Document Number: S-TTC5F-G-20-001

I/O Driver Manual V 3.4.1 7.11 IO Error.h File Reference

173

7.11.2.63 #define IO_E_INVALID_VOLTAGE 14U

The measured voltage does not fit to a voltage band.

Digital inputs:

This error code is reported when the measured voltage is in between the defined voltage bands for high and low.

Definition at line 194 of file IO_Error.h.

7.11.2.64 #define IO E LIN BIT 260U

A LIN bit error has been detected during the last transfer.

Definition at line 613 of file IO_Error.h.

7.11.2.65 #define IO_E_LIN_CHECKSUM 262U

A LIN checksum error has been detected during the last data reception.

Definition at line 621 of file IO_Error.h.

7.11.2.66 #define IO_E_LIN_FRAMING 265U

A LIN framing error has been detected during the last transfer Definition at line 633 of file IO_Error.h.

7.11.2.67 #define IO_E_LIN_INCONSISTENT_SYNCH_FIELD 263U

A LIN inconsistent synch field error has been detected during the last header reception.

Definition at line 625 of file IO_Error.h.

7.11.2.68 #define IO_E_LIN_NO_RESPONSE 264U

A LIN no-response error has been detected during the last transfer Definition at line 629 of file IO_Error.h.

7.11.2.69 #define IO_E_LIN_OVERRUN 266U

A LIN overrun error has been detected during the last transfer Definition at line 637 of file IO_Error.h.



Document Number: S-TTC5F-G-20-001

7.11.2.70 #define IO_E_LIN_PARITY 267U

A LIN parity error has been detected during the last header reception. Definition at line 641 of file IO Error.h.

7.11.2.71 #define IO_E_LIN_PHYSICAL_BUS 261U

A LIN physical bus error has been detected during the last transfer. Definition at line 617 of file IO Error.h.

7.11.2.72 #define IO_E_LIN_TIMEOUT 268U

A LIN driver timeout error has been detected during the last transfer. Definition at line 645 of file IO Error.h.

7.11.2.73 #define IO E MPU REGION DISABLED 331U

IO_MPU_Disable() was called on a region which is already disabled. Definition at line 799 of file IO_Error.h.

7.11.2.74 #define IO E MPU REGION ENABLED 330U

IO_MPU_Enable() was called on a region which is already enabled. Definition at line 795 of file IO Error.h.

7.11.2.75 #define IO_E_NO_DIAG 15U

No output diagnostic is currently possible.

This error code is reported in several different cases:

PWM - Not enough samples:

The timer feedback has not captured enough samples yet in order to provide valid diagnostic information. Either the output was just enabled or just entered the valid diagnostic margin. The error condition is reset as soon as enough feedback samples have been captured.

PWM - Out of diagnostic range:

The PWM output was configured to not apply any diagnostic margin and the output was set to a duty cycle below the minimum on-time or above the minimum off-time. In this case the timer feedback of the output is not able to read a valid signal. The error condition is reset as soon as a duty cycle above the minimum on-time and below the minimum off-time is set and enough feedback samples have been captured.

I/O Driver Manual V 3.4.1 7.11 IO_Error.h File Reference

175

DO - No feedback after level change:

After the level of a digital output was changed, no diagnostic feedback is available directly afterwards. The error condition is reset as soon as the output stays constantly at one level for at least 10 ms.

Definition at line 218 of file IO Error.h.

7.11.2.76 #define IO_E_NULL_POINTER 30U

A NULL pointer has been passed to the function.

This error is reported if a non-optional pointer parameter of the function has been set to NULL.

Definition at line 317 of file IO_Error.h.

7.11.2.77 #define IO_E_OK 0U

everything is fine, no error has occurred.

Definition at line 56 of file IO Error.h.

7.11.2.78 #define IO E OPEN LOAD 10U

A open load condition has been detected on an output.

Digital outputs:

This error code is reported when the output is set to low (power stage is switched off) and the analog feedback signal is between 1.5V and 5.5V.

The error condition is reset as soon as the feedback voltage is below 1.5V or the output is set to high.

Definition at line 110 of file IO_Error.h.

7.11.2.79 #define IO_E_OPEN_LOAD_OR_SHORT_BAT 13U

An open load or short circuit to battery voltage condition has been detected.

PWM output:

This error code is reported if the PWM output was configured to apply a diagnostic margin and the digital timer feedback of the output was not able to read a valid signal. The feedback signal was read as high.

The error condition is reset as soon as the timer feedback signal returns a valid signal again. In order to distinguish between open load and short to UBAT, refer to function IO_PWM_ResolveOpenLoadShortCircuit

Document Number: S-TTC5F-G-20-001