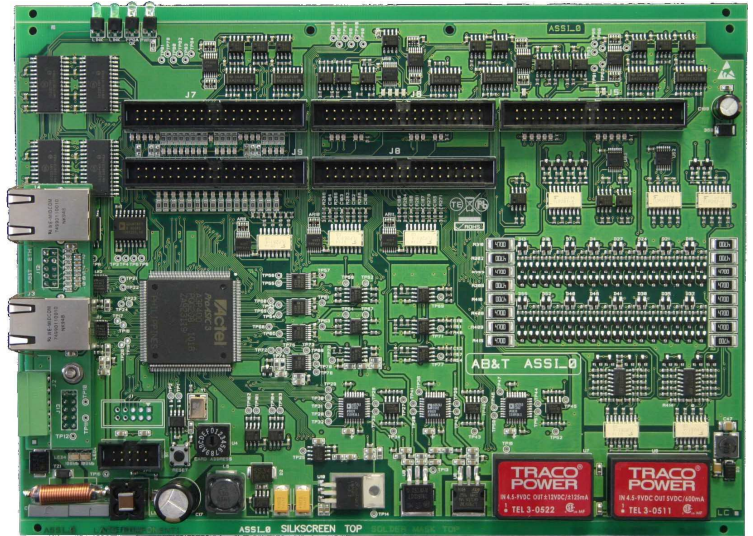


Features:

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



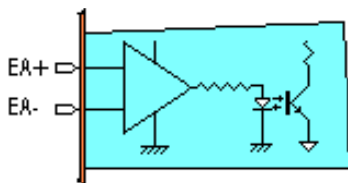
Introduction

The Etherbox is an high performance industrial 6 analog axes and 6 stepper motor controller 32Input 32Output

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

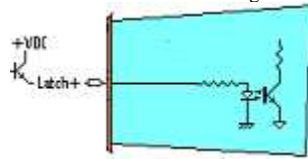
Encoder counter

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



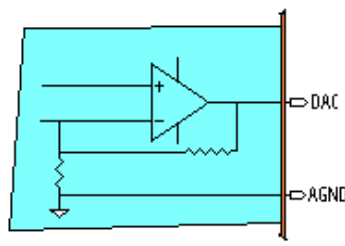
Latch position

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



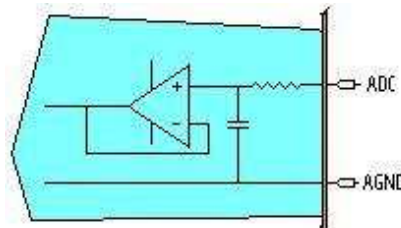
Analog Output

The Etherbox provides 6 16-bit + 3 12-bit Digital to Analog converter channels. The output voltage ranger from -10 V to +10 V. The Analog outputs are all single endend with common round AGND.



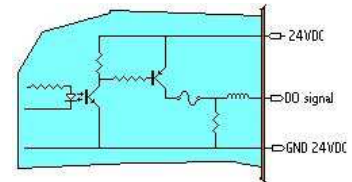
Analog input

The Etherbox provides 3 12-bit A/D converter chanel. The analog source is selectable for each channel to be +10V DC to -10V DC



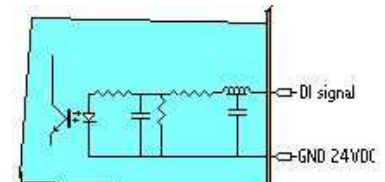
Digital Output

The Etherbox provides 6 + 32
The signals is indicate to use for :
6 Enable the analog driver
32 to connect general output



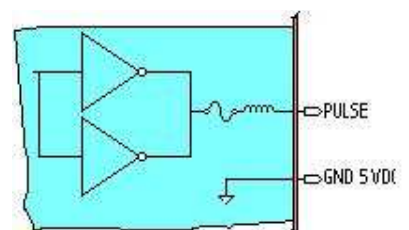
Digital Input

The Etherbox provides 12+32 digital input with 2500 V ms isolation .
The signals is indicate to use for :
6 to connect Driver Ok
6 to connect Zero Micro Switch.
32 to connect general input



Pulse Output

The Etherbox provides 6 pulse output chanel
5 Vcc, the output frequency goes up 1MHz.
6 5 Vcc Enble the stepper motor
6 5 Vcc Direction stepper motor



Specifications

Connectors:

- 2 Rj45 Ethernet connection **J3-J4**
- 24 Volt Power supply **J2**
- 1-2 Axes analog e stepper 1° DAC + 1°ADC (analog channel) **J5**
- 3-4 Axes analog e stepper 2° DAC + 2°ADC (analog channel) **J6**
- 5-6 Axes analog e stepper 3° DAC + 3°ADC (analog channel) **J7**
- 32 Output 100m A 24V **J9**
- 32 Input 24V **J8**
- Card Address 0-9 9 Must be last

