**Error Code List**

**The first 2 digits stand for the failed feature, the last 2 digits stand for the specific error category and details.**

Read & Write test of EEPROM:00

0000: If the returned file is empty, this error occurs. It is always caused by eeprom reading fail.

0001: If the returned result does not equal to the string that users input, this error occurs. It is always caused by the denied of eeprom write action or writing action fail.

SN\_Read:01

0100: There is no required file existing in the eeprom. A possible reason is the failed action of sn\_write.

0101: There is no required file existing in the emmc. A possible reason is the failed action of sn\_write.

0102: The eeprom read result file contains no content. If an empty file returned, this error occurs.

0103: The emmc read result file contains no content. If an empty file returned, this error occurs.

0104: The serial number stored at emmc and eeprom differ. If the 2 results are different, this error occurs. For example, if there is random strings returned, this error will occur.

MAC\_Read: 02

0200: There is no required file existing in the eeprom. A possible reason is the failed action of sn\_write.

0201: There is no required file existing in the emmc. A possible reason is the failed action of sn\_write.

0202: The eeprom read result file contains no content. If an empty file returned, this error occurs.

0203: The emmc read result file contains no content. If an empty file returned, this error occurs.

0204: The mac address stored at emmc and eeprom differ. If the 2 results are different, this error occurs. For example, if there is random strings returned, this error will occur.

SW image version:03

0300: Cannot get the version file. If the version file does not exist at the specific location of device, this error occurs.

0301: If the version file contains no version number but some other strings, this error occurs.

0302: If the version file contains more than one version number, this error occurs.

Check MCU FW Version:04

0400: If the version file contains no version number but some other strings, this error occurs.

0401: If the version file contains no contents, this error occurs. If an empty file is returned, this error occurs.

0402: If the version number is different from the parameter we set at first, this error occurs.

0403: If the returned file contains more than one version number, this error occurs.

0404: If the returned value is ‘0xffff’, which is resulted from the lack of FW version, this error occurs. It might be caused by the old version firmware.

DDR: 05

0500 : The returned result is not in the required format. The expected result is a table containing memory usage information. If the return result is not such a table or if there is no specific value within the table, this error occurs.

0501: The returned result is less than the lower bound. If the return result shows that the total memory is less than the required memory lower bound, this error occurs.

0502: The returned result is greater than the upper bound. If the return result shows that the total memory is greater than the required memory upper bound, this error occurs.

EMMC:06

0600: The returned result is not in the required format. The expected result is a table containing memory usage information. If the return result is not such a table or if there is no specific value within the table, this error occurs.

0601: The returned result is less than the lower bound. If the return result shows that the total memory is less than the input memory lower bound, this error occurs.

0602: The returned result is greater than upper bound. If the return result shows that the total memory is greater than the input memory upper bound, this error occurs.

LED\_White: 07

0700: The white LED light doesn’t work. As required, there is only one time input by user, so that there is only one error code generated if applied.

LED\_RGB: 08

0800: The RGB LED light doesn’t work. As required, there is only one time input by user, so that there is only one error code generated if applied.

Mic: 09

0900: If there is no wave file returned from DUT, this error occurs.

0901: If the frequency spectrum of the recorded file differs greatly from the source file 'smoke\_alarm\_mono.wav', that is, the difference exceeds the threshold the user offer, this error occurs.

ALS\_BLT:10

1000: The returned result is not specific values but some other strings. The expected result is a series of numbers. If the returned result contains no number, this error occurs.

1001: The returned result contains less numbers than required. If the number of returned values is less than required, this error occurs. For example, we expect 3 values to be returned, but there are only 2 within the returned result.

1002: The first value is under its lower bound. The lower bound will be set in the ‘als\_para\_blt.txt’ file.

1003: The first value is above its upper bound. The upper bound will be set in the ‘als\_para\_blt.txt’ file.

1004: The second value is under its lower bound. The lower bound will be set in the ‘als\_para\_blt.txt’ file.

1005: The second value is above its upper bound. The upper bound will be set in the ‘als\_para\_blt.txt’ file.

1006: The third value is under its lower bound. The lower bound will be set in the ‘als\_para\_blt.txt’ file.

1007: The third value is above its upper bound. The upper bound will be set in the ‘als\_para\_blt.txt’ file.

OFN\_getID:11

1100: The returned result is not specific values but some other strings. The expected result is a series of values. If the return result contains no value, this error occurs.

1101: The returned result contains less numbers than required. If the number of returned values is less than required, this error occurs. For example, we expect 2 values to be returned, but there are only 1 within the returned result.

1102: The first returned value is invalid. If no action, the first value should be 0.

1103: The second returned value is invalid. As required, the second returned value should always be 0. If it is not 0, this error occurs.

PIR\_getID:12

1200: The returned result is not specific values but some other strings. The expected result is a series of values. If the return result contains no value, this error occurs.

1201: The returned file is an empty file. If the returned file contains no contents, this error occurs.

1202: The returned result contains less numbers than required. If the number of returned values is less than required, this error occurs. For example, we expect 5 values to be returned, but there are only 1 within the returned result.

