FUTEK .NET API Documentation

USB_DLL Class Methods

In This Topic

For a list of all members of this type, see USB_DLL members.

Public Methods

	Name	Description
	Change_Battery_Enter	Controls the "Battery / Enter" button on the keypad of the IHH500. Controls the "Channel / Enter" button on the keypad of the IPM650.
	Change_Display_Back	Controls the "Display / Back" button on the keypad of the IHH500 or IPM650.
	Change_Hold_Down	Controls the "Hold / Down" button on the keypad of the IHH500 or IPM650.
	Change_Menu	Controls the "Menu" button on the keypad of the IHH500 or IPM650.
	Change_Reset_Left	Controls the "Reset / Left" button on the keypad of the IHH500 or IPM650.
	Change_Shunt_Exit	Controls the "Shunt / Exit" button on the keypad of the IHH500 or IPM650.
	Change_Tare_Up	Controls the "Tare / Up" button on the keypad of the IHH500 or IPM650.

Change_Unit_Right	Controls the "Unit / Right" button on the keypad of the IHH500 or IPM650.
Close_Device_Connection	Closes a connection with the USB device and assigns a value to the DeviceStatus.
Create_Back_Up	Create_Back_Up is a Function that is used to Create a Backup in Memory.
Fast_Data_Request	Gets the latest analog-to-digital converter (ADC) values in the buffer of the USB device.
Get_Active_Page_Number	Get_Active_Page_Number is a Function that returns a value representing the Active Page Number of the USB Device.
Get_Active_Sound	Gets the active sound stored in the EEPROM of the microcontroller.
Get_ADC_PGA_Setting	Get_ADC_PGA_Setting is a Function that returns a value representing the ADC PGA (Programmable Gain Amplifier) Setting.
Get_ADC_Sampling_Rate_Setting	Get_ADC_Sampling_Rate_Setting is a Function that returns a value representing the ADC Sampling Rate.
Get_Analog_Voltage_Output	Get_Analog_Voltage_Output is a Function that returns a value representing the Analog Voltage Output of the Device.
Get_Average_Setting	Get_Average_Setting is a Function that returns a value representing the Average Setting.
Get_Baud_Rate	Get_Baud_Rate is a Function that returns a value representing the Baud Rate (bits per second).
Get_Bridge_Resistance	Get_Bridge_Resistance is a Function that returns a value representing the Bridge Resistance of the USB Device.

Get_Calibration_Code	Get_Calibration_Code is a Function that returns a value representing the Calibration Technician used during Calibration of the USB Device.
Get_Calibration_Day	Get_Calibration_Day is a Function that returns a value representing the Calibration Day of the USB Device.
Get_Calibration_Month	Get_Calibration_Month is a Function that returns a value representing the Calibration Month of the USB Device.
Get_Calibration_Year	Get_Calibration_Year is a Function that returns a value representing the Calibration Year of the USB Device.
Get_Channel_Configuration	Gets the channel configuration stored in the EEPROM of the microcontroller.
Get_CrossTalk	Get_CrossTalk is a Function that returns a value representing the CrossTalk of the USB Device.
Get_Data_Logging	Gets the data logging value stored in memory and assigns a value to the DataLogging_Counter, DataLogging_Value1 and DataLogging_Value2.
Get_Decimal_Point	Get_Decimal_Point is a Function that returns a value representing the Decimal Point of the USB Device.
Get_Destination_IP_Address	Get_Destination_IP_Address is a Function that returns a value representing the Destination IP Address of the Device.
Get_Destination_MAC_Address	Get_Destination_MAC_Address is a Function that returns a value representing the Destination MAC Address of the Device.
Get_Destination_Port_Number	Get_Destination_Port_Number is a Function that returns a value representing the

	Destination Port Number of the Device.
Get_Device_Count	Get_Device_Count is a Function that is used to get the USB Device count. It also assigns a value representing the DeviceStatus of the USB Device.
Get_Device_Serial_Number	Get_Device_Serial_Number is a Function that is used to get the USB Device Serial Number. It also assigns a value representing the DeviceStatus of the USB Device.
Get_Direction	Get_Direction is a Function that returns a value representing the Direction of the USB Device.
Get_Display_Page	Gets the display page from the USB device.
Get_Enabled_Channels	Gets the enabled channels stored in the EEPROM of the microcontroller.
Get_Excitation	Get_Excitation is a Function that returns a value representing the Excitation of the Device.
Get_Firmware_Month	Get_Firmware_Month is a Function that returns a value representing the Month that the Firmware was created.
Get_Firmware_Version	Get_Firmware_Version is a Function that returns a value representing the Firmware Version of the USB Device.
Get_Firmware_Year	Get_Firmware_Year is a Function that returns a value representing the Year that the Firmware was created.
Get_Fullscale_Load	Get_Fullscale_Load is a Function that that is used to to get the Fullscale Load of the USB Device.
Get_Fullscale_Value	Gets the fullscale value stored in the EEPROM of the microcontroller.

