Fundamental

Functions in “Fundamental.c” are designed for convenience. They are very simple, but they are the most frequently used functions.

### *Overview for basic functions*

|  |  |
| --- | --- |
| **Name** | **Note** |
| combine | Convert byte array into an integer number (MSB first) |
| split | Convert an integer into a byte array (MSB first) |
| abs16 | Take the absolute value of the input value with respect to Zero\_16 (0x8000) |
| updateLimit | Update the upper and lower limit |
| smaller | Output the smaller number |
| bigger | Output the bigger number |
| reachLimit | Deduce if the specific output channel is at its limit |
| current\_output | Check current output of a specific channel |
| output\_limit | Return an output channel upper limit |

### *Useful numbers*

|  |  |  |  |
| --- | --- | --- | --- |
| **For 16 bit** | | **For 20 bit** | |
| Zero\_16 | 0x8000 | Zero\_20 | 0x080000 |
| Max\_16 | 0xFFFF | Max\_20 | 0x0FFFFF |
| Min\_16 | 0x0000 | Min\_20 | 0x000000 |