oToBrite

oToAdapter-GMSL-AGX-Orin

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Overview

oToAdapter-GMSL-AGX-Orin is an automotive-grade multi-channel GMSL2 camera adapter that connects up to 8 GMSL2 cameras to the NVIDIA® AGX Orin™ Developer Kit.
Integrating the ADI/MAXIM MAX96724 deserializer, the adapter supports multi-camera synchronization, wide-range power input, and automotive temperature operation, enabling rapid development for autonomous driving, unmanned vehicles, and robotics applications.

oToAdapter-GMSL-AGX-Orin

Product key features

- The quickest and most compatible way to get started with NVIDIA Jetson developer kits
- Plug and play to support all oToBrite GMSL cameras with pre-packaged NVIDIA JetPack
- Well-designed bracket for early autonomous driving & robotics development
- Supports external or internal (by default) frame synchronization for multi-camera applications
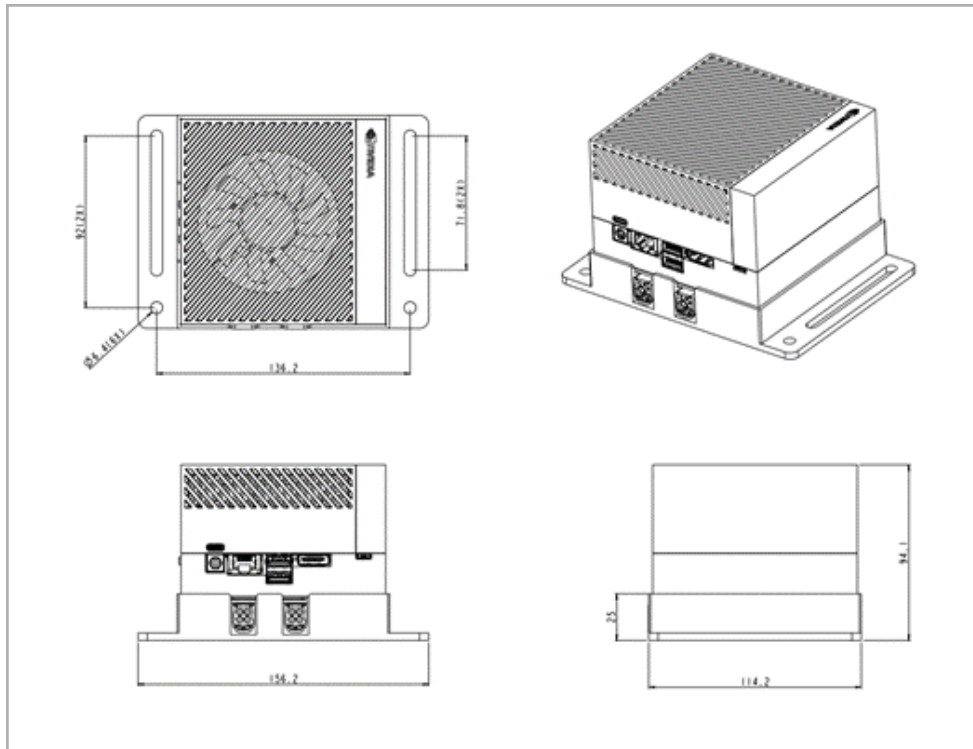
Specifications