Get_Gain_Switch	Get_Gain_Switch is a Function that returns a value representing the Gain Switch of the Device.
Get_Hardware_Version	Get_Hardware_Version is a Function that returns a value representing the Hardware Version of the USB Device.
Get_Internal_Register	Gets the internal register value stored in the EEPROM of the microcontroller.
Get_Load_of_Loading_Point	Get_Load_of_Loading_Point is a Function that that is used to to get the Load of Loading Point of the USB Device.
Get_Loading_Point	Get_Loading_Point is a Function that that is used to to get the Loading Point of the USB Device.
Get_Number_of_Active_Channels	Get_Number_of_Active_Channels is a Function that returns a value representing the Number Of Active Channels of the USB Device.
Get_Number_of_Loading_Points	Get_Number_of_Loading_Points is a Function that that is used to to get the Number of Loading Points stored in the USB Device.
Get_Offset_Load	Get_Offset_Load is a Function that that is used to to get the Offset Load of the USB Device.
Get_Offset_Value	Gets the offset value stored in the EEPROM of the microcontroller.
Get_Output_Type	Get_Output_Type is a Function that returns a value representing the Sensor Output Type.
Get_Polarity	Get_Polarity is a Function that returns a value representing the Polarity of the Device.

Get_Pulses_Per_Rotation	Get_Pulses_Per_Rotation is a Function that returns a value representing the Pulses Per Rotation of the USB Device.
Get_Rotation_Values	Get_Rotation_Values is a Function that that is used to to get the Angle Value.
Get_RS232_Output_Format	Get_RS232_Output_Format is a Function that returns a value representing the RS-232 output format.
Get_Sensitivity	Get_Sensitivity is a Function that returns a value representing the Sensitivity of the USB Device.
Get_Sensor_Identification_Number	Get_Sensor_Identification_Number is a Function that returns a value representing the Sensor Identification Number of the USB Device.
Get_Sensor_Sensitivity	Get_Sensor_Sensitivity is a Function that returns a value representing the Sensor Sensitivity of the Device.
Get_Shunt_Resistor	Get_Shunt_Resistor is a Function that returns a value representing the Shunt Resistor of the Device.
Get_Shunt_Value	Get_Shunt_Value is a Function that returns a value representing the Absolute Shunt Value of the USB Device.
Get_Source_IP_Address	Get_Source_IP_Address is a Function that returns a value representing the Source IP Address of the Device.
Get_Source_MAC_Address	Get_Source_MAC_Address is a Function that returns a value representing the Source MAC Address of the Device.
Get_Source_Port_Number	Get_Source_Port_Number is a Function that returns a value representing the Source Port Number of the Device.

Get_Span_1_Potentiometer	Get_Span_1_Potentiometer is a Function that returns a value representing the Span 1 Potentiometer of the Device.
Get_Span_2_Potentiometer	Get_Span_2_Potentiometer is a Function that returns a value representing the Span 2 Potentiometer of the Device.
Get_TEDS_Error_Detection	Gets the TEDS error detection stored in the EEPROM of the microcontroller.
Get_Type_of_Board	Get_Type_of_Board is a Function that returns a value representing the Type of Board (FUTEK Model Number) of the USB Device.
Get_Type_of_Calibration	Get_Type_of_Calibration is a Function that returns a value representing the Type of Calibration of the USB Device.
Get_Unit_Code	Get_Unit_Code is a Function that returns a value representing the Unit Code of the USB Device.
Get_Voltage_Output	Get_Voltage_Output is a Function that returns a value representing the Voltage Output of the USB Device.
Get_Zero_Potentiometer	Get_Zero_Potentiometer is a Function that returns a value representing the Zero Potentiometer of the Device.
Normal_Data_Request	Gets the latest analog-to-digital converter (ADC) value from the USB device.
Open_Device_Connection	Opens a connection with the USB device using the serial number assigned in the EEPROM of the USB FIFO IC and assigns a value to the DeviceHandle and DeviceStatus. The DeviceHandle will be required for subsequent use with many of the other commands.

