

Vzense Technology Co., Introduction

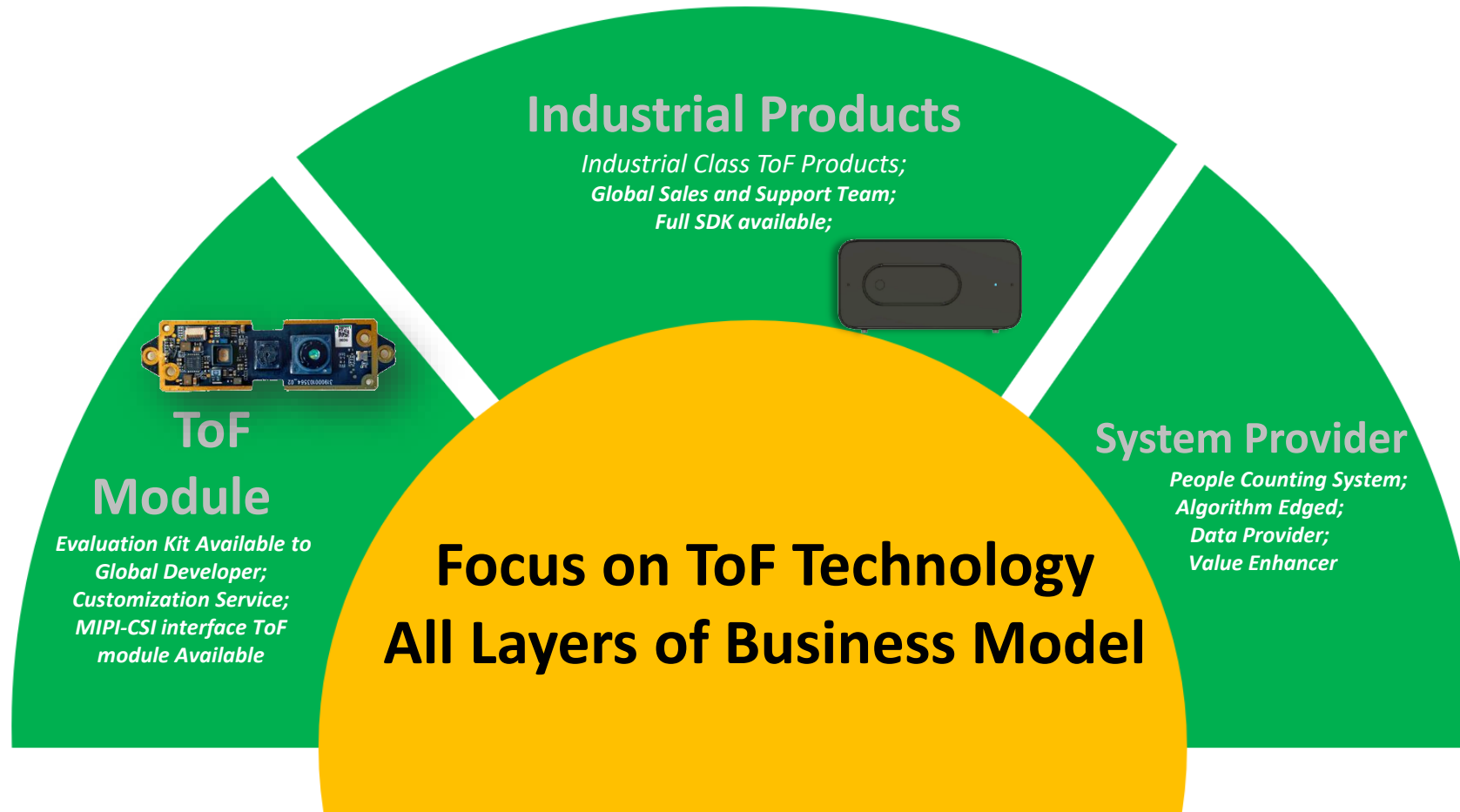
July, 2021

www.vzense.com

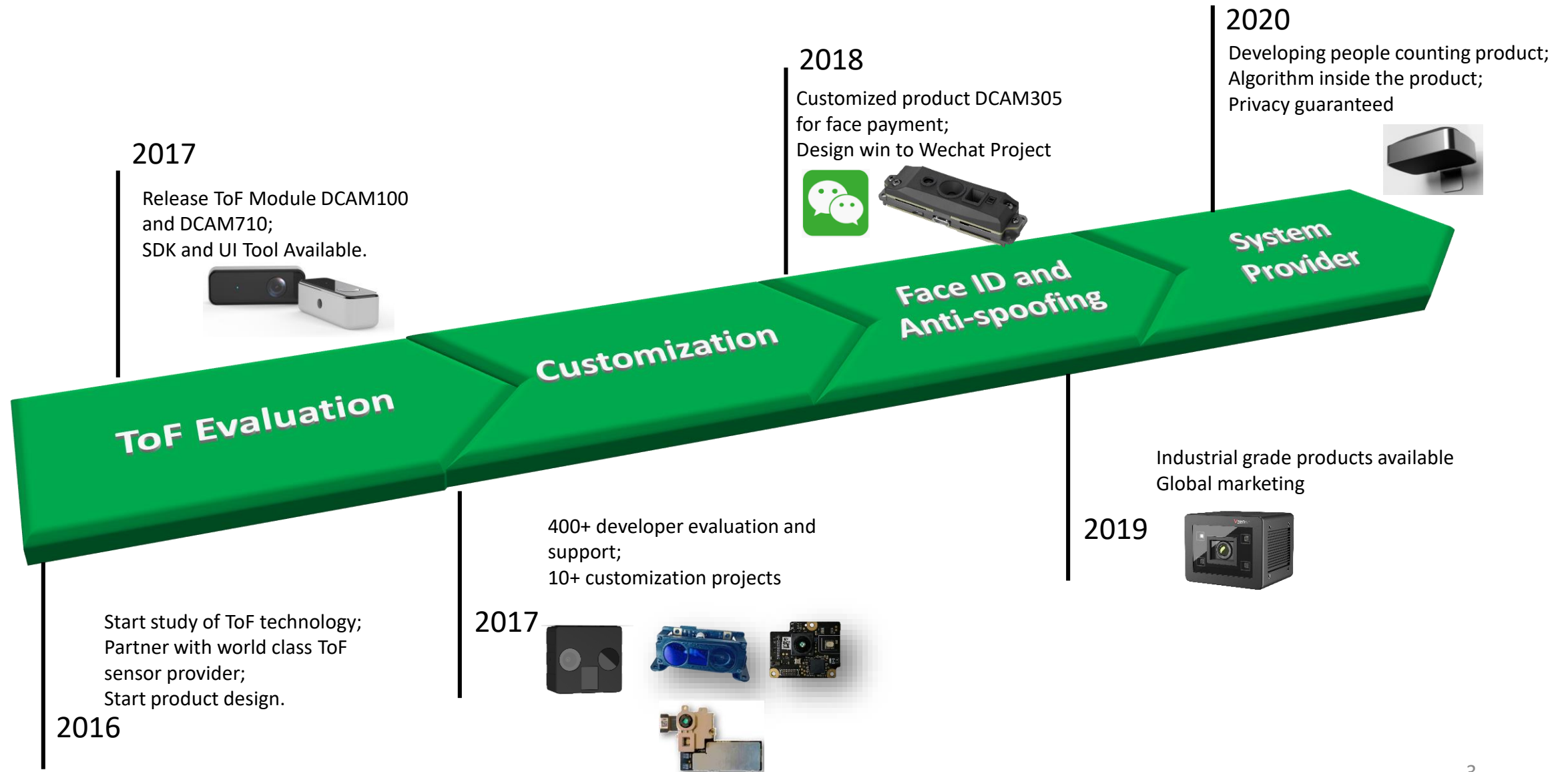
Contact: Sahara Yang

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- **Vzense – A Leading Company of ToF Solution Provider**



