

## Commands

### General Rules:

A command will be executed upon the reception of <LF>.

Any wrong command will return „E“.

A return value ends with <CR> <LF>.

A list of return values is separated by <CR> <LF>.

### Exit

Terminate session. Keep state of master.

### SetTimeout(timeoutSec)

Enables or disables Connection State supervision.

Will terminate connection after {timeoutSec} sec without traffic.

#### Parameters:

|            |   |   |
|------------|---|---|
| timeoutSec | n | timeout in seconds (default = 30, 0 = disabled) |
|------------|---|---|

#### Return:

|          |   |            |
|----------|---|------------|
| timeout= | n | in seconds |
|----------|---|------------|

### KeepAlive

prevents Connection Timeout

#### Return:

|  |   |  |
|--|---|--|
|  | 1 |  |
|--|---|--|

## Commands

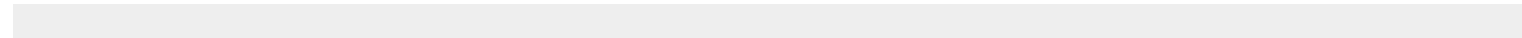
|  |      |  |
|--|------|--|
| <b>ListDevices</b>                     |      |  |
| Returns List of found USB FTDI devices |      |  |
|  |      |  |
| <i>Return:</i>                         |      |  |
|  | n    | Number of devices, list with devices follows |
|  | dev0 | Only if devices are found                    |
|  | ...  |  |

|  |       |                         |
|--|-------|-------------------------|
| <b>OpenSerial(serial)</b>  |       |                         |
| Open connection to selected FTDI Master by device serial number. |       |                         |
|  |       |                         |
| <i>Parameters:</i>   |       |                         |
| serial number  | n     | serial number of device |
|  |       |                         |
| <i>Return:</i>   |       |                         |
| connected=   | [0 1] |                         |

|  |       |  |
|--|-------|--|
| <b>OpenList(listId)</b>  |       |  |
| Open connection to selected FTDI Master by device list position. |       |  |
|  |       |  |
| <i>Parameters:</i>   |       |  |
| devId  | n     | Number in device list, starting with 0 |
|  |       |  |
| <i>Return:</i>   |       |  |
| connected=   | [0 1] |  |

## Commands

|   |       |  |
|---|-------|--|
| <b>Close</b>  |       |  |
| Close connection to FTDI Master. Stop Periodic Transfers. |       |  |
|   |       |  |
| <i>Return:</i>  |       |  |
| connected=  | [0 1] |  |



|                           |   |                            |
|---------------------------|---|----------------------------|
| <b>SetBtrate(bitrate)</b> |   |                            |
| Select Btrate             |   |                            |
|                           |   |                            |
| <i>Parameters:</i>        |   |                            |
| bitrate                   | n | in baud (default = 500000) |
|                           |   |                            |
| <i>Return:</i>            |   |                            |
| bitrate=                  | n |                            |

|                      |             |     |
|----------------------|-------------|-----|
| <b>SetSync(sync)</b> |             |     |
| Select SYNC          |             |     |
|                      |             |     |
| <i>Parameters:</i>   |             |     |
| sync                 | 8 (default) | bit |
|                      | 32          | bit |
|                      |             |     |
| <i>Return:</i>       |             |     |
| sync=                | n           |     |

## Commands

|                          |             |             |
|--------------------------|-------------|-------------|
| <b>SetHeader(header)</b> |             |             |
| Select Header format     |             |             |
|                          |             |             |
| <i>Parameters:</i>       |             |             |
| header                   | 3 (default) | byte header |
|                          | 4           | byte header |
|                          |             |             |
| <i>Return:</i>           |             |             |
| header=                  | n           |             |

|                          |             |       |
|--------------------------|-------------|-------|
| <b>SetParity(parity)</b> |             |       |
| Select Parity            |             |       |
|                          |             |       |
| <i>Parameters:</i>       |             |       |
| parity                   | 0 (default) | Even  |
|                          | 1           | Odd   |
|                          | 2           | Space |
|                          | 3           | None  |
|                          |             |       |
| <i>Return:</i>           |             |       |
| parity=                  | n           |       |

