Optical Flow Module Programming

Overview

Arduino and Processing code for an A3080 or ADNS3080 optical flow sensor. For circuit layout watch the YouTube video: 'will be online in a few days' or the layout. Keep in mind that the position of the pins on the A3080 drawing do NOT meet the real situation. Optical Flow uses a downward facing camera and a downward facing distance sensor for velocity estimation. It can be used to determine speed when navigating without GNSS — in buildings, underground, or in any other GNSS-denied environment. The video below shows PX4 holding position using the Ark. Optical flow sensors, like the PMW3901, help drones achieve this by tracking motion relative to the ground. The PX4FLOW is not yet supported in Plane or Rover.

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This article describes how to setup the PX4FLOW (Optical Flow) Sensor which can be used for Non-GPS navigation. The PX4FLOW is not yet supported in Plane or Rover.

An Optical Flow setup requires a downward facing camera and a downward facing distance sensor (preferably a LiDAR). These can be combined in a single product, such as the ARK Flow, ARK Flow ...

Hi, I currently using the module "optical flow lidar sensor" of MATEK SYS to read the flow X, flow Y and distance from optical flow PMW3901 and VL53L0x. I used uart to take the information ...

Learn how the PMW3901 optical flow sensor tracks motion without GPS. Explore its features, specifications, and how to interface it with ESP32 for accurate position tracking.

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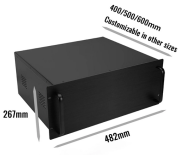
In order to ensure good optical flow quality, it is important to focus the camera on the PX4Flow to the desired height of flight. To focus the camera, put an object with text on (e. g. a book) and plug in the ...

The PMW3901 is a high-performance optical flow sensor designed for motion detection and tracking applications. Manufactured by Pimoroni Ltd, this sensor leverages advanced algorithms to provide ...



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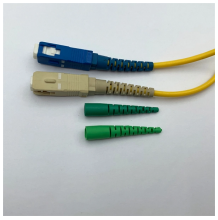

ARK Flow is an open source DroneCAN optical flow, distance sensor, and IMU module. Order this module from: The ARK Flow is connected to the CAN bus using a Pixhawk standard 4 pin JST GH ...

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The NVIDIA Optical Flow SDK taps in to the latest hardware capabilities of NVIDIA Turing™, Ampere, and Ada architecture GPUs dedicated to computing the relative motion of pixels between images.

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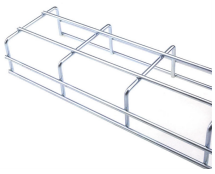	NVOFA engine''s capabilities can be accessed using the NVIDIA Optical Flow APIs (hereafter referred to as NVOF APIs), exposed via NVIDIA Optical Flow SDK. This document ...

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: https://indzawo.co.za
Email: sales@indzawo.co.za
Phone: +27 71 296 8473
Address: 22 Quantum Street, Midrand, 1685, Gauteng, South Africa

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