• Milestone of Vzense Team



- **Global Market**

**4+**

Years

400+

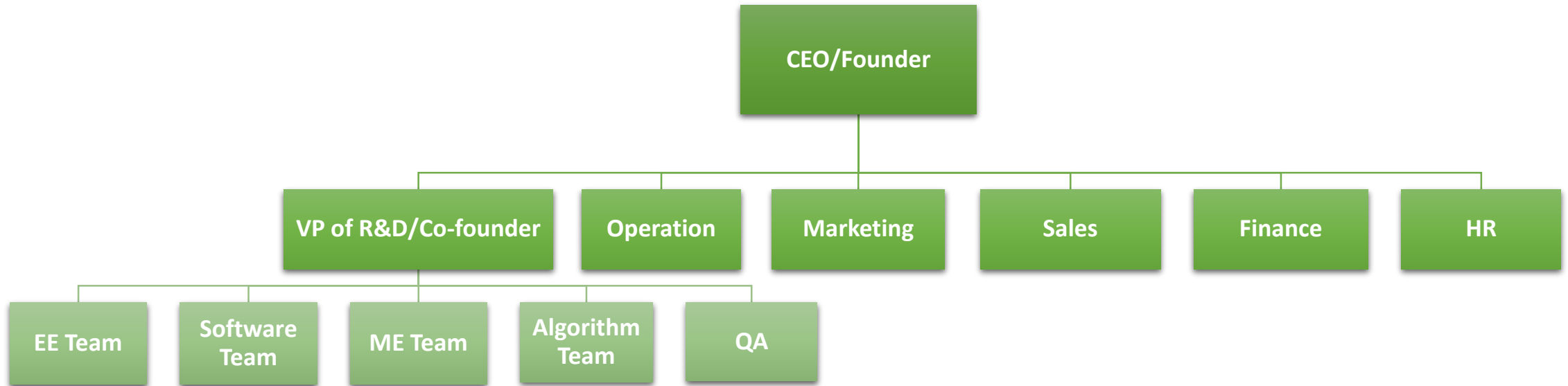
Developer

35+

Countries

12+Customization
Products

- Team



Qingdao, China



San Francisco, US

- Key Partners

Panasonic



ToF Sensor

am
Lextar



VCSEL&Driver

VI.VI



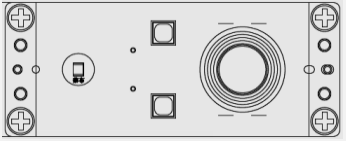
Lens&Filter



Platform

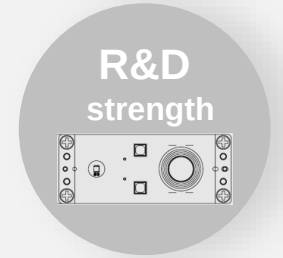
Core Advantages

- **4 Years** Focusing on ToF technology, **6** Products Mass Production, **11** Design-win Products;
- **36** TOF related patents, including mass production, calibration, data processing, applications, etc;
- Independent developed ToF calibration device and software, fast calibration technology ;
- Strong ability in customization service, supply chain management;



Customized Module brief introduction

 Dimension (L*W*H)	Minimum Dimension: 35mm × 20mm × 7mm	 Interface	MIPI/USB2.0/USB3.0/Type C Ethernet/CAN
 Distance	从0.15m to 15m , Unique Patented WDR Technology	 Operation System	Android/Linux / ARM Linux/Windows7/8/10 ROS/OpenNI
 Angle	60°、70°、90°、100°、110°、 120°	 Schedule	Working Samples: 2 Month Engineering Samples: 3-4 Month Mass Production: 5 Month



