

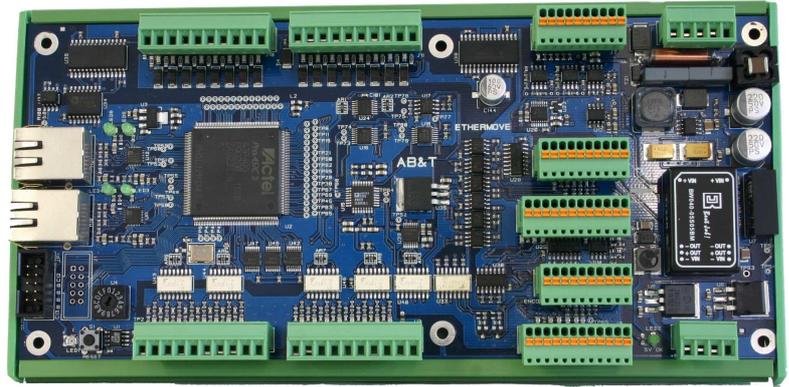
# EtherMove



2CH Analog Axes + 2CH stepper motors  
+ 16Input + 16Output + 2ADC + 2DAC

## Features:

- 2-CH encoder counter
  - A/B phase
  - Z marker
  - 2.5Mhz any phase
- 2-CH 16 bit analog-output +-10Volt
- 2-CH DO 24V-100mA to enable Driver
- 2-CH DI 24V for Driver OK
- 2-CH DI 24V for Micro Zero
- 2-CH DI fast input for Latch Counter
- 2-CH 12 bit analog-output +- 10Volt
- 2-CH 12 bit analog-input 133KHz +-10Volt
- 2-CH DO 5V-20mA for pulse Stepper Motor
- 2-CH DO 5V-20 mA for direction Stepper Motor
- 2-CH DO 5V-20mA for enable Stepper Motor
- 16-CH DI 24V-100mA for General Output
- 16-CH DI 24V for General Input



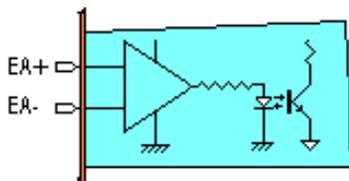
## Introduction

The Etherbox is an high performance industrial 2 analog axes and 2 stepper motor controller 16Input 16Output

- 2-CH encoder counter
  - A/B phase
  - Z marker
  - 2.5Mhz any phase
- 2-CH 16 bit analog-output
- 2-CH DO 24V-100mA to enable Driver
- 2-CH DI 24V for Driver OK
- 2-CH DI 24V for Micro Zero
- 2-CH DI fast input for Latch Counter
- 2-CH 12 bit analog-output
- 2-CH 12 bit analog-input 133KHz
- 2-CH DO 5V-20mA for pulse Stepper Motor
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- 16-CH DI 24V for General Input

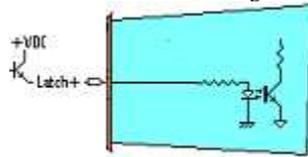
## Encoder counter

2 counter 24 bit to read position with A/B phase,  
any phase is an input differential signal to up to 2.5Mhz, ( 10Mhz counter).  
2 differential Z marker to homing positions



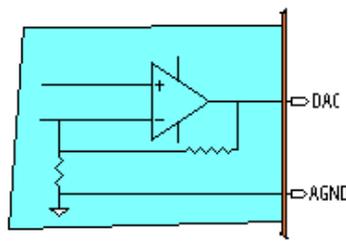
## Latch position

2 digital 5VDC interrupt signals are connected to latch independent position, the position are latch in 70 ns on front change of signal



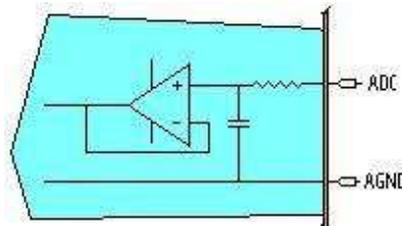
## Analog Output

The Etherbox provides 2 16-bit + 2 12-bit Digital to Analog converter channels. The output voltage ranges from -10 V to +10 V. The Analog outputs are all single ended with common ground AGND.



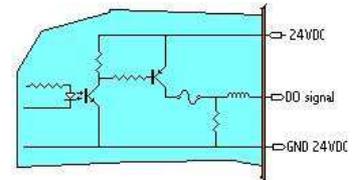
## Analog input

The Etherbox provides 2 12-bit A/D converter channels. The analog source is selectable for each channel to be +10V DC to -10V DC



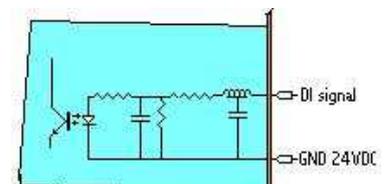
## Digital Output

The Etherbox provides 2 + 16  
The signals indicate to use for :  
2 Enable the analog driver  
16 to connect general output



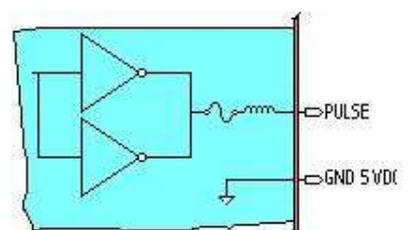
## Digital Input

The Etherbox provides 4+16 digital input with 2500 V ms isolation.  
The signals indicate to use for :  
2 to connect Driver Ok  
2 to connect Micro Zero  
16 to connect general input



