

EtherCAT IO Slave Module ES-16I16O-S1 User Guide

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Chapter 1: Product Introduction

1.1 Digital Input and Output

- 16 digital input channels and 16 digital output channels
- Input / Output Voltage: 0 and 3.3VDC

1.2 Power Requirements

- DC input range: DC 24V

1.3 EtherCAT

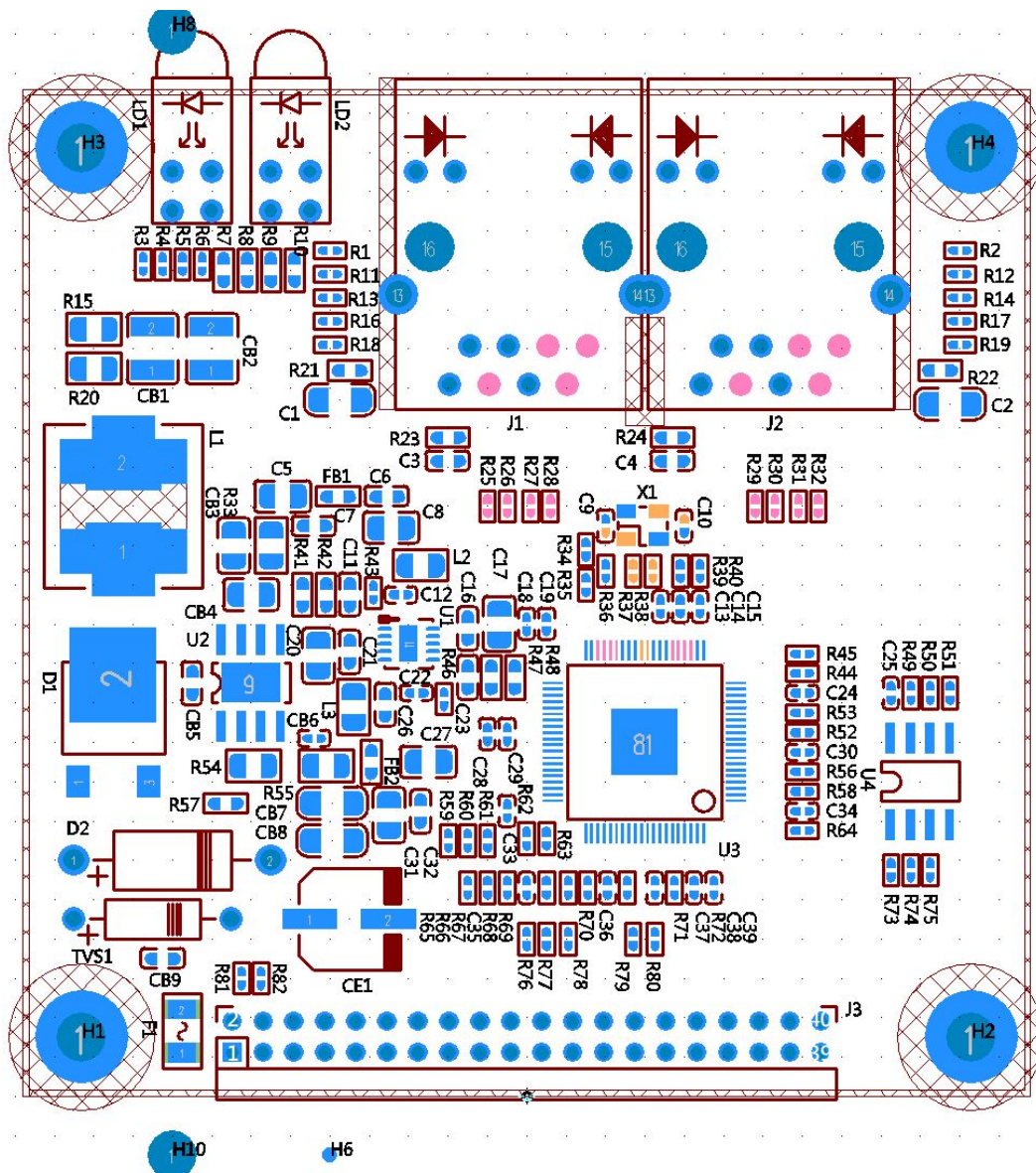
- Data transfer medium: Ethernet cable(CAT5e), shield type: S/STP or S/UTP
- Ethernet interface: 2x RJ-45
- Data transfer rate: 100Mbps, full duplex
- Protocol: EtherCAT