Hardware structure / System
/ Application software



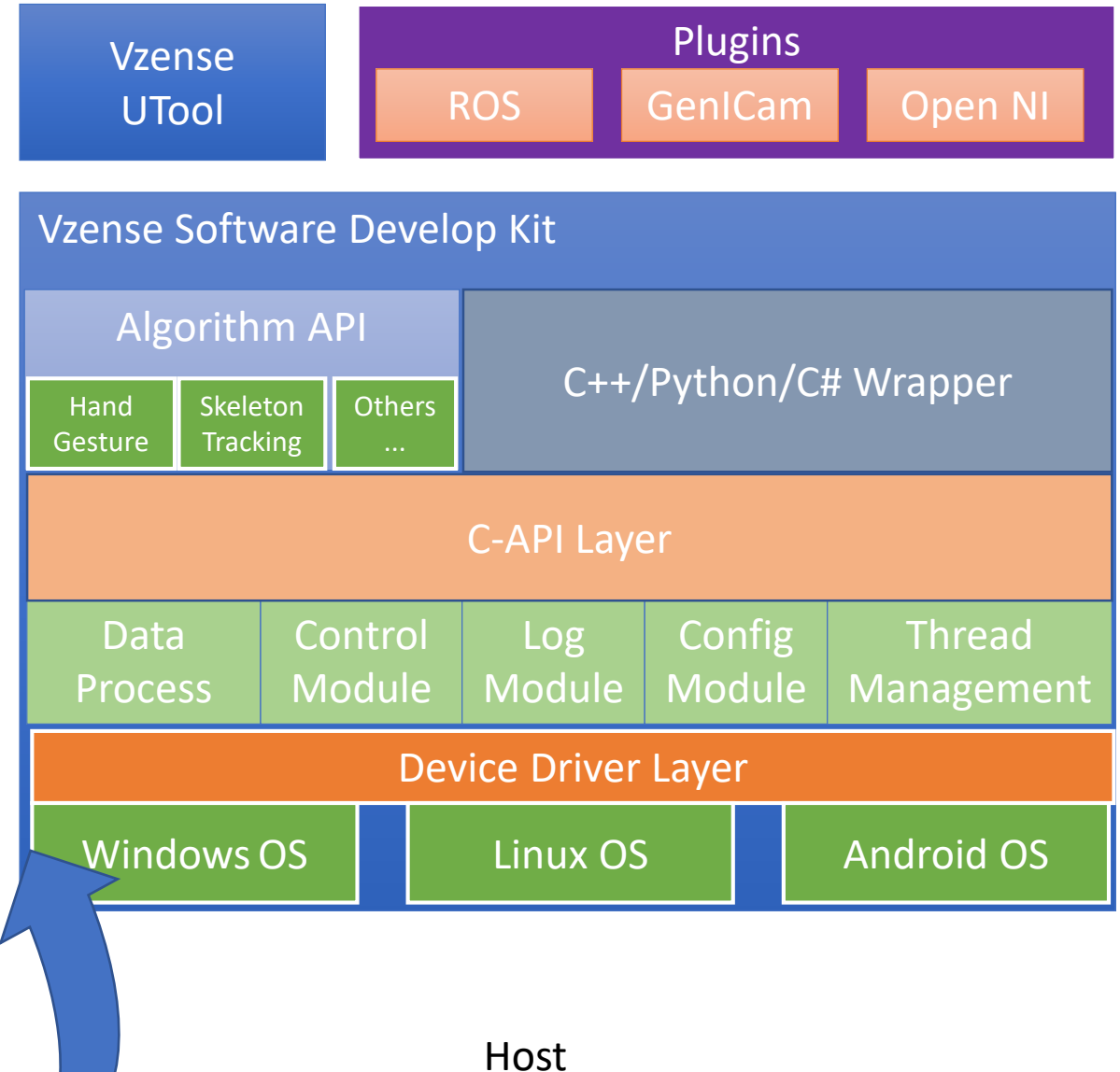
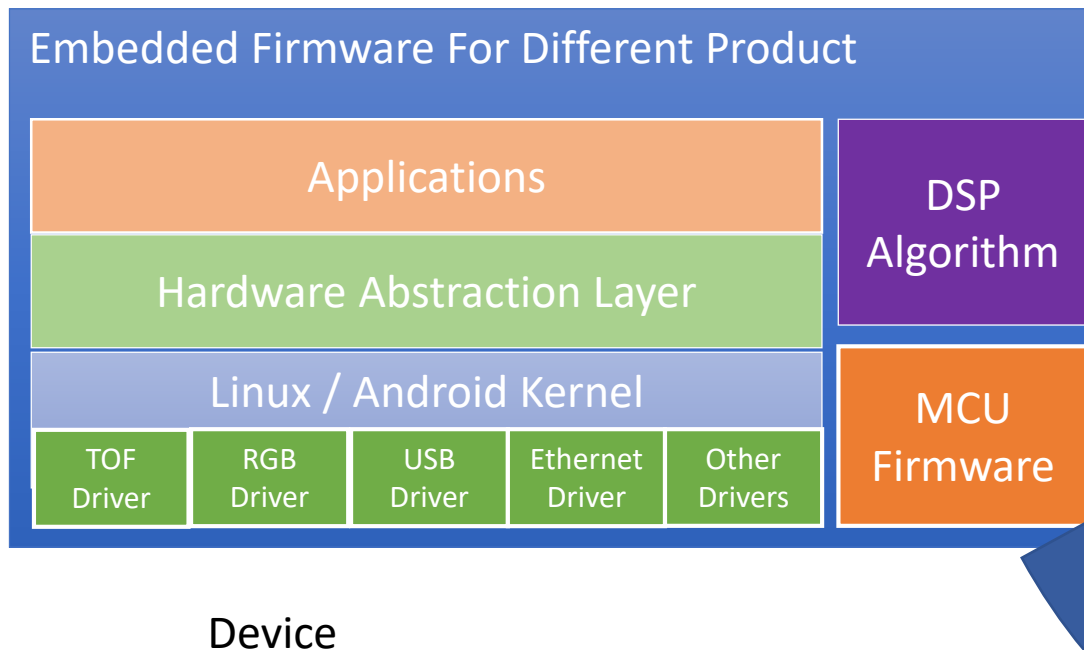
Provide flexible integrated
configuration space.



