

MC02HID.DLL
REFERENCE DOCUMENTATION

Interinar Electronics, LLC.
Version 1.0.0.0
2013

Namespace Documentation

Package MC02HID

Classes

- class MCDevice
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Description

MC02HID namespace features only one documented and user-accessible class.

Class Documentation

MC02HID.MCDevice Class Reference

Static Public Member Functions

- static Boolean FindTheHid ()
Search for a HID-class device by its Vendor ID and Product ID.
 - static Byte[] GetReg (UInt16 repType)
Request Input Report from device.
 - static void SetReg (UInt16 repType, Int32 regVal)
Send Output Report to device while no response from device is expected.
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Description

MCDevice Class gives access to internal registers of MC-02. It features three documented and user-accessible classes.

Member Function Documentation

static Boolean MC02HID.MCDevice.FindTheHid () [static]

Description:

Search for a HID-class device by its Vendor ID and Product ID.
 Vendor Id is set to 0x03EB
 Product Id is set to 0x2013

Returns:

True if the device is detected
 False if not detected.

static Byte [] MC02HID.MCDevice.GetReg (UInt16 repType) [static]

Description:

Request Input Report from device.
 Device must respond within 100ms or communication will close.
 Once communication is closed program must be restarted.

Returns:

Once transmission is completed it will return array of 9 bytes (see MC-02A User Manual).

Arguments:

<i>repType</i>	Must be a valid report type or will return error
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Using any other report type, not presented in Table 1 will result in error.
 For detailed explanation of each report type please refer to MC-02A User Manual.

Table 1. Allowed repType for GetReg

BIT NUMBER								<i>repType</i>		COMMAND NAME	Axes
7	6	5	4	3	2	1	0	DEC	HEX		
0	1	0	0	0	1	0	0	68	0x44	Read R0	X
0	1	0	1	0	1	0	0	84	0x54	Read R0	Y
0	1	1	0	0	1	0	0	100	0x64	Read R0	Z
0	1	1	1	0	1	0	0	116	0x74	Read R0	U
0	1	1	1	0	1	1	1	119	0x77	Read S0,S1	X,Y,Z,U
1	1	0	0	0	0	0	0	192	0xC0	HardwareID	

static void MC02HID.MCDevice.SetReg (UInt16 *repType*, Int32 *regVal*) [static]

Description:

Send Output Report to device.
Output Report must include both arguments.

Returns:

No response from device is expected.

Arguments:

<i>repType</i>	Must be a valid report type or will return error
<i>regVal</i>	Must be within a valid range for each register

For detailed explanation of each report type please refer to MC-02A() User Manual.
Each register has different value limits. This program will not report if value is out of limits.
This must be implemented in customer's application.

Table 2. Allowed *repType* for SetReg

BIT NUMBER								<i>repType</i>		COMMAND NAME	Axes
7	6	5	4	3	2	1	0	DEC	HEX		
0	0	0	0	1	1	1	1	15	0x0F	Start Mode	X
0	0	0	0	0	0	0	1	1	0x01	Control Mode	X
0	0	0	0	0	0	1	0	2	0x02	Register Mode	X
0	0	0	0	0	0	1	1	3	0x03	Output Mode	X
0	0	0	0	0	1	0	0	4	0x04	Write R0	X
0	0	0	0	0	1	0	1	5	0x05	Write R1	X
0	0	0	0	0	1	1	0	6	0x06	Write R2	X
0	0	0	0	0	1	1	1	7	0x07	Write R3	X
0	0	0	0	1	0	0	0	8	0x08	Write R4	X
0	0	0	0	1	0	0	1	9	0x09	Write R5	X
0	0	0	0	1	0	1	0	10	0x0A	Write R6	X
0	0	0	1	1	1	1	1	31	0x1F	Start Mode	Y
0	0	0	1	0	0	0	1	17	0x11	Control Mode	Y
0	0	0	1	0	0	1	0	18	0x12	Register Mode	Y
0	0	0	1	0	0	1	1	19	0x13	Output Mode	Y
0	0	0	1	0	1	0	0	20	0x14	Write R0	Y
0	0	0	1	0	1	0	1	21	0x15	Write R1	Y
0	0	0	1	0	1	1	0	22	0x16	Write R2	Y
0	0	0	1	0	1	1	1	23	0x17	Write R3	Y

0	0	0	1	1	0	0	0	24	0x18	Write R4	Y
0	0	0	1	1	0	0	1	25	0x19	Write R5	Y
0	0	0	1	1	0	1	0	26	0x1A	Write R6	Y
0	0	1	0	1	1	1	1	47	0x2F	Start Mode	Z
0	0	1	0	0	0	0	1	33	0x21	Control Mode	Z
0	0	1	0	0	0	1	0	34	0x22	Register Mode	Z
0	0	1	0	0	0	1	1	35	0x23	Output Mode	Z
0	0	1	0	0	1	0	0	36	0x24	Write R0	Z
0	0	1	0	0	1	0	1	37	0x25	Write R1	Z
0	0	1	0	0	1	1	0	38	0x26	Write R2	Z
0	0	1	0	0	1	1	1	39	0x27	Write R3	Z
0	0	1	0	1	0	0	0	40	0x28	Write R4	Z
0	0	1	0	1	0	0	1	41	0x29	Write R5	Z
0	0	1	0	1	0	1	0	42	0x2A	Write R6	Z
0	0	1	1	1	1	1	1	63	0x3F	Start Mode	U
0	0	1	1	0	0	0	1	49	0x31	Control Mode	U
0	0	1	1	0	0	1	0	50	0x32	Register Mode	U
0	0	1	1	0	0	1	1	51	0x33	Output Mode	U
0	0	1	1	0	1	0	0	52	0x34	Write R0	U
0	0	1	1	0	1	0	1	53	0x35	Write R1	U
0	0	1	1	0	1	1	0	54	0x36	Write R2	U
0	0	1	1	0	1	1	1	55	0x37	Write R3	U
0	0	1	1	1	0	0	0	56	0x38	Write R4	U
0	0	1	1	1	0	0	1	57	0x39	Write R5	U
0	0	1	1	1	0	1	0	58	0x3A	Write R6	U
1	0	0	0	0	0	0	1	129	0x81	Enable X	X
1	0	0	0	0	0	1	0	130	0x82	StepMode X	X
1	0	0	1	0	0	0	1	145	0x91	Enable Y	Y
1	0	0	1	0	0	1	0	146	0x92	StepMode Y	Y
1	0	1	0	0	0	0	1	161	0xA1	Enable Z	Z
1	0	1	0	0	0	1	0	162	0xA2	StepMode Z	Z
1	0	1	1	0	0	0	1	177	0xB1	Enable U	U
1	0	1	1	0	0	1	0	178	0xB2	StepMode U	U
1	0	1	0	0	0	0	0	160	0xA0	AUX Outputs	
1	0	0	0	1	0	0	0	136	0x88	RESET PCD	