Read_Channel_Register	Reads from the microcontroller's channel register.
Read_EEPROM_Register	Reads from the microcontroller's EEPROM register.
Read_Memory_Register	Reads from the microcontroller's memory register.
Read_Page_Register	Reads from the microcontroller's page register.
Read_TEDS_Register	Reads from the Transducer Electronic Data Sheet (TEDS) register.
Reset_Angle	**Warning: The use of this function can affect the factory calibration of the USB device.** Resets the angle value stored in the EEPROM of the microcontroller.
Reset_Board	Resets the microcontroller.
Restore_Back_Up	Restore_Back_Up is a Function that is used to Restore the Backup in Memory.
Set_Active_Page_Number	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the active page number stored in the EEPROM of the microcontroller.
Set_Active_Sound	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the active sound stored in the EEPROM of the microcontroller.
Set_ADC_Configuration	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the sampling rate of the analog-to-

	digital converter (ADC) stored in the EEPROM of the microcontroller.
Set_ADC_Configuration2	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the gain and the sampling rate of the analog-to-digital converter (ADC) stored in the EEPROM of the microcontroller.
Set_Average_Setting	**Warning: The use of this function can affect the factory calibration of the USB device.** Enables or disables the average applied to the analog-to-digital converter (ADC) values.
Set_Baud_Rate	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the Baud rate value stored in the EEPROM of the microcontroller.
Set_Bridge_Resistance	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the nominal bridge resistance value stored in the EEPROM of the microcontroller.
Set_Calibration_Code	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the calibration code stored in the EEPROM of the microcontroller.
Set_Calibration_Day	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the calibration day stored in the EEPROM of the microcontroller.
Set_Calibration_Mode	**Warning: The use of this function can affect the factory calibration of the USB**

	device. Sets the calibration mode associated with the digital components of the USB device.
Set_Calibration_Month	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the calibration month stored in the EEPROM of the microcontroller.
Set_Calibration_Register	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the calibration registers stored in the EEPROM of the microcontroller including: Resistance, Voltage, Current and Temperature.
Set_Calibration_Year	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the calibration year stored in the EEPROM of the microcontroller.
Set_Channel_Configuration	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the channel configuration associated with the USB device.
Set_CrossTalk	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the crosstalk value stored in the EEPROM of the microcontroller.
Set_Decimal_Point	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the decimal point format stored in the EEPROM of the microcontroller.
Set_Destination_IP_Address	**Warning: The use of this function can affect the factory calibration of the USB**

	device. Sets the destination IP address stored in the EEPROM of the microcontroller.
Set_Destination_MAC_Address	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the destination MAC address stored in the EEPROM of the microcontroller.
Set_Destination_Port_Number	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the destination port number stored in the EEPROM of the microcontroller.
Set_Digital_Components	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the digital components of the USB device.
Set_Direction	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the direction value stored in the EEPROM of the microcontroller.
Set_Enabled_Channels	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the enabled channels stored in the EEPROM of the microcontroller.
Set_Load_of_Loading_Point	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the load value related to the loading point stored in the EEPROM of the microcontroller.
Set_Load_Switch	**Warning: The use of this function can affect the factory calibration of the USB device.**

	Enables or disables the simulated load applied to the analog-to-digital converter (ADC).
Set_Loading_Point	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the analog-to-digital converter (ADC) value associated with the calibration loading point stored in the EEPROM of the microcontroller.
Set_Number_of_Active_Channels	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the number of active channels stored in the EEPROM of the microcontroller.
Set_Number_of_Loading_Points	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the number of loading point values stored in the EEPROM of the microcontroller.
Set_Pulses_Per_Rotation	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the number of pulses per rotatioin stored in the EEPROM of the microcontroller.
Set_RS232_Output_Format	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the RS-232 output format value stored in the EEPROM of the microcontroller.
Set_Sensitivity	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the nominal sensitivity value stored in the EEPROM of the microcontroller.

Set_Sensor_Configuration	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the sensor configuration stored in the EEPROM of the microcontroller including: Input / Output Type, Nominal Sensitivity and Nominal Bridge Resistance.
Set_Sensor_Identification_Number	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the serial number stored in the EEPROM of the microcontroller.
Set_Shunt_Value	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the shunt value stored in the EEPROM of the microcontroller.
Set_Source_IP_Address	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the source IP address stored in the EEPROM of the microcontroller.
Set_Source_Port_Number	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the source port number stored in the EEPROM of the microcontroller.
Set_TEDS_Error_Detection	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the TEDS error detection stored in the EEPROM of the microcontroller.
Set_Type_of_Calibration	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the type of calibration stored in the EEPROM of the microcontroller.

Set_Unit_Code	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the engineering unit code stored in the EEPROM of the microcontroller.
Set_Voltage_Output	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the voltage output of the USB device.
Set_Zero_Correction	**Warning: The use of this function can affect the factory calibration of the USB device.** Sets the new loading point value based on a zero correction for fixturing stored in the EEPROM of the microcontroller.
Slave_Activity_Inquiry	Verifies the communication data link with the USB device.
Version_of_Board	Gets the version of board from the USB device.
Write_Channel_Register	Writes to the microcontroller's channel register.
Write_EEPROM_Register	Writes to the microcontroller's EEPROM register.
Write_Memory_Register	Writes to the microcontroller's memory register.
Write_TEDS_Register	Writes to the Transducer Electronic Data Sheet (TEDS) register.

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See Also

Reference

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FUTEK_USB_DLL Namespace

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