Actively cooperate with clients, in
order to achieve the common
goals.

• Software Ability

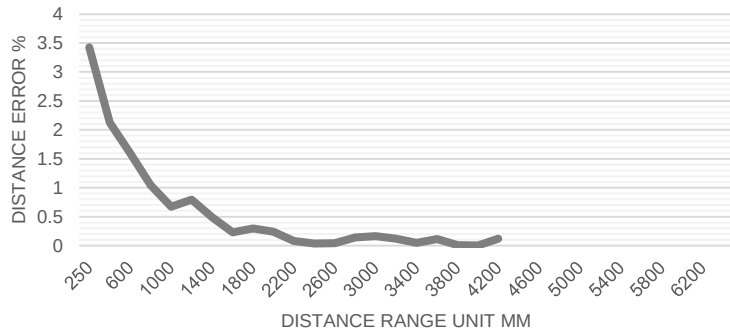
- Focusing on ToF Technology, Vzense has the ability of different layer of software development;
- Multiple interface, operation system, language and 3rd party API;



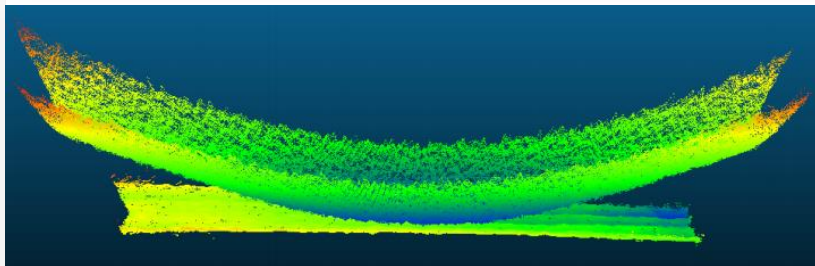
USB, Ethernet(RJ45 or Wi-Fi)

Algorithm Ability

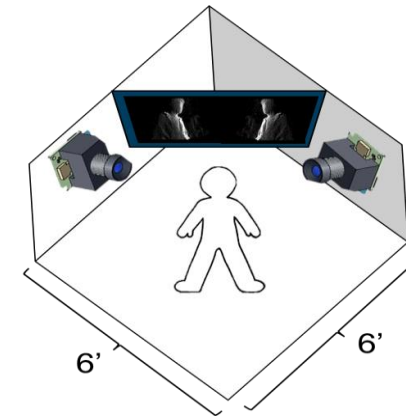
- Vzense team is skilled in data filtering, ToF calibration, and application algorithm;
- Especially Vzense team is good at light weight algorithm development, embedded system algorithm;