1.4 Environment

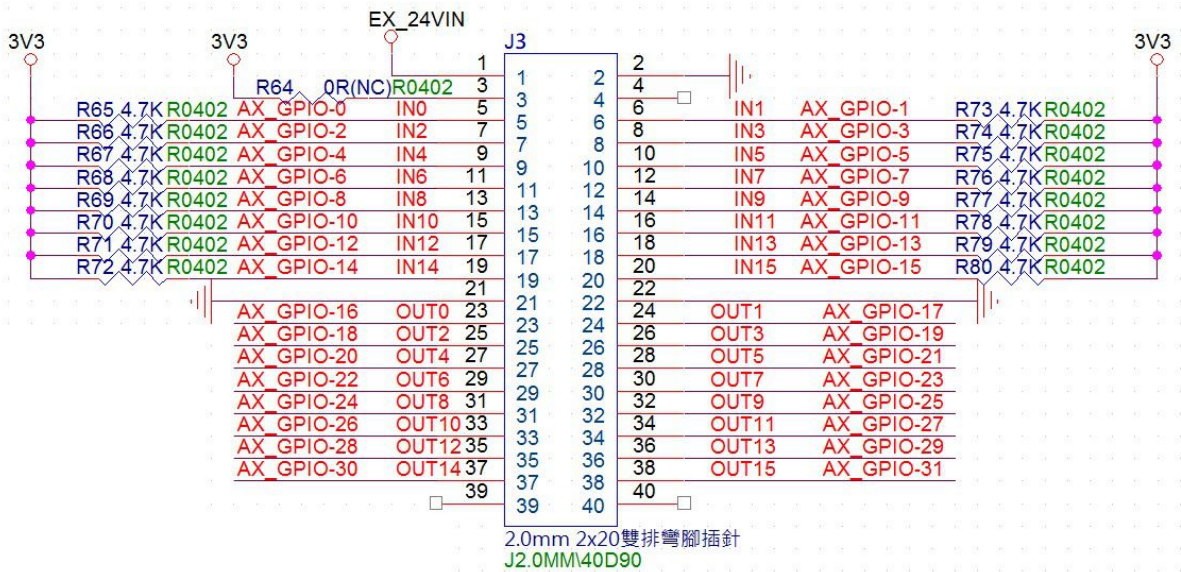
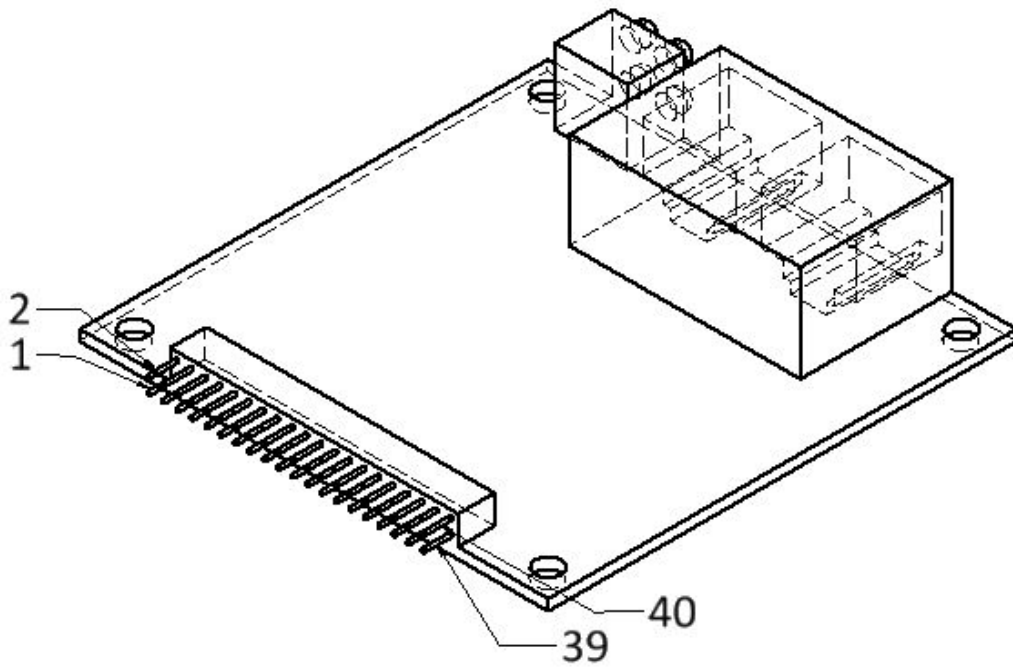
- Operating temperature: 0°C to 65°C
- Dimension(mm): 65(W) x 65(L) x 18(H)

