



Company Profile



is Media

All Cameras All Technologies, Breathe Camera On™

is Media,
a globally world competitive technology-oriented company, expands the knowledge-based management through Valuable-Technology in modular image sensor measurement systems.

Founded in 2002,
is Media continues its efforts to gain popularity from the world by providing market-differentiation solution through a customer-oriented and market-oriented business.

is Media sustains its brand-value through better products and intensifying market-dominant with proactive marketing strategy.

Furthermore,
is Media keeps devoting itself to contribute to society and to respect mankind with Valuable-Technology management which can materialize a technology-oriented and customer-focus company.

" isMedia put customer satisfaction first, isMedia reward customers through constant value creation. isMedia will look ahead and move forward."

Thank you.





CEO Mr. S.Ch.Hong

Establishment Nov. 2002

Issued capital US\$ 2.6 Million

Employee 157 People (R&D 60 People)
Korea Head office 127 People
China Affiliated company 30 People (以事美德科技(深圳)有限公司)

Business Area



Digital Imaging
System



Machine Vision
System



Automatic
Equipment



Electrical Test
System



FPGA & ASIC
Design

Address 12-18, Simin-daero 327 beon-gil, Dongan-gu, Anyang-si, Gyeonggi.do,
14055, Korea

Tel / Fax TEL) +82-31-427-8411 / FAX) +82-31-463-3733

Homepage <http://www.ismedia.com>



- 2018** 2018 Outstanding Company for Job Creation(Presidential Award)
- 2017** **Go Public (IPO)**
- 2016** S-Mark (Safety) Certificate Acquisition
- 2015** Moved to New Building (isMedia owns)
- 2014** Authorized as ISO 9001: 2008
- 2013** Annual revenue **exceeds 30.0 Million USD**
Chosen as 2013 The best company to work
- 2011** 2011 Venture-Startup Festival Award ; **Awarded Prime-Minister- Prize**
2011Given Best technology **award from KIBO** (Government Agent)
- 2009** Patent on illuminator for image tester
Patent on test equipment's for camera module
Authentication of Merit
- 2008** Authorized as ISO 9001-2000
Authorized as INNO-BIZ
Authorized as venture company
- 2007** Patent on metrics camera for Display inspection system
- 2006** Acquisition R&D Center certification by Government's agency Found R&D center
Patent on Dual camera systems through mirrors
- 2005** Acquisition Venture Firm Certification
Certified on devices expert company
Patent on TV receiver add-on card
- 2004** Patent on Test S.W(IVI-M/I)
- 2003** Acquisition Incubating company certification bi I.B.K Bank
- 2002** Established isMedia co.,Ltd.



+ Patent

- 78 Testers related Patents registered.
- 29 Tester related Patents in process.



- 19 International patent have been registered



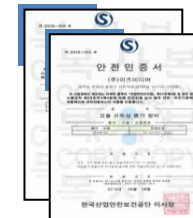
- Image Stabilization Inspection Device for Camera Module
- Dual Camera Optical Alignment and Assembly
- Camera Module Testing using Inline Handler

