



MEDIATEK UART/USB Modem logging config SOP



Typical usage (2/2)

AT cmds	Description
AT+EPORT=1,uls,5	Switch HSL log to USB port
A+EPORT=1,emmi,4	Switch GKI log to USB port
AT+EPORT=1,uls,2	Switch HSL log to uart port
AT+EPORT=1,emmi,1	Switch GKI log to uart port
AT+EPORT=3,2,13	Change HSL log port to 3000000 baudrate
AT+EPORT=3,1,13	Change GKI log port to 3000000 baudrate
AT+EPORT=3,2,12	Change HSL log port to 921600 baudrate
AT+EPORT=3,1,12	Change GKI log port to 921600 baudrate

After switch to USB/UART port, please reset target.

Agenda

- Background
- AT cmd for serial port description
- Modem port information
- AT cmd Detail usage
- Typical usage
- Notes

Background

- USB tracing is designed for Modem logging in 2625 project. However in pre-silicon phase USB was not available alternative solution was to use UART.
- At the beginning of real sample activities UART tracing has been used widely meanwhile finalizing USB tracing concept.
- Due the this there are at the moment both tracing mechanisms in place and in short term we need to support both tracing solutions.
- Long term plan is to use only USB tracing for Modem and configuration will be changed so that USB tracing is only option for Modem logging.

AT cmd for serial port

- Current support AT cmd for serial port:
- All the AT cmds are case sensitive
- All the AT cmds should return OK, or need retry

```
#define AT_COMMAND_SERIAL_PORT_HELP \  
"AT+EPORT - show or modify serial port assignment and switch.\r\n\  
usage: \r\n\  
    Serial port show:    AT+EPORT=0\r\n\  
    Serial port assign: AT+EPORT=1,<owner_name>,<device_id>\r\n\  
    Serial port switch: AT+EPORT=2,<owner_name>,<device_id>\r\n\  
    Parameters modify:  AT+EPORT=3,<device_id>,<parameters>\r\n\  
    Parameters show:    AT+EPORT=4\r\n"
```

Port Information

- Modem log owner name:
 - uls -> HSL log
 - emmi -> GKI log
- Port id:
 - 0...3 is UART device (currently assign uls to port 2, emmi to port 1 (if UART used))
 - 4...5 is USB device (current assign uls to port 5, emmi to port 4 (if USB used))
- baudrate value:
 - 9 -> 115200
 - 12 -> 921600

AT+EPORT=0

- This AT cmd will show all the owner name use which port id
- AT cmd format: AT+EPORT=0
- Return format : +EPORT: <owner name> = <port id>
- Example:
 - Current HSL port is 2
 - Current GKI port is 1

```
+EPORT: uls = 2  
+EPORT: emmi = 1  
OK
```

AT+EPORT= 1

- This AT cmd used to assign new port id for user, valid after reboot
- AT cmd format: `AT+EPORT=1,<owner name>,<port id>`
- Return format : OK or ERROR
- Example:
 - Set HSL log to port 5

```
AT+EPORT=1,uls,5
OK
```


AT+EPORT= 3

- This AT cmd used to assign baudrate for uart port, valid after reboot
- AT cmd format: `AT+EPORT=3,<port id>,<baudrate value>`
- Return format : OK or ERROR
- Example:
 - Change port id 1 to 115200 boudrate

```
AT+EPORT=3,1,9  
OK
```

AT+EPORT= 4

- This AT cmd will show current port parameters
- AT cmd format: AT+EPORT=4
- Example:
 - Port 1 & port 2 's boudrate are 921600

```
AT+EPORT=4
+EPORT: 0
baudrate = 9
+EPORT: 1
baudrate = 12
+EPORT: 2
baudrate = 12
+EPORT: 3
baudrate = 9
+EPORT: 4
none
+EPORT: 5
none
```

Typical usage (1/2)

- Switch to USB/UART port
 1. use `AT+EPORT=0` to check current hsl & gki log port id
 2. If setting are not as wanted, use
`AT+EPORT=1,uls,<port id>` or
`AT+EPORT=1,emmi,<port id>`
to switch to a new port
- Change baudrate
 1. use `AT+EPORT=4` to check current UART1 & UART2 's baudrate
 2. If setting are not as wanted, use
`AT+EPORT=3,<port id>,<baudrate value>`
to change the baudrate

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AT+EPORT=1,uls,2	Switch HSL log to uart port
AT+EPORT=1,emmi,1	Switch GKI log to uart port
AT+EPORT=3,2,9	Change HSL log port to 115200 baudrate
AT+EPORT=3,1,9	Change GKI log port to 115200 baudrate
AT+EPORT=3,2,12	Change HSL log port to 921600 baudrate
AT+EPORT=3,1,12	Change GKI log port to 921600 baudrate

Notes

- AT+EPORT=1 & AT+EPORT=3 setting will save to FLASH region, valid after next boot, no need set again even download new load
- Please use latest version of Genie tool & USB driver



everyday genius