ICP DAS

e-USB404
4-port USB 3.1 Gen 1 Expansion Module

◪ Features

- 4 Independent USB 3.1 Gen 1 Host Controllers
- Data Transfer Rates: SuperSpeed (5 Gbps), High Speed (480 Mbps), Full Speed (12 Mbps) and Low Speed (1.5 Mbps)
- LED indicator for each port
- 4 x USB 3.1 Gen 1 ports (the same as USB 3.0)
- 4 x USB 3.1 Gen 1 Type-A connectors
- 5V, up to 900mA per port
- Support USB vision camera

RoHS | USB3 VISION

▣ Introduction

e-USB404 is an e-Bus x 4 (similar to PCI-E x4) industrial-grad expansion module that supports 4 independent USB 3.1 Gen 1 (same as USB 3.0) ports. This module needs to be installed on an e-Bus x4 slot of the AXP-9000-IoT Programmable Automation Controller (PAC).

All the USB ports of e-USB404 can be accessed on the panel for easy wiring and including an LED indicator for each port. Each port can provide a standard 700mA regulated 5V output to power USB devices. It also supports software programmable power on/off control for each port to reset the USB device for failure recovery.
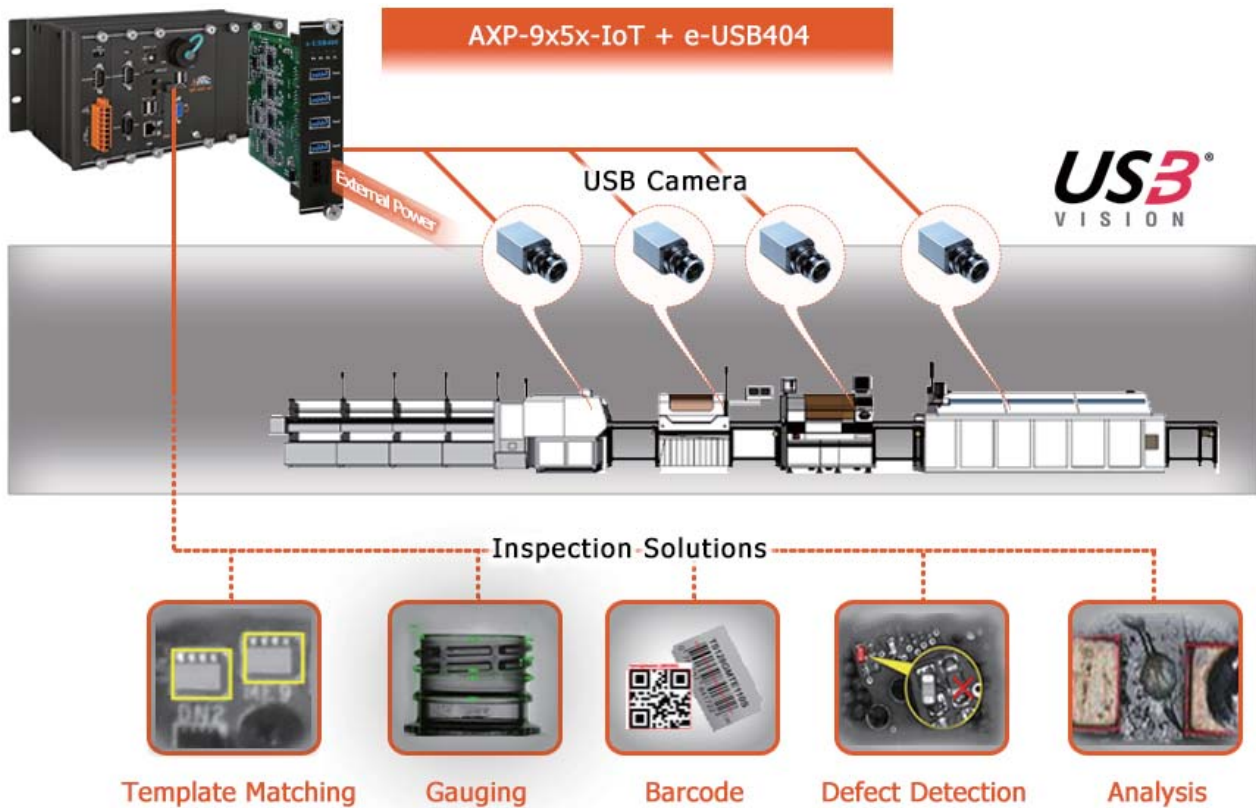
The module supports 4-channel independent USB ports for the connection of 4 USB devices (such as USB Vision camera) operating simultaneously with an independent bandwidth of 5 Gbps. The e-USB404 module is suitable for use as a frame grabber to capture large amount of image data using USB Vision cameras for machine vision, factory automation and medical imaging applications.
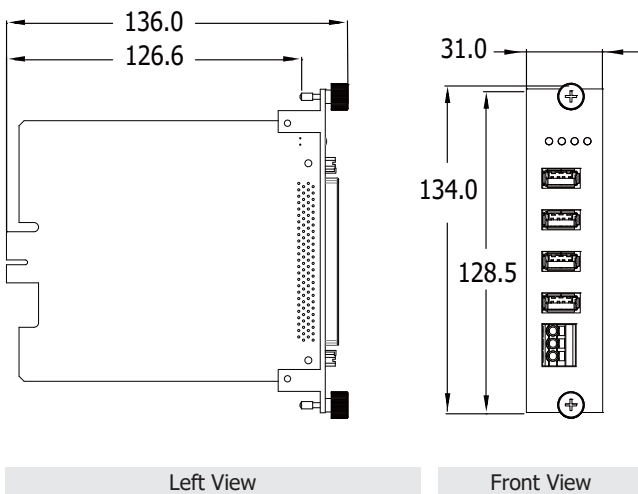
▣ Specifications

USB	
Ports	4 x USB 3.1 host controllers
Specification	Compliant with USB 3.1 Specification and Intel$^®$ x HCI Specification, Rev1.0
Transfer Speed	SuperSpeed (5 Gbps), High Speed (480 Mbps), Full Speed (12 Mbps), Low Speed (1.5 Mbps)
Supply Current	Max. 4 W USB Power from e-Bus Slot only
Connector	4 x USB Type-A Connector
Overload Protection	900 mA Max. (Per Port)
Short-circuit Protection	Yes
General	
Type	e-Busx4
System LED Indicator	4 x Link Status
Software	
OS Support	Microsoft Windows 7/8.1/10 and Linux
SDK	Yes, USB power ON/OFF by API
Power	
Reverse Polarity Protection	Yes
Input Type	Max. 4 W USB Power from e-Bus Slot only, Max. 20W USB Power from external Power
Consumption	0.1 A @ 24 VDC without PD loading, 0.5 A @ 24 VDC with PD full loading (4.5 W per ports)
Mechanical	
Dimensions (W x L x H)	31 mm x 136 mm x 133 mm
Environment	
Operating Temperature	-25 ~ +60 °C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 90 % RH, Non-condensing

📁 Applications

- Machine Vision Inspection
- Automated Optical Inspection
- Quality Assurance
- Medical Imaging

📁 Dimensions (Units: mm)

Left View

Front View

📁 Appearance

Terminal No.	Pin Assignment
01	+VS
02	GND
03	F.G.

📁 Ordering Information

e-USB404 CR	4-port USB 3.1 Gen 1 Expansion Module (RoHS)