EAS12M, Version 1.00
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Overview

EAS12M is a DLL that was written to help Visual Basic programmers access the MiniDaq hardware functions. The DLL contains a number of routines and was written entirely in C. There are two version of the EAS12M DLL library. EAS12M.DLL is compiled for the 16bit Visual Basic programming environment and EAS12M32.DLL for the 32bit version of Visual Basic. Programs compiled using EAS12M.DLL will run on both Windows3.1 and Windows95 platforms. Programs compiled with EAS12M32.DLL will run only on Windows95.

To use EAS12 in your Visual Basic program, you should copy either EAS12M.TXT or EAS12M32.TXT to to one of the .BAS modules in your project. This file contains the declarations for all of the EAS12M subroutines and functions. You must also place the DLL itself where Windows can find it (normally in the Windows system directory). You can then call these routines as you would call any other DLL routine. See the Visual Basic documentation for additional information about calling DLL routines from Visual Basic.

WARNING: Visual Basic prevents you from making most errors that would adversely affect the system. When you use this or any other DLL, Visual Basic can no longer prevent these types of errors. Under Windows protected mode, most errors will result in a General Protection Fault (GPF). However, it is possible, using EAS12M, to corrupt Windows, DOS or even the files on your disk. Use caution when working with any DLL and be sure to save and backup your files often.

If you find a problem or have a suggestion for making the DLL or associated documentation more helpful, please share your knowledge and let us know.

Subroutine Reference

This section lists and describes the subroutines contained within the EAS12M.DLL and EAS12M32.

outbyte

Declaration 16bit: Declare Sub outbyte Lib "eas12m.dll" (ByVal nPort%, ByVal nData%)
Declaration 32bit: Declare Sub outbyte Lib "eas12m32.dll" (ByVal nPort%, ByVal nPort%)

Description: Sends a byte value to the I/O port nPort specified by nData.

Note that under Windows protected mode, some I/O ports may be in use by Windows and will not be available to your application.

inbyte

Declaration 16bit: Declare Function inbyte Lib "eas12m.dll" (ByVal nPort%) As Integer

Declaration 32bit: Declare Function inbyte Lib "eas12m32.dll" (ByVal nPort%) As Integer

Description: Reads a byte value from the I/O port specified by nPort.

Note that under Windows protected mode, some I/O ports may be in use by Windows and will not be available to your application.

bpse12

Declaration 16bit: Declare Function bpse12 Lib "eas12m.dll" (ByVal channel%, ByVal baseaddress%) As Integer

Declaration 32bit: Declare Function bpse12 Lib "eas12m32.dll" (ByVal channel%, ByVal baseaddress%) As Integer

Description: Function will start a bipolar single ended conversion and return integer
value between

-2048 and +2047

channel is a input integer from 0 to 7 corresponding to the 8 A/D channels on MiniDaq.

Bipolar A/D channel pin assignments for MiniDaq

Channel 0	P2 pin 1
Channel 1	P2 pin 2
Channel 2	P2 pin 3
Channel 3	P2 pin 4
Channel 4	P2 pin 5
Channel 5	P2 pin 6
Channel 6	P2 pin 7
Channel 7	P2 pin 8

baseaddress is the address of the PC parallel port MiniDaq is connected to.

unise12

Declaration 16bit: Declare Function unise12 Lib "eas12m.dll" ByVal channel%, ByVal baseaddress%) As Integer

Declaration 32bit: Declare Function unise12 Lib "eas12m32.dll" ByVal channel%, ByVal baseaddress%) As Integer

Description: Function will start a unipolar single ended conversion and return integer
value between

0 and 4097

channel is a input integer from 0 to 7 corresponding to the 8 A/D channels on MiniDaq.

Unipolar A/D channel pin assignments for MiniDaq

Channel 0	P2 pin 1
Channel 1	P2 pin 2
Channel 2	P2 pin 3
Channel 3	P2 pin 4
Channel 4	P2 pin 5
Channel 5	P2 pin 6
Channel 6	P2 pin 7

Channel 7	P2 pin 8

baseaddress is the address of the PC parallel port MiniDaq is connected to.

bpdf12

Declaration 16bit: Declare Function bpdf12 Lib "eas12m.dll" (ByVal channel%, ByVal baseaddress%) As Integer

Declaration 32bit: Declare Function bpdf12 Lib "eas12m32.dll" (ByVal channel%, ByVal baseaddress%) As Integer

Description: Function will start a bipolar differential conversion and return integer value between
-2048 and +2047

channel is a input integer from 0 to 3 corresponding to the 4 differential A/D channels on MiniDaq.

Differential A/D channel pin assignments for MiniDaq

	Negative	Positive
Channel 0	P2 pin 1	P2 pin 2
Channel 1	P2 pin 3	P2 pin 4
Channel 2	P2 pin 5	P2 pin 6
Channel 3	P2 pin 7	P2 pin 8

baseaddress is the address of the PC parallel port MiniDaq is connected to.

unidf12

Declaration 16bit: Declare Function unidf12 Lib "eas12m.dll" (ByVal channel%, ByVal baseaddress%) As Integer

Declaration 32bit: Declare Function unidf12 Lib "eas12m32.dll" (ByVal channel%, ByVal baseaddress%) As Integer

Description: Function will start a unipolar differential conversion and return integer
value between

0 and 4097

channel is a input integer from 0 to 3 corresponding to the 4 differential A/D channels on MiniDaq.

