

EOS-J Series

NVIDIA® Jetson TX2-based Vision System

Features

- Integrating NVIDIA® Jetson TX2, frame grabber, and industrial I/O
- Supports ADLINK GigE, USB3 and other PCIe-based frame grabbers
- Industrial isolated 32CH DI/O
- 256 core Pascal NVIDIA® GPU supports Deep Learning Inference
- ARMv8 (64-bit) multi-processor CPU complex for heterogeneous multi-processing



Introduction

ADLINK's EOS-J vision system integrates the NVIDIA® Jetson TX2, frame grabber, and industrial DI/O in a compact package, serving machine vision applications at the edge.

Addressing problems that can't be solved by other rule-based algorithms, EOS-J is equipped with the NVIDIA® Jetson TX2 and also supports GigE, SUB3 and other PCIe based frame grabbers to solve problems by using Deep Learning.

By integrating the Jetson TX2, the EOS-J provides 256 CUDA cores and ARM Cortex-A57 processors, enabling robust Deep Learning inference, empowering defect inspection and object classification requirements in manufacturing environments.

A neural model optimized by NVIDIA® tools like Digits or TensorRT can be deployed on the EOS-J directly, easing development of user-specific machine vision solutions.

The EOS-J provides an Ethernet port and two communication ports, and a HDMI output for maximum integration in the field.

Software Support

- Ubuntu
- Open GL, CUDA

Ordering Information

- **EOS-J-GigE**
4CH GigE vision system with 32CH isolated DI/O
- **EOS-J-USB3**
4CH USB3 vision system with 32CH isolated DI/O

Specifications

Model Name	EOS-J
Processors & Memory	
Processor	NVIDIA® Denver 2 (Dual-Core) & ARM Cortex-A57 (Quad-Core) processor @ 2.0GHz 256 Core NVIDIA® Pascal GPU
Display	HDMI
RAM	8GB LPDDR4 (built-in Jetson TX2)
Storage	32GB eMMC (Built-in Jetson TX2)
I/O Interface	
Supported Frame Grabbers	ADLINK GigE and USB3 frame grabbers
Digital I/O	32CH Isolated DI/O
Display	1x HDMI output
Ethernet	1x GbE
Serial Communication	2 x COM port
USB	2x USB3.0 for keyboard and mouse
Mechanical	
Dimensions	211mm W x 207.7mm D x 74.4mm H
Software Support	
Operating System	Ubuntu
Environmental & Electrical	
Power Consumption	12VDC, 90W
Operating Temperature	0°C to 45°C