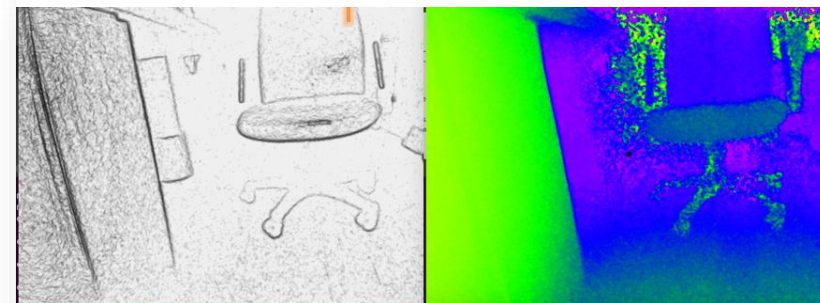
- WDR: Near to Far in one mode
- Wide used in all applications



- Intrinsic & Extrinsic Calibration
- Flatness Calibration

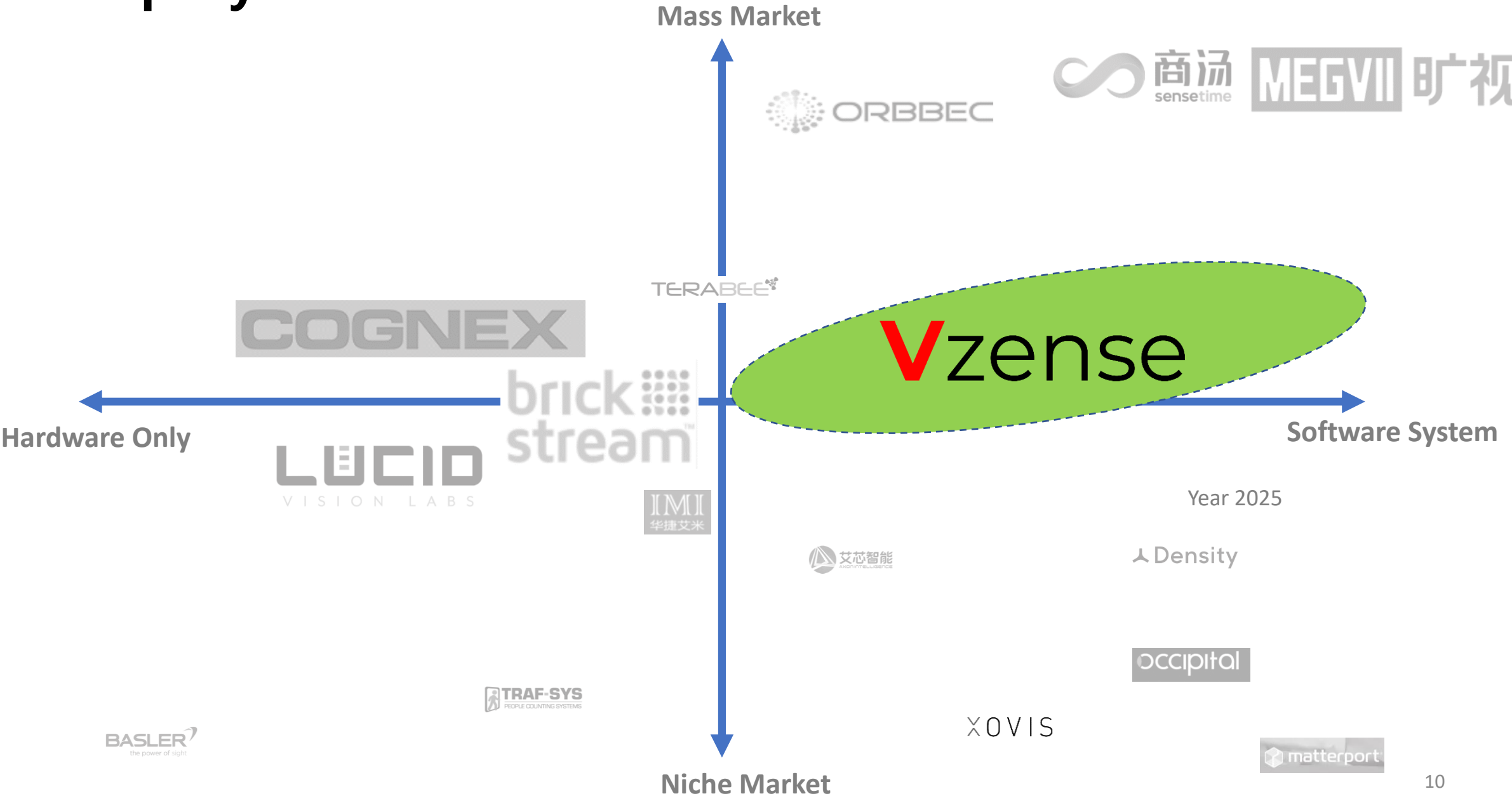


- Multiple machines co-exist;
- AGV, people counting applications



- Semantic Segmentation Algorithm
- Reduce the loading of CPU

• Company Position



• Core Products

USB Interface Products

DCAM710



- RGB Sensor: 1080P, 30fps
- ToF Sensor: VGA, up to 60 fps
- ToF FOV: 69° * 51°
- Effective Range: 0.35m~4.4m
- Interface: USB2.0

Industrial Grade Products

DCAM550-U



- ToF Sensor: VGA, 30fps
- ToF FOV: 69° * 51°
- Effective Range: 0.35m~6m
- Interface: USB2.0/RS485
- Power: DC 12V~24V

DCAM550-P



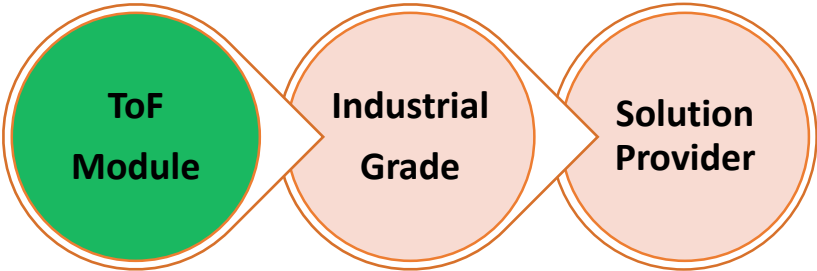
- ToF Sensor: VGA, 30fps
- ToF FOV: 69° * 51°
- Effective Range: 0.35m~6m