+ Award and Certificate

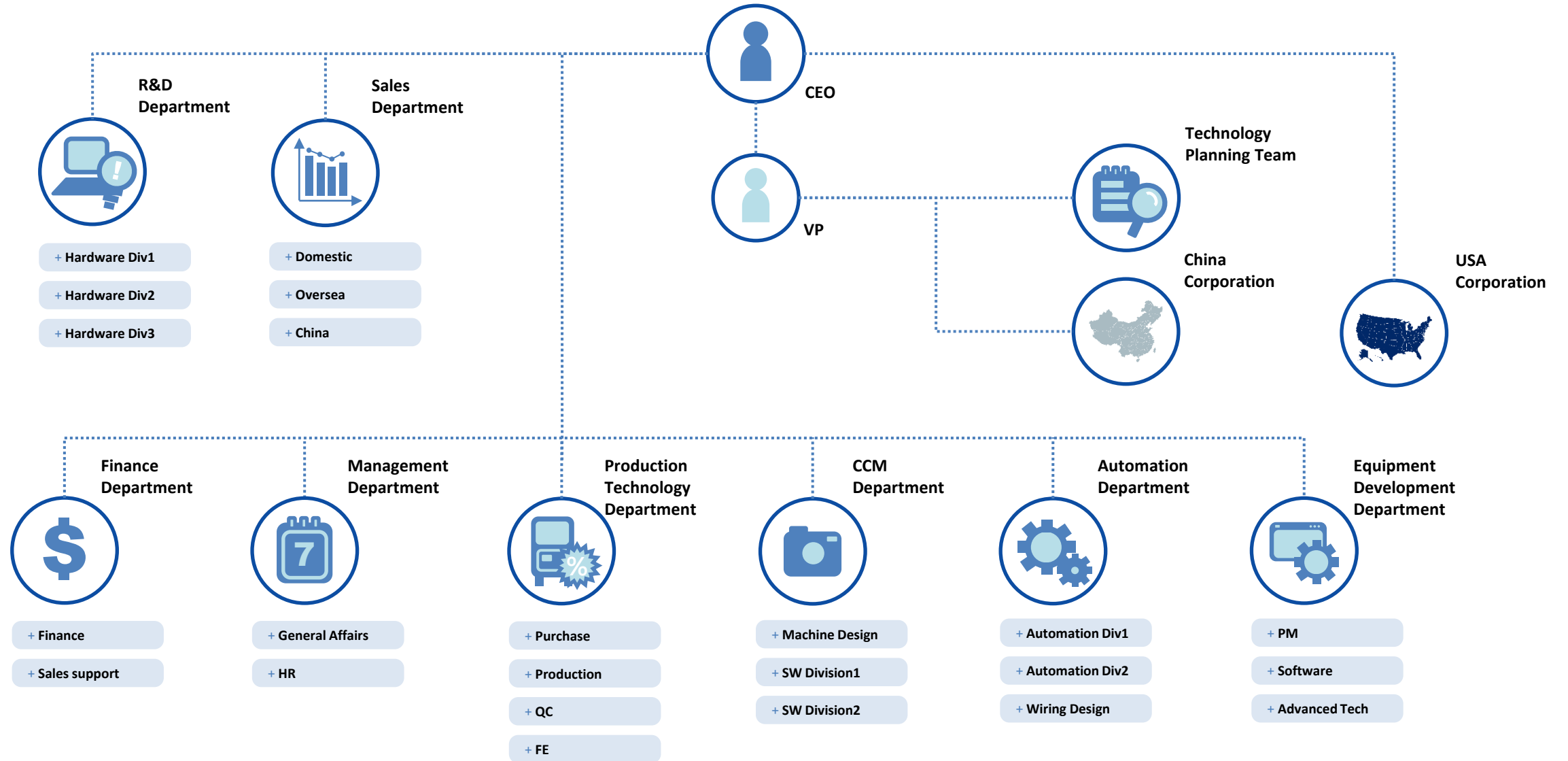
- 18 Government Awards and Certificates.
- 2 Safety Certificates.



- 2018 Korea Jobs Leading Company (President)
- Promising Medium Business Certificate
- Technology Innovation Medium Business (Inno-Biz) Certificate
- Venture Business Award



- Safety (S-Mark) Certificates





+ Korea HQ

(14055) 경기도 안양시 동안구 시민대로 327번길 12-18(관양동) (주)이즈미디어
12-18, Simin-daero 327beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do 14055 Korea

+ China Corporation (ShenZhen HQ)

广东省深圳市龙华新区腾龙路淘金地大厦A座607 (518109)
#1002, Block A, Taojindi Building, Tenglong Road, Longhua New District, ShenZhen,
GuangDong, China (518109)

+ China Corporation(SuZhou Branch)