Dimension : 233.35x160

Operating Temperature: 0C –50C

Storage Temperature: -20C –80C

Humidity: 5- 85% non condensing

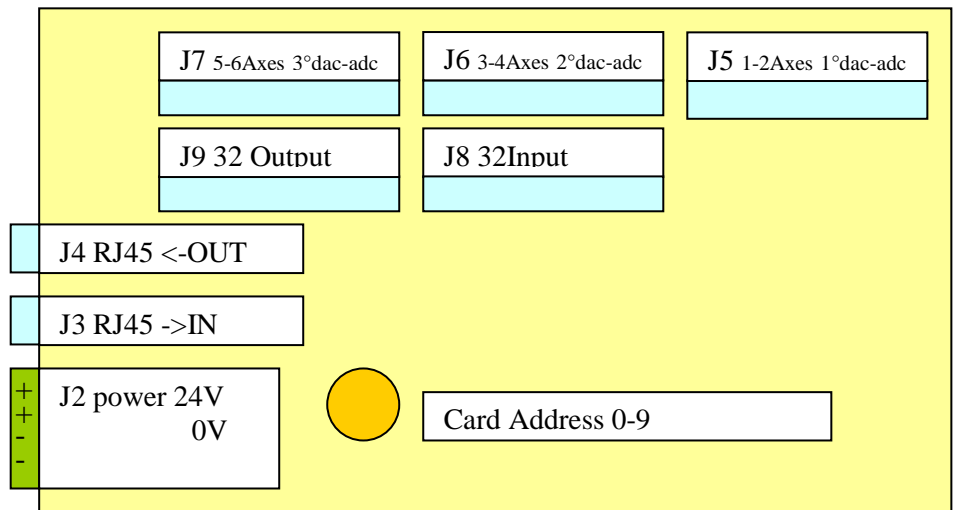
Power Consumption:

External power supply (input)

+24 V DC , +- 5%

Internal power supply (output)

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



J9

24VDC	1	2	24VDC
24VDC	3	4	24VDC
OUT1	5	6	OUT2
OUT3	7	8	OUT4
OUT5	9	10	OUT6
OUT7	11	12	OUT8
OUT9	13	14	OUT10
OUT11	15	16	OUT12
OUT13	17	18	OUT14
OUT15	19	20	OUT16
OUT17	21	22	OUT18
OUT19	23	24	OUT20
OUT21	25	26	OUT22
OUT23	27	28	OUT24
OUT25	29	30	OUT26
OUT27	31	32	OUT28
OUT29	33	34	OUT30
OUT31	35	36	OUT32
0VDC	37	38	0VDC
0VDC	39	40	0VDC

J7

EA5+	1	2	EA5-
EB5+	3	4	EB5-
EZ5+	5	6	EZ5-
0VDC	7	8	GND 0V Frequency signals 5V+DC
REF5	9	10	AGND-REF5 (ADC3)
Probe_5V+Input5	11	12	0VDC Probe_5V+Input5
ENABLE_24V+5	13	14	DROK_24V+5
ZERO_24V+5	15	16	ENABLE_5V+5
DIR_5V+5	17	18	PULSE_5V+5
ADC3	19	20	5VDC (20mA Output)
EA6+	21	22	EA6-
EB6+	23	24	EB6-
EZ6+	25	26	EZ6-
0VDC	27	28	GND 0V Frequency signals 5V+DC
REF6	29	30	AGND-REF6 (DAC3)
Probe_5V+Input6	31	32	0VDC Probe_5V+Input6
ENABLE_24V+6	33	34	DROK_24V+6
ZERO_24V+6	35	36	ENABLE_5V+6
DIR_5V+6	37	38	PULSE_5V+6
DAC3	39	40	5VDC (20mA Output)

J8

	1	2	
	3	4	
IN1	5	6	IN2
IN3	7	8	IN4
IN5	9	10	IN6
IN7	11	12	IN8
IN9	13	14	IN10
IN11	15	16	IN12
IN13	17	18	IN14
IN15	19	20	IN16
IN17	21	22	IN18
IN19	23	24	IN20
IN21	25	26	IN22
IN23	27	28	IN24
IN25	29	30	IN26
IN27	31	32	IN28
IN29	33	34	IN30
IN31	35	36	IN32
0VDC	37	38	0VDC
0VDC	39	40	0VDC

J6

EA3+	1	2	EA3-
EB3+	3	4	EB3-
EZ3+	5	6	EZ3-
0VDC	7	8	GND 0V Frequency signals 5V+DC
REF3	9	10	AGND-REF3 (ADC2)
Probe_5V+Input3	11	12	0VDC Probe_5V+Input3
ENABLE_24V+3	13	14	DROK_24V+3
ZERO_24V+3	15	16	ENABLE_5V+3
DIR_5V+3	17	18	PULSE_5V+3
ADC2	19	20	5VDC (20mA Output)
EA4+	21	22	EA4-
EB4+	23	24	EB4-
EZ4+	25	26	EZ4-
0VDC	27	28	GND 0V Frequency signals 5V+DC
REF4	29	30	AGND-REF4 (DAC2)
Probe_5V+Input4	31	32	0VDC Probe_5V+Input4
ENABLE_24V+4	33	34	DROK_24V+4
ZERO_24V+4	35	36	ENABLE_5V+4
DIR_5V+4	37	38	PULSE_5V+4
DAC2	39	40	5VDC (20mA Output)

J5

EA1+	1	2	EA1-
EB1+	3	4	EB1-
EZ1+	5	6	EZ1-
0VDC	7	8	GND 0V Frequency signals 5V+DC
REF1	9	10	AGND-REF1 (ADC1)
Probe_5V+Input1	11	12	0VDC Probe_5V+Input1
ENABLE_24V+1	13	14	DROK_24V+1
ZERO_24V+1	15	16	ENABLE_5V+1
DIR_5V+1	17	18	PULSE_5V+1
ADC1	19	20	5VDC (20mA Output)
EA2+	21	22	EA2-
EB2+	23	24	EB2-
EZ2+	25	26	EZ2-
0VDC	27	28	GND 0V Frequency signals 5V+DC
REF2	29	30	AGND-REF2 (DAC1)
Probe_5V+Input2	31	32	0VDC Probe_5V+Input2
ENABLE_24V+2	33	34	DROK_24V+2
ZERO_24V+2	35	36	ENABLE_5V+2
DIR_5V+2	37	38	PULSE_5V+2
DAC1	39	40	5VDC (20mA Output)