

# 1 MegaPixel Time-of-Flight Module

## FEATURES

- ▶ 1024 × 1024 ToF imager with 3.5 μm × 3.5 μm pixels
- ▶ 75° × 75° field of view
- ▶ Imager lens subassembly with 940 nm band-pass filter
- ▶ Illumination subassembly with eye safety support
- ▶ 4-lane MIPI CSI-2 transmitter interface, 1.5 Gbps per lane
- ▶ 4-wire SPI and 2-wire I<sup>2</sup>C serial interfaces
- ▶ NVM (Flash) for module boot-up sequence
- ▶ Power regulators for local imager and illumination rails
- ▶ Calibrated modes at 1024 × 1024 and 512 × 512 resolutions
- ▶ Depth range: 0.4 m to 4 m (depth noise (1 σ) 15 mm maximum, 19% minimum target reflectance, 3 klux equivalent sunlight)
- ▶ Depth accuracy: ±5 mm (across full depth range)
- ▶ Available in 50-lead, MODULE, ML-50-1 package

## APPLICATIONS

- ▶ Machine vision systems
- ▶ Robotics
- ▶ Building automation
- ▶ Augmented reality (AR) systems

## MODULE FUNCTIONAL BLOCK DIAGRAM

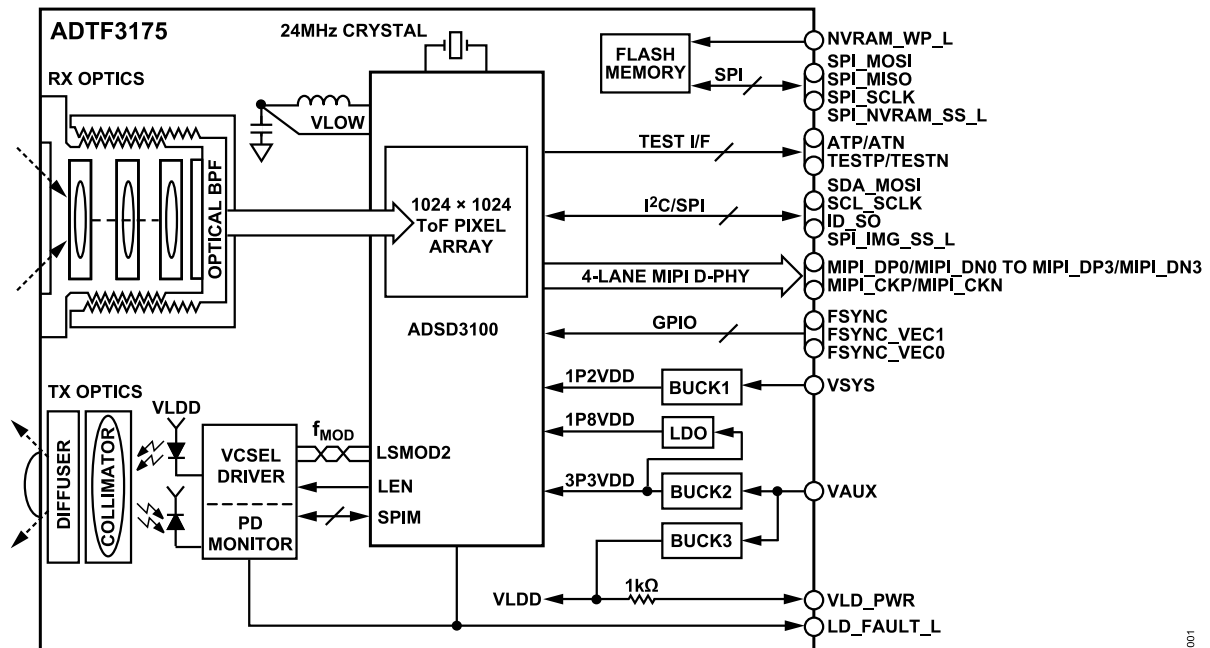


Figure 1. Module Functional Block Diagram

For more information about the ADTF3175, contact [tof@analog.com](mailto:tof@analog.com).

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DOCUMENT FEEDBACK

TECHNICAL SUPPORT

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**NOTES**