T160 Series

Controller & I/O Module

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Description

The T160 series of I/O modules are used as expansion modules for control systems, providing a more reasonable product mix for controllers and increasing the flexibility of system design. With faster processors, flexible port multiplexing, compact size and support for up to 2-way CAN2.0B bus communication, the products are widely used in small control systems and automation technology combinations.
The T160 series I/O modules can operate at temperatures from -40 to 70°C and can be used in extreme climatic environments.
The T160 Series I/O modules allow users OTA to remotely upgrade applications and firmware, easily maintain the system, reduce total cost of ownership at all stages of the product lifecycle, and accelerate your digital transformation.
The T160 series I/O modules can be used as controllers for specialized system development and have a superb cost performance. It supports high-level C programming and provides free basic version to speed up the application development process.

Application

Small control systems for the industrial, robotics and construction machinery industries, as well as I/O extensions.
- Vehicle-mounted aerial work platform machinery
- Hoisting machinery
- Material handling machinery
- Industrial, Robotics
- Sanitation machinery
- Agricultural machinery
- Earthmoving machinery
- New energy machine control
- Mining Machinery
- Distributed control

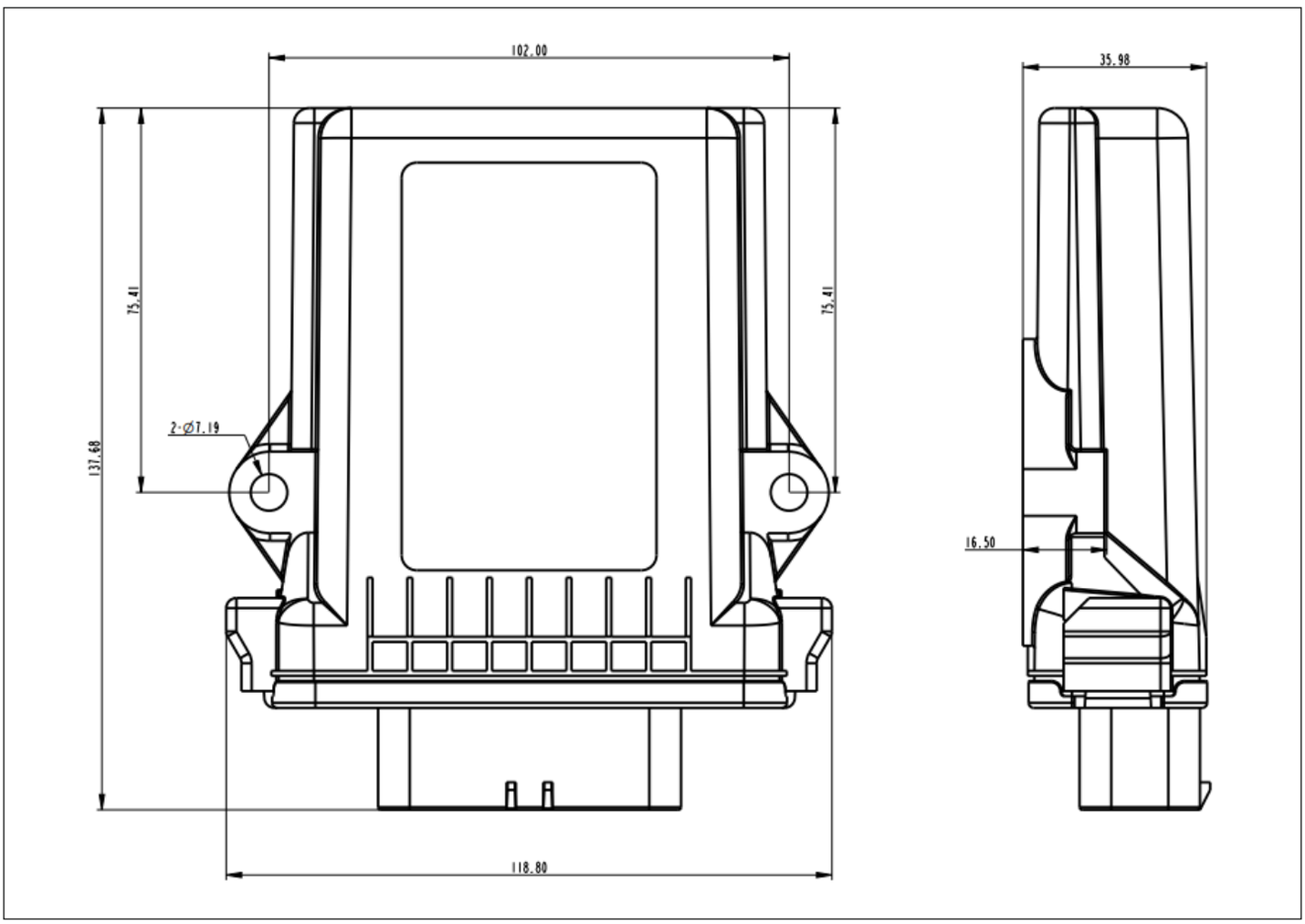
Features

- 32-bit 120 MHz high-performance processor
- Adopt high-speed SPI interface ferroelectric memory chip (FRAM), 1 billion times erasure life, parameter double backup storage, improve parameter reliability
- 2-way CAN interfaces up to 1 Mbps.
- The product is highly integrated with 8-way outputs and 14-way inputs for a total of 22-way IO ports.
- 4-way 4A high-side PWM/DO output ports, support constant current output, meet the demand of closed-loop control.
- 4-way 2A high-side DO outputs, all with diagnostic function.
- 5-way 4...20mA / 0...5V / DIH input ports, each one software configurable.
- 4-way DIH switching inputs, each of which is software configurable.
- 4-way DIH / DIL switching inputs, each one software configurable.
- 1-way 0...32V/DIH input port.
- 1-way channel 5V voltage output, maximum output voltage 250mA.

Technical specification

Term (in a mathematical formula)	Parameters	Note
operating voltage	8～36V	
operating temperature	-40～70°	
Storage temperature	-40～85°	
IP rating	IP67 (including harness)	
CPU frequency	120MHz	
Power supply anti-reverse connection	be in favor of	
Overall dimensions	138*119*37mm	
Mating Plug	35 stitches	
weights	0.8KG	