## Pulse Output

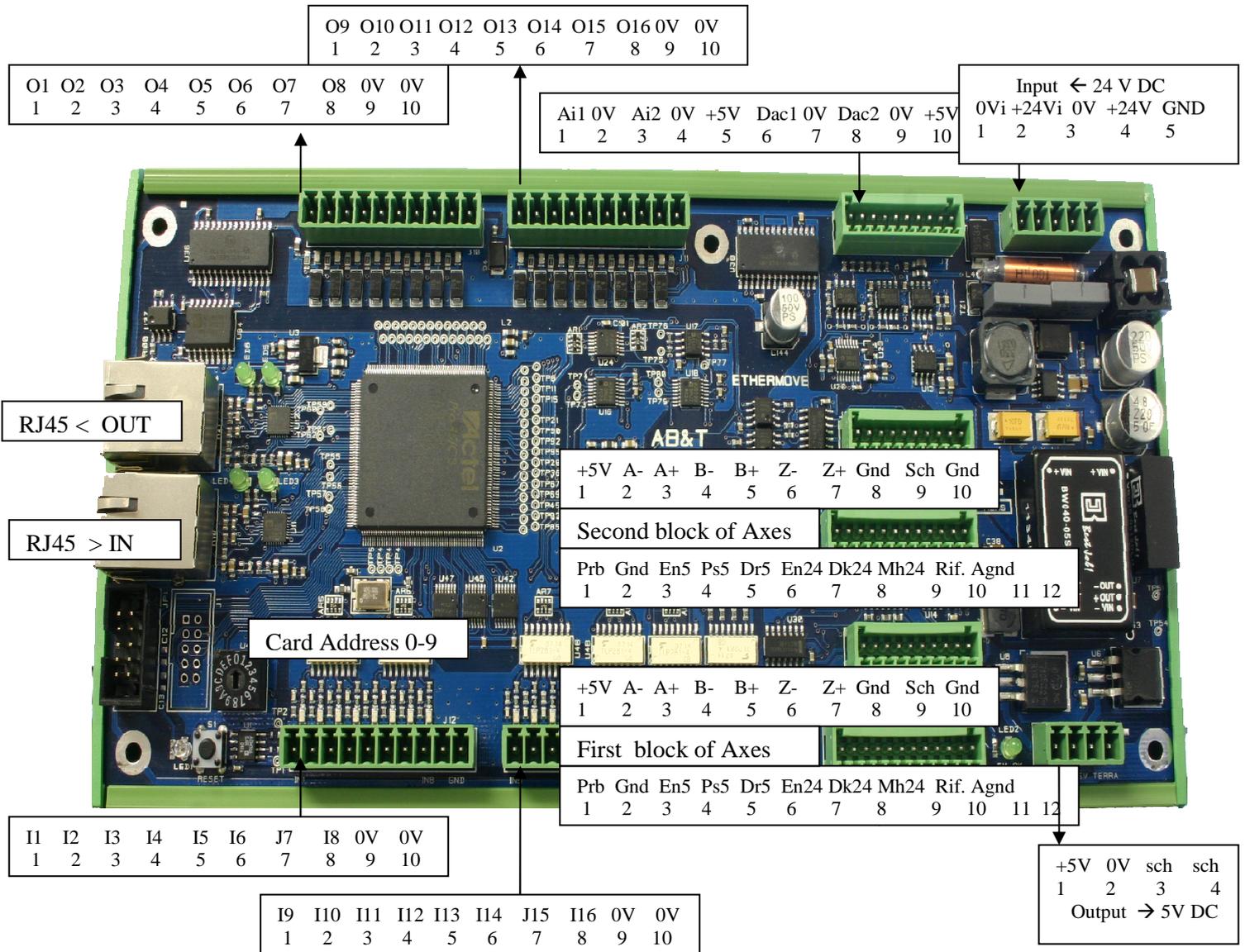
The Etherbox provides 2 pulse output channels  
5Vcc, the output frequency goes up to 1MHz.  
2 signal 5Vcc Direction stepper motor  
2 signal 5Vcc Enable the stepper motor



# EtherMove



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## Specification:

Dimension 107- 170 mm without DIN enclosure

Operating Temperature: 0C -50C

Storage Temperature: -20C -80C

Humidity: 5- 85% non condensing

## Power Consumption:

External power supply (input)

+24 V DC , +- 5%

Internal power supply (output)

+5 V DC , +- 5%, 200 mA max

## Encoder Connector

1	+5Volt for power supply to Encoder output
2	A- differential signal
3	A+ differential signal
4	B- differential signal
5	B+ differential signal
6	Z- differential signal Marker
7	Z+ differential signal Marker
8	Gnd ( 0Volt ) for power supply to Encoder output
9	Shield for cable for Encoder
10	Ground ( 0Volt ) for frequency motor driver ( Enable5V, Pulse 5V, Direction 5 ) output

## Axes connector

1	Probe 5Volt input
2	Probe 0Volt input
3	Enable 5Volt for frequency motor drive
4	Pulse 5Volt for frequency motor drive
5	Direction 5Volt for frequency motor drive
6	Enable 24Volt output for motor drive standard mode
7	Driver OK 24 Volt input output for motor drive standard mode
8	Micro Home sensor 24Volt input output for motor drive standard mode
9	Reference +- 10Volt output for motor drive standard mode
10	Analog Ground for Reference signal +- 10Volt
11	Free
12	Free

## Analogic connector

1	Analogic Input 1 +- 10Volt ( 12bit)
2	Analog Ground Input 1
3	Analogic Input 2 +- 10Volt ( 12bit)
4	Analog Ground Input 2
5	+5Volt output
6	Analogic Output 1 +- 10Volt ( 12bit)
7	Analog Ground Output 1
8	Analogic Output 2 +- 10Volt ( 12bit)
9	Analog Ground Output 2
10	+5Volt output