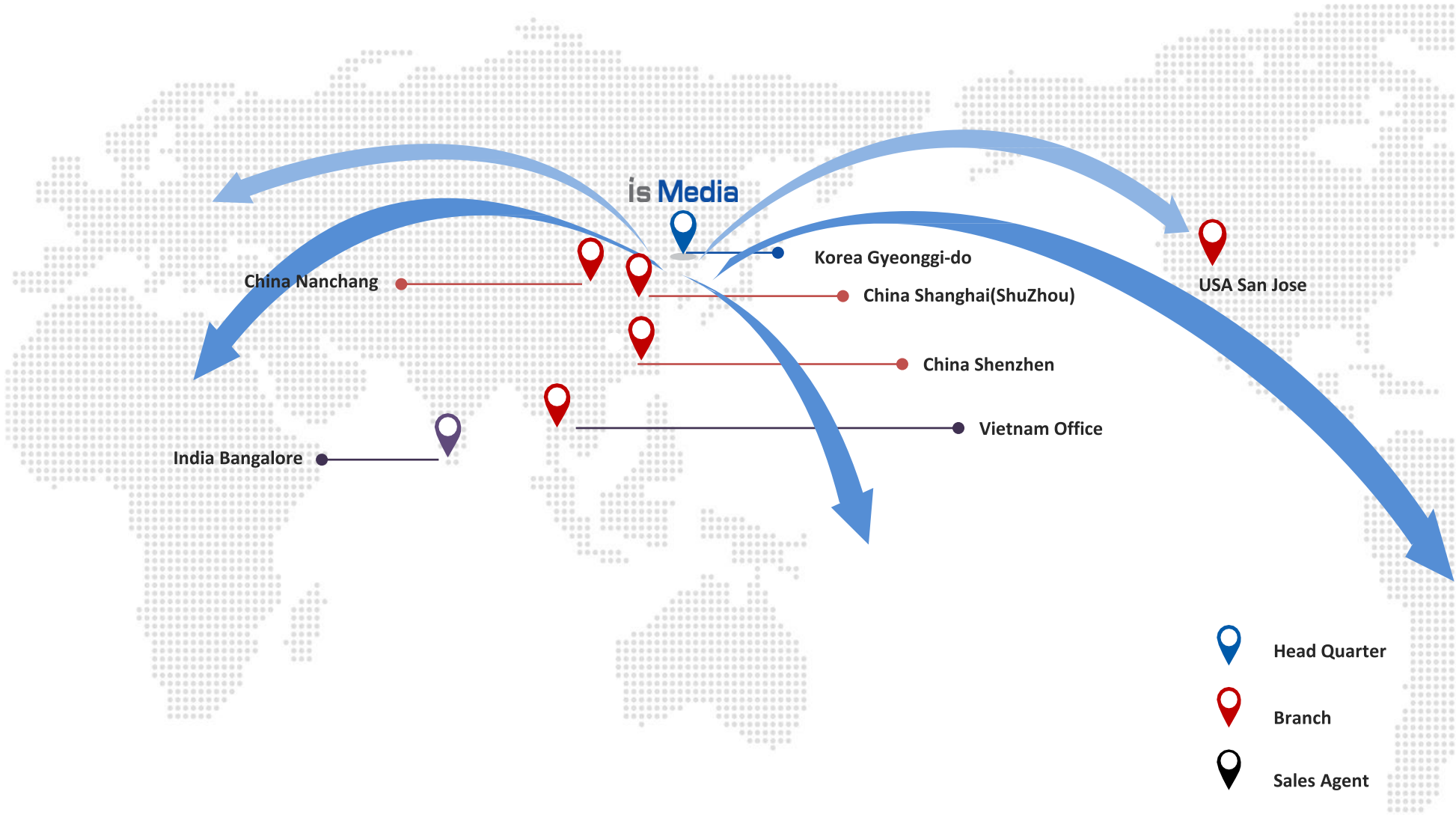
江西省南昌市高新开发区紫阳大道199号 , 紫晶国际广场1606室
Zi Jing Office Square Room 1606, ZiYang Road No.199, High-tech Development District,
Nanchang, Jiangxi Province, China (330096)

