Version No.: V-241114A



3D DEPTH CAMERAS BASED on ToF TECHNOLOGY



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Goermicro Vzense



A Leading Technology Company in MEMS

> Established in October 2017, Goertek Microelectronics (Goermicro) is a subsidiary of Goertek Inc., specializing in the research, development, and manufacturing of high-precision electronic components and microelectronic devices. Now it is capable of providing customers with one-stop product solutions of "chip + device + module".

1800+ 2200+

R&D investment accounts for 8% of revenue

more than 1800 granted patents

The number of employees

Team Development

MII FSTONES

2017 -

Released ToF modules DCAM100 and DCAM710, announced SDK and graphical tools

2020

Our products began to Transform to professional and systematic ones



2023

Receiving positive feedback from industrial-oriented customers and realizing revenues 2016

At a well-known VR company worldwide, we began evaluating 3D sensors, eventually selected the ToF sensor and began research and developing

2019

Supported over 400 developers, conducted evaluations and development, and completed custom development for over 10 projects

2022

Industrial grade products development completed and put into test in the field



- ·7 years R&D experience in TOF Technology
- ·Over 10 designed independently& mass produced TOF products
- ·Dozens of TOF technology related patents
- ·Independently developed TOF products for fast calibration
- ·Strong TOF module customization ability for quick delivery.





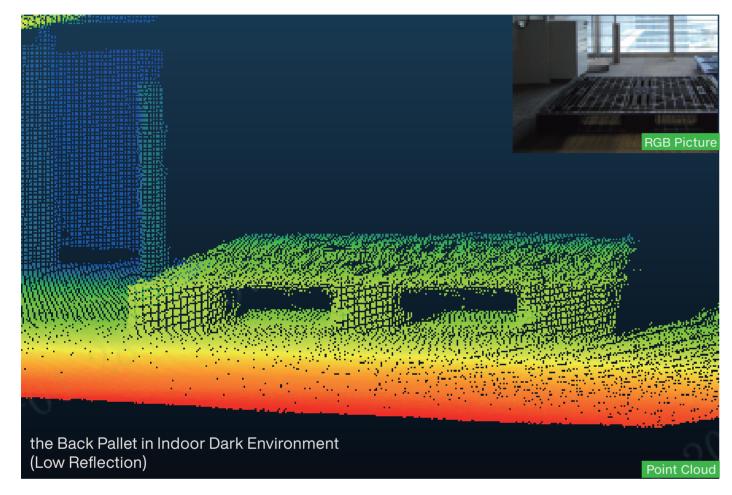




01 COMPANY PROFILE 02 TEAM INTRODUCTION

Product Strength

'Outstanding', anywhere, anytime!



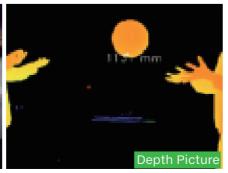




the Nice Painted Car Outdoor (High Reflection)

Fast throwing a ball indoor (Low Reflection& High Speed)





Goermicro



















- TOP SENSOR (SONY& NUVOTON)
- TOP ILLIMINATION (LUMENTUM)
- GLOBAL SHUTTER RGB CAMERA
- GaN DRIVED CHIPS
- INDUSTRIAL LENS
- STABLE SDK SUPPORT

03| PRODUCT FEATURES Depth Picture Depth Picture

Product Series Goermicro **Working Range** Multi Coexistence More Affordable Accuracy Low Jitter Precision **Energy Saving** Dynamic Range **NYX SERIES** Based on Pulse iToF Light Resistance Anti-interference NYX O DS DS SERIES Based on Continuous Wave iToF 05 | PRODUCT SERIES 06 PRODUCT SERIES

APPLICATION SCENARIOS

Goermicro

Smart Palletizing&

Depalletizing

Pallet Recognition Robot Safety Ensurance

Smart Agriculture

Measurement

Autostore



Gesture Perception



People Counting Body Scaning Queue Control

Automated Fare Collection

Falling Detection Gesture Perception



■ Technical Parameters
Goermicro



DS 87/86 SERIES



NYX 660/650 SERIES

Model	DS87 Series	DS86 Series
Sensor	Sony DepthSense ToF CMOS	
Illumination	940nm VCSEL * 2	
ToF Resolution/ Frame rate	640*480, Max.15fps	
ToF HDR Mode	Supported with Max. 10fps	
ToF FOV	67°(H)*50°(V)	
RGB Camera	1600*1200, Global Shutter, 70 ° (H)*50° (V)	
Output Format	16bit (Depth) + 8bit (IR) + JPEG (RGB)	
Transmission Technology	1000Mbps Ethernet	
Physical Connection	Aviation Plug x 2	RJ45
Power Supply	12V~24V DC or PoE+	12V~24V (DC)
Accuracy	<1%	
Working Range	0.15m to 5m	
Working Temperature	-20° C to +50° C	
Operation System & Platform	Windows/Linux/Arm Linux/ROS1/ROS2	
SDK	C/C++/Python	
Enclosure Rating	IP67	IP42
Conformity	CE, FCC, FDA	

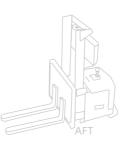
Model	NYX660 Series	NYX650 Series
Sensor	Nuvoton Depth Sense ToF CMOS (Originally Panasonic Semiconductor)	
Illumination	940nm VCSEL*2	
ToF Resolution/Frame rate	640*480, Max.30fps	
ToF FOV	70°(H)*50°(V)	
RGB Camera	1600*1200, Global Shutter, 71 $^{\circ}$ (H)*55 $^{\circ}$ (V)	
Output Format	16bit (Depth) + 8bit (IR) + JPEG (RGB)	
Transmission Technology	1000Mbps Ethernet	
Physical Connection	Aviation Plug x 2	RJ45
Power Supply	12V~24V DC or PoE+	12V~24V (DC)
Accuracy	<2%*	
Working Range	0.3m ~ 4.5m*	
Working Temperature	-20° C to +50° C	
Operation System & Platform	Windows7/8/10/11/ Linux/Arm Linux/ROS1/ROS2	
SDK		
Enclosure Rating	IP67	IP42
Conformity	CE, FCC, FDA	

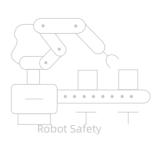








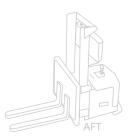












10 | PRODUCT DETAILS