stream <mux_id><"dest ip"><dest port>
gstream     - f(42)get stream <mux_id>
starts      - f(43)set streaming operation<mux-0 0=stop,1=start>...<mux-n 0=stop,1=start>
fastenc     - f(38)set fast encoding <mux><bits><bitrate><fps><w><h>
gfastenc    - f(39)get fast encoding <mux>
sencqialty  - f(47)set encoding <mux>,<mode 0-VBR,1-CBR 2-VBR block><bitrate><gop>
gencqialty  - f(48)get encoding <mux>
sfrmrate    - f(49)set frame rate <mux>,<frame rate 0-full,1-time_lapse>,<fps>
gfrmrate    - f(50)get frame rate<mux>
storage     - f(100)get storage info<dev_index: 0=SD 1=USB 2=Internal Memory>
record      - f(58)set record operation <mux><operation:0=stop,1=start record,2=start record TS><index_mode:0=off,1=on><container:0=T
S,1=RAW,2=JPEG><cycle_mode:0=off,1=on><cycle_time_sec><pre_no>
muxstat     - f(60)get active muxes
cyclictrigger - f(60)exit cyclic<mux>
sdatasrc    - f(106)set data source parameters <id><type 0-unicast,1-multicast,2-uart><ip><port><protocol 0-udp,1-tcp><uart num 0-tty
mxc0,1-ttymxc2,2-ttymxc3><baud_rate><flow_ctl><rec_opt 1/2/3>
gdatasrc    - f(107)get data source parameters <id>
format_device - f(164)Format Device <dev_id: 0=SD, 1=USB ,2=Internal Memory><format type: 1=FAT,2=EXT4,3=EXFAT>
```

Test Command with UART

The image shows two overlapping Windows File Explorer windows. The left window displays the 'API Test APP' folder, and the right window displays the 'API Test APP Source' folder. A yellow callout box labeled 'API Document' points to a document file in the left window, and another yellow callout box labeled 'API Test APP' points to the folder name in the left window.

API Test APP

Name	Status	Date modified	Type	Size
IMX8_jupiter_icd_req_1.0.7.docx	✓	4/29/2025 2:34 PM	Microsoft Word Document	1,188 KB
ldvc test doc 1.1.3.pdf	✓	5/4/2025 1:26 PM	PDF Document	1,188 KB
ldvc test doc.pdf	✓	11/1/2023 10:36 AM	PDF Document	1,188 KB
ldvc test doc.pptx	✓	11/1/2023 10:36 AM	Microsoft PowerPoint Presentation	2,964 KB
libgcc_s_seh-1.dll	✓	3/19/2018 5:14 PM	Application Extension	73 KB
libstdc++-6.dll	✓	3/19/2018 5:14 PM	Application Extension	1,393 KB
libwinpthread-1.dll	✓	3/19/2018 5:14 PM	Application Extension	51 KB
Qt5Core.dll	✓	3/27/2020 10:12 PM	Application Extension	8,149 KB
Qt5SerialPort.dll	✓	3/27/2020 10:21 PM	Application Extension	153 KB
udvp_test.exe	✓	4/29/2025 1:14 PM	Application	1,188 KB

API Test APP Source

Name	Status	Date modified	Type	Size
clilib.c	✓	3/21/2023 10:51 AM	C Source file	94 KB
clilib.h	✓	3/21/2023 9:34 AM	C++ Header file	5 KB
clilibapi.c	✓	3/21/2023 11:10 AM	C Source file	17 KB
control_remote.cpp	✓	5/4/2025 1:29 PM	C++ Source file	14 KB
control_remote.h	✓	5/4/2025 1:30 PM	C++ Header file	4 KB
ftplib.c	✓	3/23/2023 2:17 PM	C Source file	32 KB
ftplib.h	✓	11/4/2020 10:29 AM	C++ Header file	5 KB
ldvc_imp.cpp	✓	5/4/2025 1:30 PM	C++ Source file	59 KB
ldvc_imp.h	✓	5/4/2025 1:30 PM	C++ Header file	4 KB
main.cpp	✓	5/4/2025 1:30 PM	C++ Source file	43 KB
oslite.c	✓	11/4/2020 2:01 PM	C Source file	5 KB
oslite.h	✓	11/4/2020 3:03 PM	C++ Header file	3 KB
ringbuf.cpp	✓	11/4/2020 10:29 AM	C++ Source file	4 KB
ringbuf.h	✓	11/4/2020 10:29 AM	C++ Header file	1 KB
shared_items.h	✓	11/4/2020 10:29 AM	C++ Header file	1 KB
socket.cpp	✓	11/4/2020 10:29 AM	C++ Source file	7 KB

How to Use UART Command

```
C:\Users\itamar\Dropbox\udvp_versions\maris_applications_and_test\maris_imx8_api_test 2\app\udvp_test.exe
imx > uart_list
uart_list
"COM6"
"COM3"
"COM7"
imx > uart_select "COM3"
uart_select "COM3"
select: [COM3]
Uart Open Success, Port(COM3) Speed(115200)
imx > gversion
gversion
send_command.177 send msg, ret(4)
Maris application version[1.1.7.0.69]
imx > gdate
gdate
send_command.177 send msg, ret(4)
0 = cli_getdate: date[2025/7/1] : time[0:7:49]
imx > gnet
gnet
send_command.177 send msg, ret(5)
Network interface: eth0
Net Mode: Manual
IP: 192.168.0.30
Mask: 255.255.255.0
Gateway: 192.168.0.1
Subnet: 192.168.0.0
Range Min: 192.168.0.31
Range Max: 192.168.0.200
imx >
```