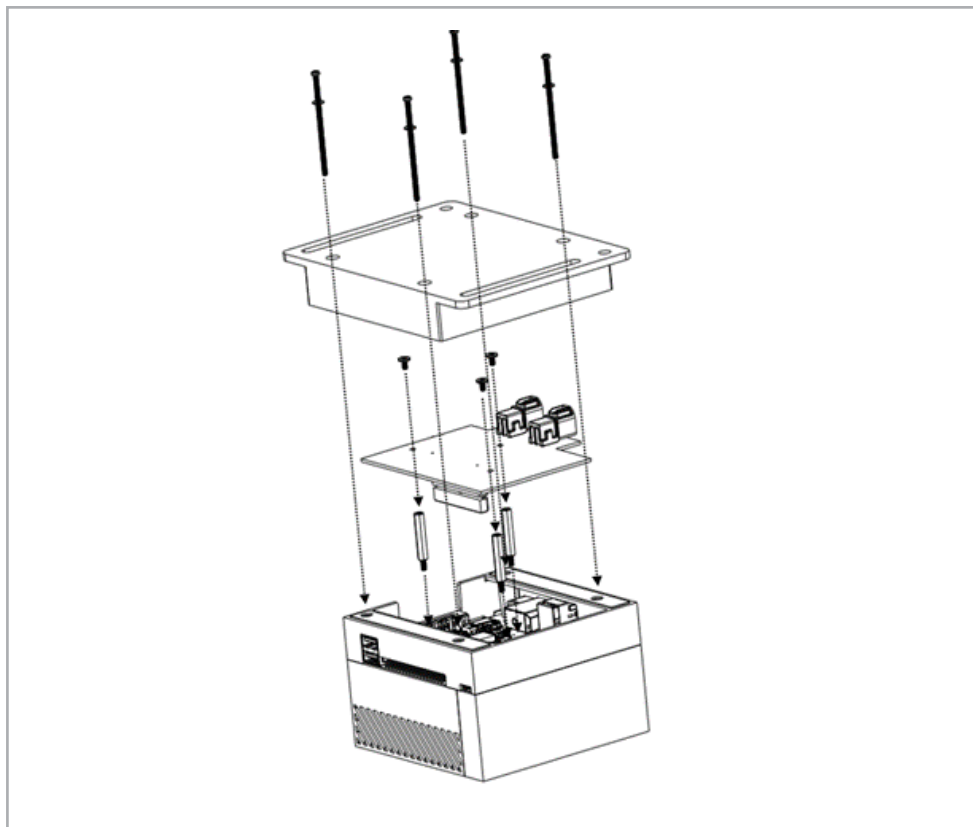| Item	Specifications
Deserializer	MAXIM(ADI) MAX96724
GMSL input interface	Up to 8 GMSL2 cameras with FAKRA connectors (Amphoral Z code)
MIPI output interface	1x High-Speed Ground Plane Terminal Strip connector (120pin)for the NVIDIA AGX Orin board
GPIO	TBD
Frame sync	Support frame sync either via external input signals or internal GPIO
Power supply	12V ~ 20V
Power in interface	2.5mm DC Jack
Power out	TBD
Operating temperature	0℃ ~ +35℃ (with NVIDIA Developer Kit)
Storage temperature	0℃ ~ +35℃ (with NVIDIA Developer Kit)
Dimension	156.2 x 114.2 x 94.1 (mm, with case)
Weight	1,245g (with case)