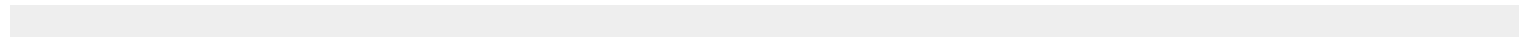
|                        |     |                                |
|------------------------|-----|--------------------------------|
| <b>SetBreak(break)</b> |     |                                |
| Select Break Length    |     |                                |
|                        |     |                                |
| <i>Parameters:</i>     |     |                                |
| break                  | x,y | double format (default = 13,5) |
|                        |     |                                |
| <i>Return:</i>         |     |                                |
| break=                 | x,y |                                |

## Commands

|                          |   |  |
|--------------------------|---|--|
| <b>SetNodeAddr(addr)</b> |   |  |
| Select address of node.  |   |  |
|                          |   |  |
| <i>Parameters:</i>       |   |  |
| addr                     | n |  |
|                          |   |  |
| <i>Return:</i>           |   |  |
| addr=                    | n |  |

|   |       |                                    |
|---|-------|------------------------------------|
| <b>SendWakeup(symbol, ack)</b>                    |       |                                    |
| Send Wakeup, symbol if selected, ack if selected. |       |                                    |
|   |       |                                    |
| <i>Parameters:</i>                                |       |                                    |
| symbol  | [0 1] | 1: send wakeup symbol + sleep 25ms |
| ack   | [0 1] | 1: send wakeup ack                 |
|   |       |                                    |
| <i>Return:</i>                                    |       |                                    |
|   | 1     |                                    |

|                           |   |  |
|---------------------------|---|--|
| <b>SendSleepBroadcast</b> |   |  |
| Send Broadcast for Sleep. |   |  |
|                           |   |  |
| <i>Return:</i>            |   |  |
|                           | 1 |  |



## Commands

|  |       |                                 |
|--|-------|---------------------------------|
| <b>Write(addr, words, data)</b>  |       |                                 |
| Write {words} data words starting with {addr} with the same {data}.<br>Address will be auto-incremented. |       |                                 |
| <i>Parameters:</i>   |       |                                 |
| addr   |       | address in decimal or hex       |
| words  |       | number of words in decimal      |
| data   |       | write address in decimal or hex |
| <i>Return:</i>   |       |                                 |
|  | [0 1] |                                 |

|  |       |                                |
|--|-------|--------------------------------|
| <b>Read(addr, words)</b>   |       |                                |
| Read {words} data words starting with {addr}.<br>Address will be auto-incremented. |       |                                |
| <i>Parameters:</i>   |       |                                |
| addr   |       | address in decimal or hex      |
| words  |       | number of words in decimal     |
| <i>Return:</i>   |       |                                |
|  | [0 1] | 1: list with read data follows |
|  | data0 |                                |
|  | ...   |                                |

## Commands

|   |       |  |
|---|-------|--|
| <b>Verify(addr, words, mask, expected)</b>  |       |  |
| Verify {words} data words starting with {addr}, checking that {expected} =? (rdata & {mask}). Address will be auto-incremented. |       |  |
| <i>Parameters:</i>  |       |  |
| addr  |       | address in decimal or hex              |
| words   |       | number of words in decimal             |
| mask  |       | verify mask in decimal or hex          |
| expected  |       | expected check value in decimal or hex |
| <i>Return:</i>  |       |  |
|   | [0 1] | 0: list with read data follows         |
|   | data0 |  |
|   | ...   |  |

|  |   |  |
|--|---|--|
| <b>SetPeriodicWrite(addr, data, words)</b>   |   |  |
| Enable periodic write of {words} data words starting with {addr} with the same {data}. Address will be auto-incremented. |   |  |
| <i>Parameters:</i>   |   |  |
| addr   |   | write address in decimal or hex          |
| words  |   | number of words in decimal (0 = disable) |
| data   |   | write address in decimal or hex          |
| <i>Return:</i>   |   |  |
|  | 1 |  |