1203: If the returned 5 value contains no 0, this error occurs. There is always a channel will return 0. If no 0 is contained, this error occurs.

Humidity:13

1300: The returned result is not a value but some error strings. The expected result is a series of values. If the return result contains no value, this error occurs.

1301: The returned result is less than the lower bound. If the returned value is less than the lower bound which is defined by the input parameters, this error occurs.

1302: The returned result is greater than the upper bound. If the returned value is greater than the upper bound which is defined by the input parameters, this error occurs.

1303: The returned file contains no content. If an empty file returned from the device, this error occurs.

Temperature:14

1400: The returned result is not a value but some error strings. The expected result is a series of values. If the return result contains no value, this error occurs.

1401: The returned result is less than the lower bound. If the returned value is less than the lower bound which is defined by the input parameters, this error occurs.

1402: The returned result is greater than the upper bound. If the returned value is greater than the upper bound which is defined by the input parameters, this error occurs.

1403: The returned file contains no content. If an empty file returned from the device, this error occurs.

Reset\_Press:15

1500: The returned result is not a value but some error strings. The expected result is a series of values. If the return result contains no value, this error occurs.

1501: The returned value is not equal to 1, which is the expected value of pressing reset button. If the result value is not 1, this error occurs.

Reset\_Press:16

1600: The returned result is not a value but some error strings. The expected result is a series of values. If the return result contains no value, this error occurs.

1601: The returned value is not equal to 0, which is the expected value of pressing reset button. If the result value is not 0, this error occurs.

Read & Write test of EMMC: 17

1700: If there is no required file generated in the device, no returned file exists. Then this error occurs.

1701: If the returned result contains less than required values, this error occurs. That is, if we input 1 parameter but there is none returned, this error occurs.

1702: If the returned value does not equal to the input parameter, this error occurs.

OFN\_Clockwise:18

1800: The returned result is not a value but some error strings. The expected result is a series of values. If the return result contains no value, this error occurs.

1801: The returned file contains less values than required. The OFN test will run per 20ms. If there are less tests occurred, this error occurs.

1802: The second value of each test result is not equal to 0. The second value of the testing result should always be 0. If not, this error occurs.

1803: The returned value is greater than 128 and it happens at the first 5 testing time. 5 is the error range we offer for user action.

1804: If the first value of each test result is 0, there is no actions occurred. Then this error appears.

OFN\_CounterClockwise:19

1900: The returned result is not a value but some error strings. The expected result is a series of values. If the return result contains no value, this error occurs.

1901: The returned file contains less values than required. The OFN test will run per 20ms. If there are less tests occurred, this error occurs.

1902: The second value of each test result is not equal to 0. The second value of the testing result should always be 0. If not, this error occurs.

1903: The returned value is less than 127 and it happens at the first 5 testing time. 5 is the error range we offer for user action.

1904: If the first value of each test result is greater than 255, this error appears.

1905: If the first value of each test result is 0, there is no actions occurred. Then this error appears.

PIR:20

2000: There is no returned file existing. If the result file does not generate, this error occurs.

2001: If the difference between action value and stable value is less than the parameter we input, this error occurs.

2002: If the returned result file contains error strings, this error occurs.

2003: If the returned result file contains less value than the number we required, this error occurs. The test times is decided by the waiting time and the testing frequency.

ALS\_SLT:21

2100: The returned result is not specific values but some other strings. The expected result is a series of numbers. If the returned result contains no number, this error occurs.

2101: The returned result contains less numbers than required. If the number of returned values is less than required, this error occurs. For example, we expect 3 values to be returned, but there are only 2 within the returned result.

2102: The first value is invalid. It is the value of channel 0 when testing in the darkness. The upper bound will be set in the ‘als\_para\_slt.txt’ file.

2103: The second value is invalid. It is the value of channel 1 when testing in the darkness. The upper bound will be set in the ‘als\_para\_slt.txt’ file.

2104: The third value is invalid. It is the computing result of the 2 channels when testing in the darkness. The upper bound will be set in the ‘als\_para\_slt.txt’ file.

2105: The fourth value is invalid. It is the value of channel 0 when testing in the light. The lower bound and upper bound will be set in the ‘als\_para\_slt.txt’ file.

2106: The fifth value is invalid. It is the value of channel 1 when testing in the light. The lower bound and upper bound will be set in the ‘als\_para\_slt.txt’ file.

2107: The sixth value is invalid. It is the computing result of the 2 channels when testing in the light. The lower bound and upper bound will be set in the ‘als\_para\_slt.txt’ file.

Aging\_logcheck:22

2200: EMMC aging result is FAILED.

2201: EEPROM read & write aging result is FAILED.

2202: Humidity aging check result is FAILED.

2203: Temperature aging check result is FAILED.

2204: OFN aging check result is FAILED.

2205: ALS aging check result is FAILED.

2206: Reset key aging check result is FAILED.

2207:There is no aging log file existing in the device. If the aging test doesn't executed, this error appears.