- Interface: 100M Ethernet/RS485
- Power: DC 12V~24V/PoE+

DCAM550-E



- ToF Sensor: VGA, 30fps
- ToF FOV: 69° * 51°
- Effective Range: 0.35m~6m
- Interface: 100M Ethernet/RS485
- Power: DC 12V~24V/PoE+

• Product Brief



DCAM710N(940nm)

Depth + RGB

ToF Sensor	TOF CCD+RGB
Laser Type	940nm VCSEL
ToF Resolution	640*480, 30fps
RGB Resolution	1920*1080, 30fps
TOF FOV	69°(H)*51°(V)
RGB FOV	73°(H)*42°(V)
Data Format	RAW12(depth,IR), H.264/MJPEG(RGB)
Interface	USB2.0
Power Supply	5V(USB) or 5V~6V(DC JACK), < 5W
Detected Range	0.35m~4.4m
Dimension	103mm*33mm*22mm
Working Temperature	-10°C-50°C
Software Platform	Windows/Android/Linux

Features:

- USB 2.0 Interface;
- Compact Size;
- Full SDK;
- Low Cost, For evaluation and study

Mass Production for 3 years

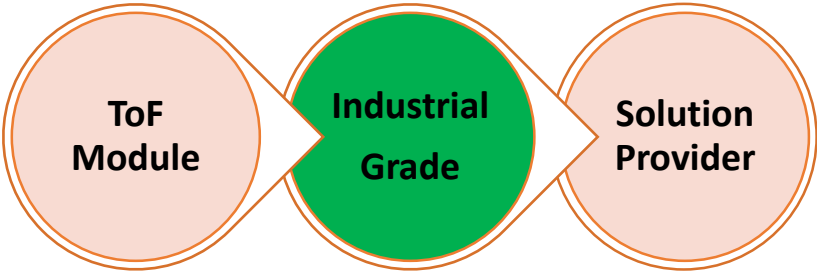
(Retail Price: \$279)