Chapter 2: Connector Pinout Assignments and Wiring Diagrams

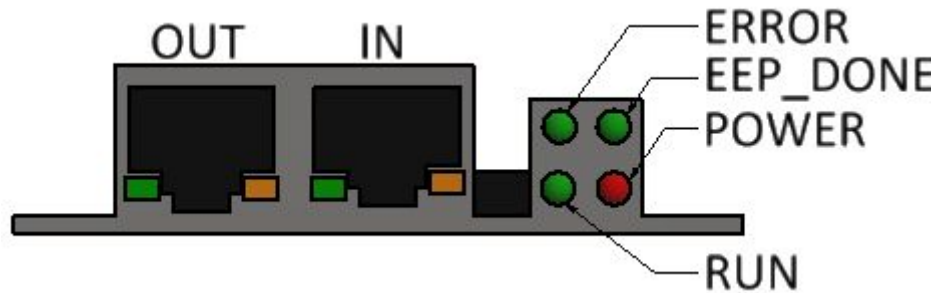
2.1 Mounting Data



- Mounting holes distance: 57.4mm
- H1 hole to J3 Pin1 horizontal distance: 9.7mm



2.2 LED Indicator & Function



POWER	
ON	Power supply has been connected to 24 VDC
OFF	Power supply is not connected to 24VDC

RUN LED	
LED Response	FSM State
OFF	1-Init
Flash	4-Safe OP, 1x
Blinking	2-PreOp
Flickering	3-Bootstrap
ON	8-Op

EEP_DONE	
ON	EEPROM done
OFF	Fail

ERROR LED	
LED Response	Error State
OFF	No Error
Flash 1x-12x	Process Data Watchdog timeout, 2x
Blinking	PDI configuration unstopped type
Flickering	I2C EEPROM loading error
ON	PDI Watchdog timeout

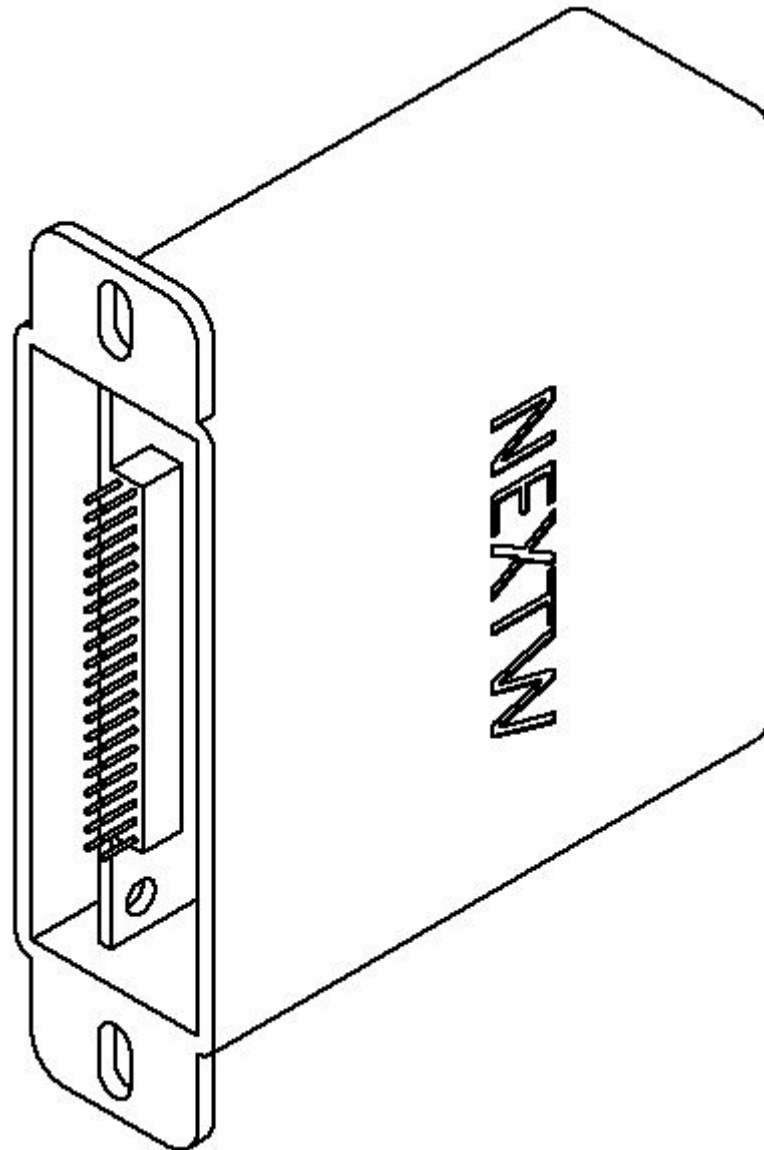
RJ45 LED Yellow	
ON	Data transmitting
OFF	No data transmitting

2.3 Note - Before You Begin

- Ensure you have stable, clean working environment.
- Before working on any components, make sure the power is off.
- Ground yourself before touching any components.
- Static electricity may damage the electronics components.