+ USA Corporation (HQ)

3003 North 1st St, San Jose, CA 95134

+ Vietnam Office (Technical Support Center)

LK10-38, Khu Đô Thị Nam Đàm Vạc, Thành Phố Vĩnh Yên, Vĩnh Phúc.
LK10-38, Nam Dam Vac Urban Area, Vinh Yen City, Vinh Phuc Province



Convenient S/W Structure

- + DLL Based Easy & Extendable Test Item Structure.
- + Universal & Various Test settings available.
- + It is possible to develop test items using SDK.
- + Central Management System called "isCMS".



Accurate & Effective H/W Set

- + Multi Programmable power channels & Fine electrical unit (μA) test
- + Compact packaging enable constant connection with module.
- + ASIC C-PHY & D-PHY Combo Chip



Precise Mechanical Engineering

- + Full Automation Machine and Precise Motion control
- + 3D CAD Based Design
- + Specialized customization

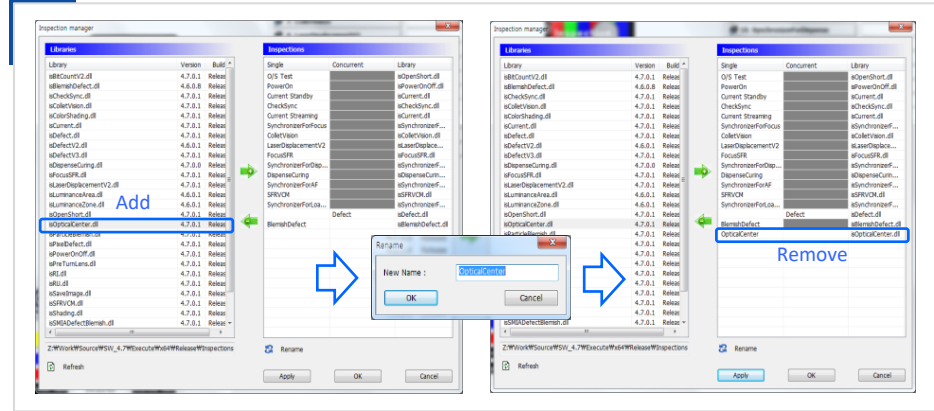
High Quality Collimator Lens

- + Up to 120 ° FOV
- + Customized CL is Available
- + "isCrown" for Automotive Camera Module with Wide FOV



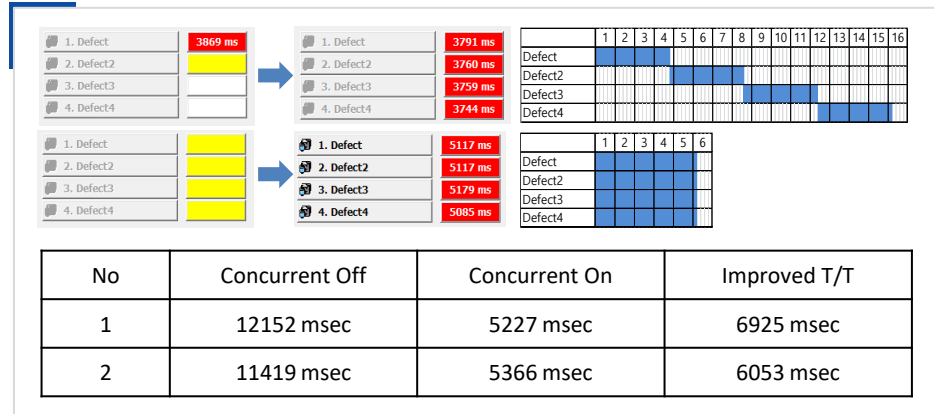
Convenient S/W Structure

+ Convenient Software platform (SDK)



- Easy to make new test items (Easy to integrate MATLAB Source code)
- No need to reveal customer's own test algorithm