Accessories

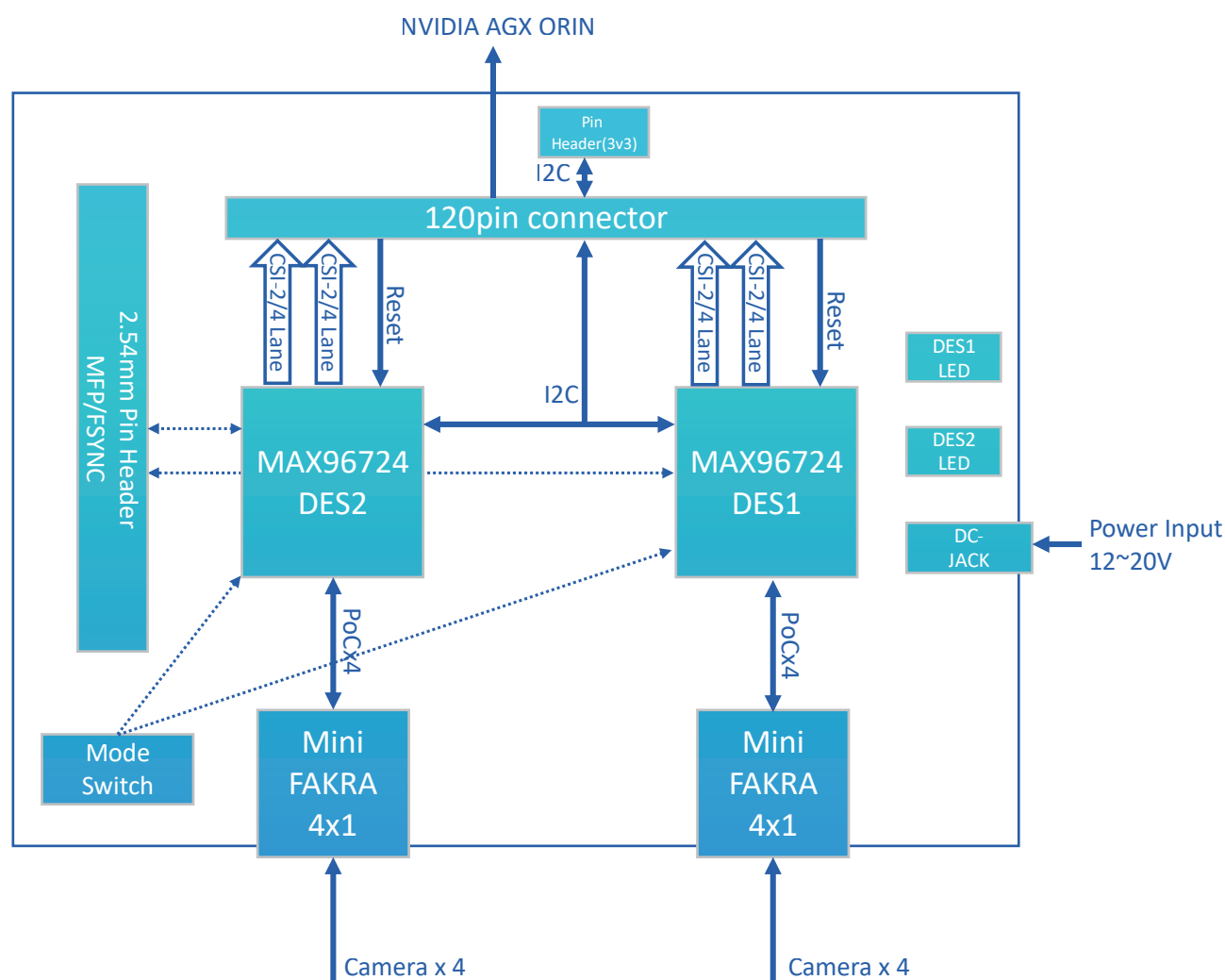| Item	Specifications
1 x Power adapter	● Input: 90~264 VAC ● Output: 15V, 5.5 x 2.5mm (Max. 40W) ● Length: 1M
2 x GMSL Mini Fakra 1-to-4 cable	● Connector: Male to Female ● Color: Z-code ● Length: 0.4M
1 x NVIDIA® Jetson AGX Orin™ Developer Kit	● Original full package included ● Original full package included Pre-packaged NVIDIA JetPack 6.2 with sensor driver to support oToCAM GMSL cameras directly

oToAdapter-GMSL-AGX-Orin Outline Drawing

● Mechanical Dimension Drawing

● Exploded Diagram

oToAdapter-GMSL-AGX-Orin Hardware Diagram

NVIDIA AGX ORIN

Pin Header(3v3)

I2C

120pin connector

CSI-2/4 Lane

CSI-2/4 Lane

Reset

CSI-2/4 Lane

CSI-2/4 Lane

Reset

2.54mm Pin Header
MFP/FSYNC

I2C

MAX96724 DES2

MAX96724 DES1

DES1 LED

DES2 LED

DC-JACK

Power Input 12~20V

PoCx4

PoCx4

Mode Switch

Mini FAKRA 4x1

Mini FAKRA 4x1

Camera x 4

Camera x 4

driving easier and safer

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