EAS12MQL, Version 1.00
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Overview

EAS12MQL is a Quick Basic library (QLB) that was written to help Quick Basic programmers access the MiniDaq hardware functions. The QLB contains a number of routines and was written entirely in C.

To use EAS12QL in your Quick Basic program, you should copy/paste EAS12MQL.INC to your source code. This file contains the declarations for all of the EAS12MQL subroutines and functions. See the Quick Basic documentation for additional information about calling QLB routines from Quick Basic.

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

Subroutine Reference

This section lists and describes the subroutines contained within EAS12MQL quick library.

outbyte

Declaration	DECLARE SUB outbyte CDECL (BYVAL *nPort* AS INTEGER, BYVAL *nData* AS INTEGER)
Description:	Sends a byte value to the I/O port *nPort* specified by *nData*.

inbyte

Declaration	DECLARE FUNCTION inbyte CDECL (BYVAL *nPort* AS INTEGER)
Description:	Reads a byte value from the I/O port specified by *nPort*.

bpse12

Declaration	DECLARE FUNCTION bpse12% CDECL (BYVAL *channel* AS INTEGER, 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	DECLARE FUNCTION unise12% CDECL (BYVAL *channel* AS INTEGER, 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	DECLARE FUNCTION bpdf12% CDECL (BYVAL *channel* AS INTEGER, 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	DECLARE FUNCTION unidf12% CDECL (BYVAL *channel* AS INTEGER, 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	DECLARE FUNCTION readpa% CDECL (BYVAL *nPort* AS INTEGER, 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	DECLARE FUNCTION readpb% CDECL (BYVAL *nPort* AS INTEGER, 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	DECLARE SUB outpa CDECL (BYVAL *nBit* AS INTEGER, BYVAL *nPort* AS INTEGER, BYVAL *baseaddress* AS INTEGER)
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	DECLARE SUB outpahi CDECL (BYVAL *nPort* AS INTEGER, BYVAL *baseaddress* AS INTEGER)
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	DECLARE SUB outpalow CDECL (BYVAL *nPort* AS INTEGER, BYVAL *baseaddress* AS INTEGER)

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.

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