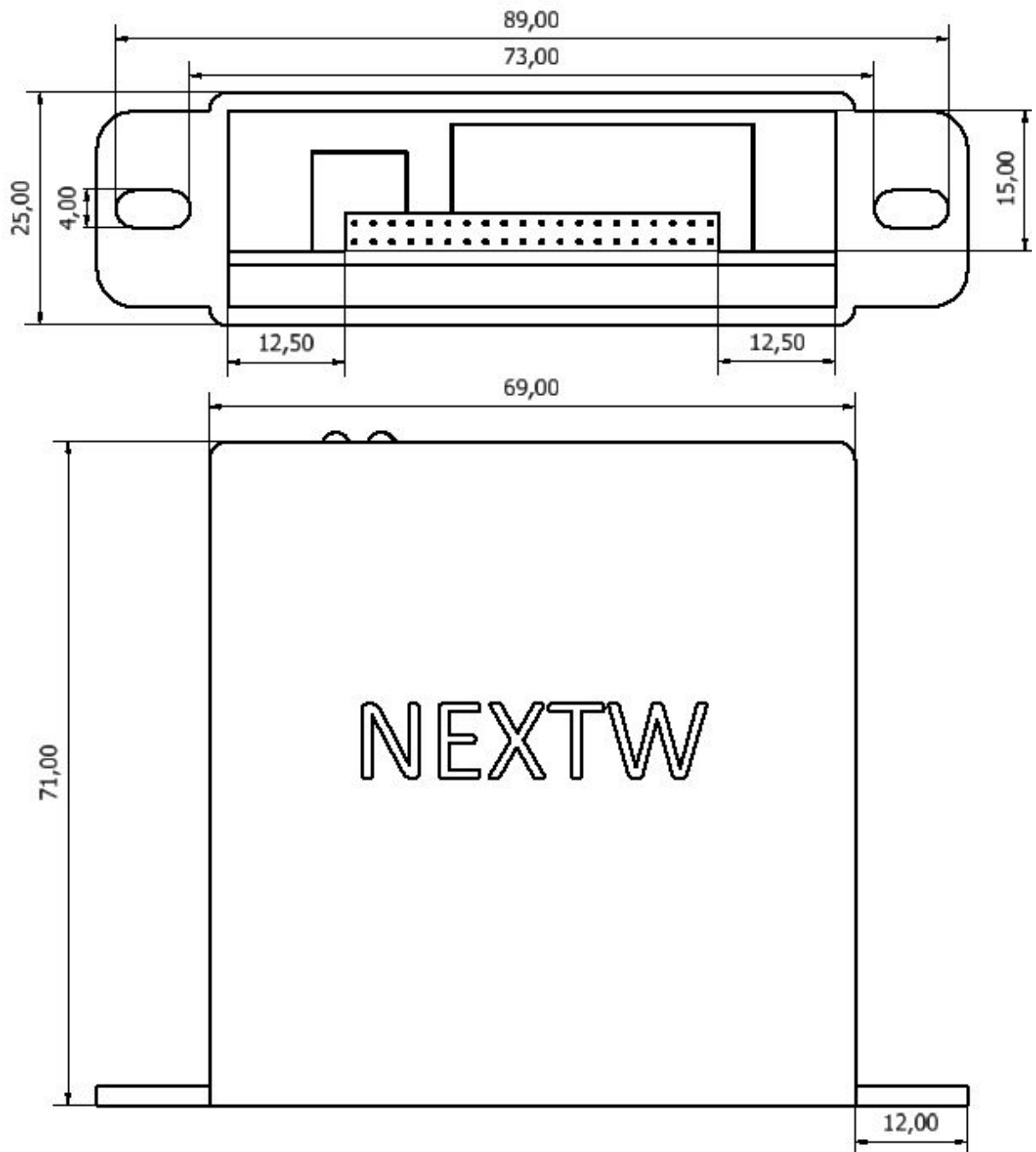
Chapter 3: PCB Enclosure Shells

3.1 Plastic Shell Diagrams



NEXTW

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3.2 Sheet Metal Shells Diagrams