• **Product Brief**



Samples Ready

(Retail Price: \$549)



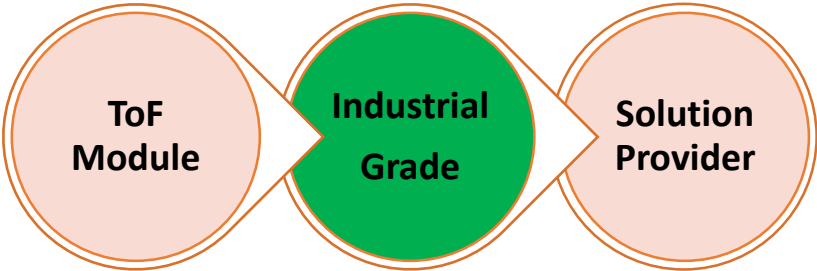
DCAM550-U
ToF Only
Industrial Level

ToF Sensor	TOF CCD
Laser Type	850nm or 940nm VCSEL * 2
ToF Resolution	640*480, 30fps
TOF FOV	69°(H)*51°(V)
Data Format	RAW12(Depth,IR)
Interface	USB2.0 / RS485
Power Supply	USB5V or 12V~24V(DC JACK), < 10W
Detected Range	0.35m~6m
Dimension	65mm*65mm*52.7mm
Working Temperature	-20°C-50°C
Software Platform	Windows/Android/Linux

- Product Brief



Samples Ready
(Retail Price: \$599)



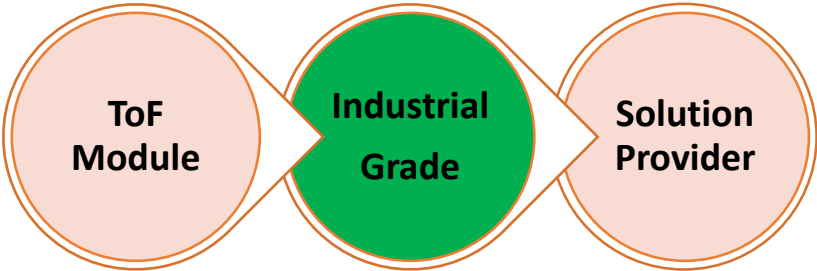
DCAM550-P
ToF Only
Industrial Level

ToF Sensor	TOF CCD
Laser Type	850nm or 940nm VCSEL * 2
ToF Resolution	640*480, 30fps
TOF FOV	69°(H)*51°(V)
Data Format	RAW12(Depth,IR)
Interface	100M Ethernet/ RS485
Power Supply	PoE+ or 12V~24V(DC JACK), < 10W
Detected Range	0.35m~6m
Dimension	65mm*65mm*52.7mm
Working Temperature	-20°C-50°C
Software Platform	Windows/Android/Linux

• **Product Brief**



Samples Ready
(Retail Price: \$749)



DCAM550-E
ToF Only
Industrial Level, IP67

ToF Sensor	TOF CCD
Laser Type	850nm or 940nm VCSEL * 2
ToF Resolution	640*480, 30fps
TOF FOV	69°(H)*51°(V)
Data Format	RAW12(Depth,IR)
Interface	100M Ethernet/ RS485
Power Supply	PoE+ or 12V~24V(DC JACK), < 10W
Detected Range	0.35m~6m
Dimension	65mm*65mm*52.7mm
Working Temperature	-20°C-50°C
Software Platform	Windows/Android/Linux

- **Strong Customization Ability**

 Schedule Management	Working Sample Engineering Sample Mass Production	2 Month 3-4 Month 5 Month
 Product Test and Calibration	R&D Test, Reliability Test, DQA Test, Factory Test, Calibration Test	
 Operation System	Android/Linux / ARM Linux/Windows7/8/10 ROS/OpenNI	
 ToF FOV	60°、 70°、 90°、 100°、 110°、 120°	
 Certificate	EE, ME, Optical Simulation and Heat Dissipation Simulation EMC, Eye Safety, Vibration Test	

Vzense is able to provide customization service for volume customer with NRE fee.





THE END