## Commands

|  |   |  |
|--|---|--|
| <b>SetPeriodicVerify(addr, words, mask, expected)</b>  |   |  |
| Enable periodic verify of {words} data words starting with {addr}, checking that {expected} =? (rdata & {mask}). Address will be auto-incremented. |   |  |
| <i>Parameters:</i>   |   |  |
| addr   |   | write address in decimal or hex          |
| words  |   | number of words in decimal (0 = disable) |
| mask   |   | verify mask in decimal or hex            |
| expected   |   | expected check value in decimal or hex   |
| <i>Return:</i>   |   |  |
|  | 1 |  |

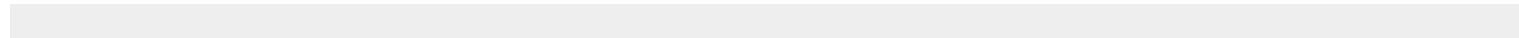
|  |   |       |
|--|---|-------|
| <b>SetPeriodicIntervalMs(interval)</b>         |   |       |
| Set interval in ms between periodic transfers. |   |       |
| <i>Parameters:</i>                             |   |       |
| interval                                       | n | in ms |
| <i>Return:</i>                                 |   |       |
| interval=                                      | n |       |

|   |       |  |
|---|-------|--|
| <b>StartPeriodic</b>                        |       |  |
| Start/Enable configured periodic transfers. |       |  |
| <i>Return:</i>                              |       |  |
| periodic=                                   | [0 1] |  |



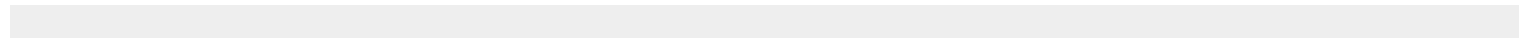
## Commands

|                                  |       |  |
|----------------------------------|-------|--|
| <b>StopPeriodic</b>              |       |  |
| Stop/Disable periodic transfers. |       |  |
|                                  |       |  |
| <i>Return:</i>                   |       |  |
| periodic=                        | [0 1] |  |



|                                 |       |   |
|---------------------------------|-------|---|
| <b>GetStatus</b>                |       |   |
| Returns and clears status flags |       |   |
|                                 |       |   |
| <i>Return:</i>                  |       |   |
| com_error=                      | [0 1] | Any error detected during transfer (readback, response, timeout, ...) |
| verify_error=                   | [0 1] | Verify error has occurred.  |

|                                |   |  |
|--------------------------------|---|--|
| <b>GetLastLiveCounter</b>      |   |  |
| Returns last used Live Counter |   |  |
|                                |   |  |
| <i>Return:</i>                 |   |  |
|                                | n |  |



|  |       |  |
|--|-------|--|
| <b>SetDebugHeaderCrcError(debugHeaderCrcError)</b> |       |  |
| Select injection of Header CRC Error               |       |  |
|  |       |  |
| <i>Parameters:</i>                                 |       |  |
| debugHeaderCrcError                                | [0 1] |  |
|  |       |  |
| <i>Return:</i>                                     |       |  |
| debugHeaderCrcError=                               | [0 1] |  |

## Commands

|  |       |  |
|--|-------|--|
| <b>SetDebugWriteCrcError(debugWriteCrcError)</b>           |       |  |
| Select injection of Write CRC Error                        |       |  |
|  |       |  |
| <i>Parameters:</i>   |       |  |
| debugWriteCrcError   | [0 1] |  |
|  |       |  |
| <i>Return:</i>   |       |  |
| debugWriteCrcError=  | [0 1] |  |
|  |       |  |
| <b>SetDebugUseLastLiveCounter(debugUseLastLiveCounter)</b> |       |  |
| Select injection of LiveCounter Error                      |       |  |
|  |       |  |
| <i>Parameters:</i>   |       |  |
| debugUseLastLiveCounter                                    | [0 1] |  |
|  |       |  |
| <i>Return:</i>   |       |  |
| debugUseLastLiveCounter=                                   | [0 1] |  |