Differential A/D channel pin assignments for MiniDaq

	Negative	Positive
Channel 0	P2 pin 1	P2 pin 2
Channel 1	P2 pin 3	P2 pin 4
Channel 2	P2 pin 5	P2 pin 6
Channel 3	P2 pin 7	P2 pin 8

baseaddress is the address of the PC parallel port MiniDaq is connected to.

readpa

Declaration 16bit: Declare Function readpa Lib "eas12m.dll" (ByVal nPort%, ByVal baseaddress%) As Integer

Declaration 32bit: Declare Function readpa Lib "eas12m32.dll" (ByVal nPort%, ByVal baseaddress%) As Integer

Description: Function will read the status of the digital output lines of MiniDaq port PA

The value returned is 1 when port PAx is high and 0 when low

nPort is a input integer with value of:
0 = function will read port PA0, P2 pin 18
1 = function will read port PA1, P2 pin 19
2 = function will read port PA2, P2 pin 20
3 = function will read port PA3, P2 pin 21
4 = function will read port PA4, P2 pin 22
5 = function will read port PA5, P2 pin 23
6 = function will read port PA6, P2 pin 24

baseaddress is the address of the PC parallel port MiniDaq is connected to.

readpb

Declaration 16bit: Declare Function readpb Lib "eas12m.dll" (ByVal nPort%, ByVal baseaddress%) As Integer

Declaration 32bit: Declare Function readpb Lib "eas12m32.dll" (ByVal nPort%, ByVal baseaddress%) As Integer

Description: Function will read the status of the digital input lines of MiniDaq port PB

The value returned is 1 when port PBx is high and 0 when low.

nPort is a input integer with value of:
0 = function will read port PB0, P2 pin 9
1 = function will read port PB1, P2 pin 10
2 = function will read port PB2, P2 pin 11
3 = function will read port PB3, P2 pin 12

baseaddress is the address of the PC parallel port MiniDaq is connected to.

outpa

Declaration 16bit: Declare Sub outpa Lib "eas12m.dll" (ByVal nBit%, ByVal nPort%, ByVal baseaddress%)

Declaration 32bit: Declare Sub outpa Lib "eas12m32.dll" (ByVal nBit%, ByVal nPort%, ByVal baseaddress%)

Description: Function will set individual digital output ports of MiniDaq port PA high or low determined by the value of nBit.

nBit is a input integer set to 0 or 1.
0 = set digital output low
1 = set digital output high

nPort is a input integer with value of:

0 = function will set port PA0, P2 pin 18
1 = function will set port PA1, P2 pin 19
2 = function will set port PA2, P2 pin 20
3 = function will set port PA3, P2 pin 21
4 = function will set port PA4, P2 pin 22
5 = function will set port PA5, P2 pin 23
6 = function will set port PA6, P2 pin 24

baseaddress is the address of the PC parallel port MiniDaq is connected to.

outpahi

Declaration 16bit: Declare Sub outpahi Lib "eas12m.dll" (ByVal nPort%, ByVal baseaddress%)
Declaration 32bit: Declare Sub outpahi Lib "eas12m32.dll" (ByVal nPort%, ByVal baseaddress%)

Description: Function will set individual digital output ports of MiniDaq port PA high.

nPort is a input integer with value of:
0 = function will set port PA0, P2 pin 18
1 = function will set port PA1, P2 pin 19
2 = function will set port PA2, P2 pin 20
3 = function will set port PA3, P2 pin 21
4 = function will set port PA4, P2 pin 22
5 = function will set port PA5, P2 pin 23
6 = function will set port PA6, P2 pin 24

baseaddress is the address of the PC parallel port MiniDaq is connected to.

outpalow

Declaration 16bit: Declare Sub outpalow Lib "eas12m.dll" (ByVal nPort%, ByVal baseaddress%)
Declaration 32bit: Declare Sub outpalow Lib "eas12m32.dll" (ByVal nPort%, ByVal baseaddress%)

Description: Function will set individual digital output ports of MiniDaq port PA low.

nPort is a input integer with value of:
0 = function will set port PA0, P2 pin 18
1 = function will set port PA1, P2 pin 19
2 = function will set port PA2, P2 pin 20
3 = function will set port PA3, P2 pin 21
4 = function will set port PA4, P2 pin 22
5 = function will set port PA5, P2 pin 23
6 = function will set port PA6, P2 pin 24

baseaddress is the address of the PC parallel port MiniDaq is connected to.

lptport

Declaration 16bit: Declare Function lptport Lib "eas12m.dll" (ByVal nPort%) As Integer
Declaration 32bit: Function not available in EAS12M32.DLL library.

Description: Function will return the baseaddress of the IBM parallel port. If value returned is 0 then parallel port is not available or installed in PC.

nPort is a input integer with value of:
1 = function will return baseaddress for parallel port LPT1
2 = function will return baseaddress for parallel port LPT2
3 = function will return baseaddress for parallel port LPT3
4 = function will return baseaddress for parallel port LPT4

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