Unit Dimensions



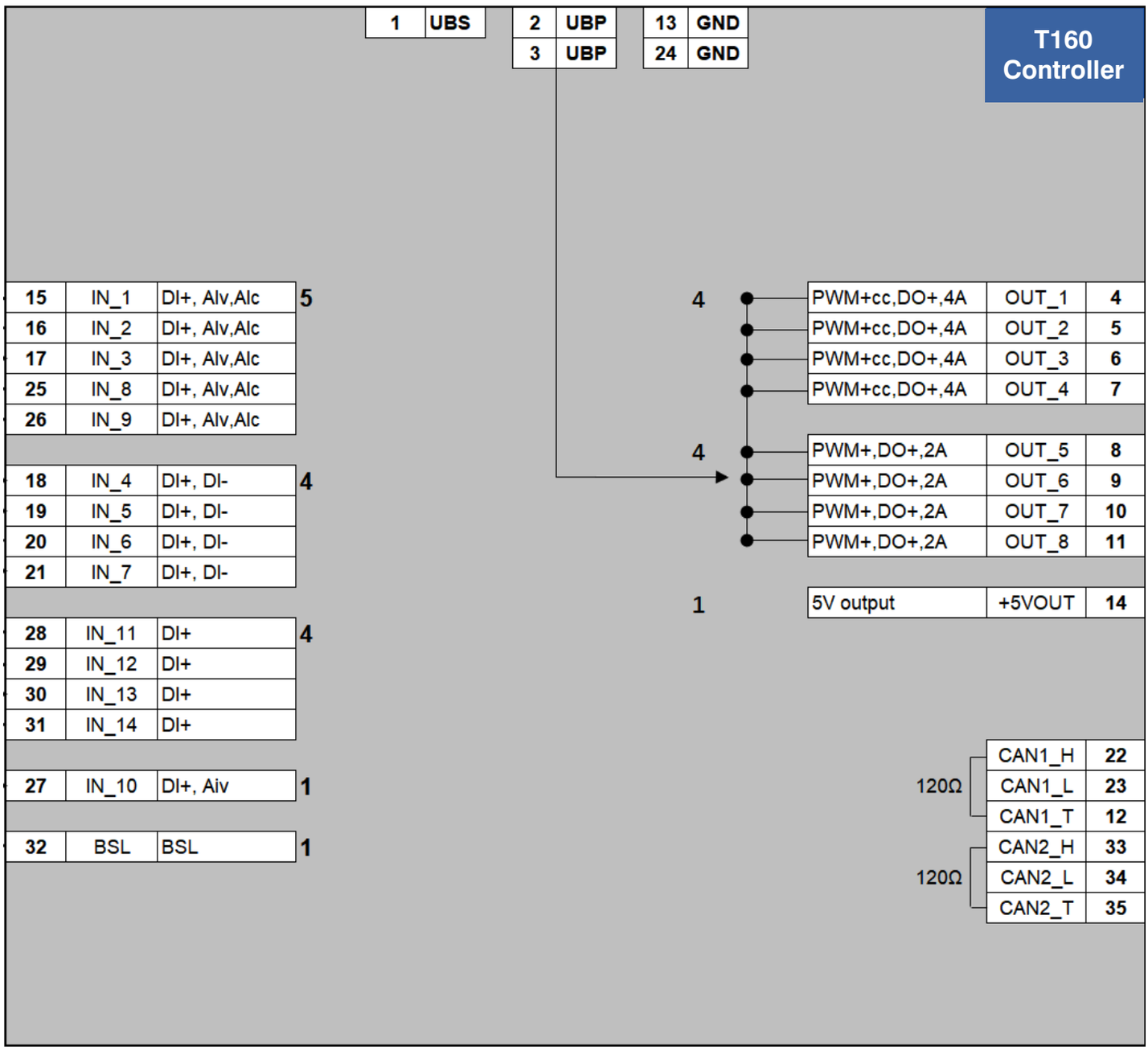
Pin Definitions

Pin	Port Definition	Functional Description
1	UBS	UBS
2	UBP	UBP
3	UBP	UBP
4	OUT_01	High -side PWM/DO output with current measurement up to 4A
5	OUT_02	High -side PWM/DO output with current measurement up to 4A

Pin Definitions

6	OUT_03	High-side PWM/DO output with current measurement up to 4A
7	OUT_04	High-side PWM/DO output with current measurement up to 4A
8	OUT_05	High-side PWM/DO output, 2A max current
9	OUT_06	High-side PWM/DO output, 2A max current
10	OUT_07	High-side PWM/DO output, 2A max current
11	OUT_08	High-side PWM/DO output, 2A max current
12	CAN1_TR	CAN1_TR
13	GND	GND
14	VSS_1	Vref5V, 250mA
15	IN_01	0～5V｜4～20mA｜DIH, Software Configuration Multiplexing
16	IN_02	0～5V｜ 4～20mA｜DIH, Software Configuration Multiplexing
17	IN_03	0～5V｜4～20mA｜DIH, Software Configuration Multiplexing
18	IN_04	DIH｜DIL, Software Configuration Reuse
19	IN_05	DIH｜DIL, Software Configuration Reuse
20	IN_06	DIH｜DIL, Software Configuration Reuse
21	IN_07	DIH｜DIL, Software Configuration Reuse
22	CAN1_H	CAN1_H
23	CAN1_L	CAN1_L
24	GND	GND
25	IN_08	0～5V｜4～20mA｜DIH, Software Configuration Multiplexing
26	IN_09	0～5V｜4～20mA｜DIH, Software Configuration Multiplexing
27	IN_10	0～32V｜DIH, Software Configuration Multiplexing
28	IN_11	Highly effective switching input DIH
29	IN_12	Highly effective switching input DIH
30	IN_13	Highly effective switching input DIH
31	IN_14	Highly effective switching input DIH
32	BSL	BSL
33	CAN2_H	CAN2_H
34	CAN2_L	CAN2_L
35	CAN2_TR	CAN2_TR

T160 Controller Details



The specified data is for product description purposes only and may not be deemed to be guaranteed unless expressly confirmed in the contract.

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