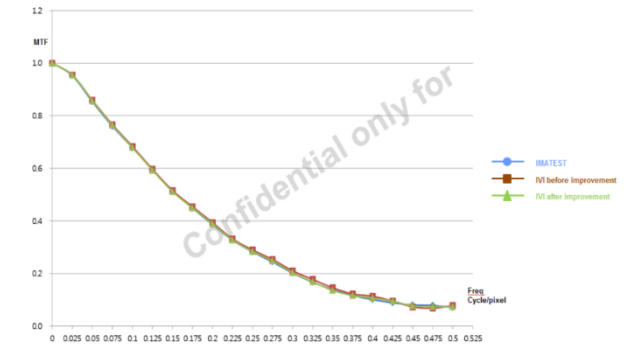
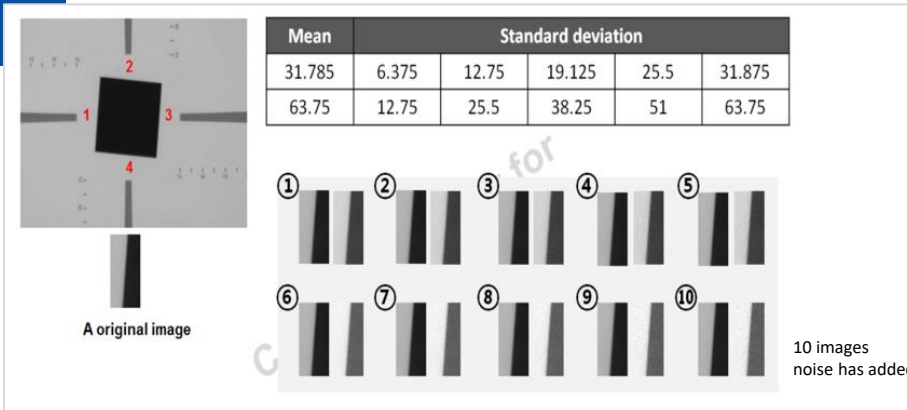
+ High UPH by Concurrent system



- Provides fast inspection time by processing the same inspection items in parallel and simultaneously.
- It can run several test items concurrently using multiple cores by Window Scheduler.

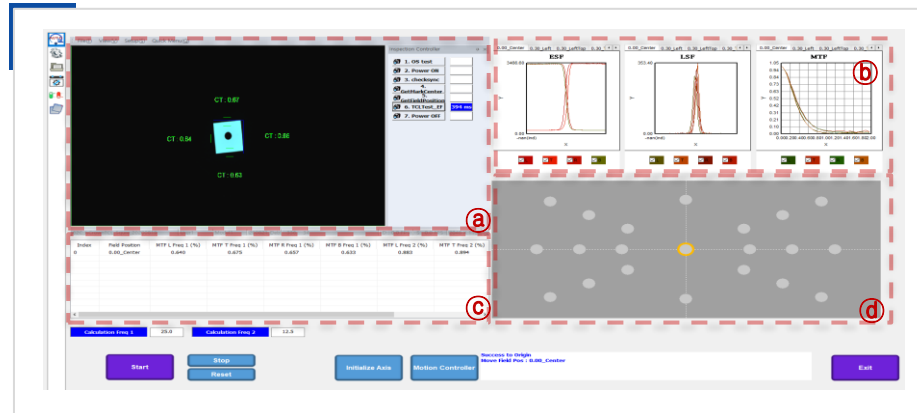
Improved resolution test algorithm

+ Own High speed SFR (ISO12233:2014)



- IVI SFR can be correlated with IMATEST.
- Provides fast operation time by using an optimized algorithm.

+ Implementing high-speed focus adjustment using flying capture.



- Fast resolution inspection is possible using isMedia's high-speed capture algorithm.
- High-speed active alignment algorithm implementation.
- High-speed Focus Adjustment algorithm implementation.

+ High performance image capture board

Board Size(W x L x H)	80(Width) x 110(Length) x 50(Height) mm
Power Supply	+12V/5A DC Adaptor
Interface with PC	TB3(PCIe GEN3 X 4LANE) for Control & Video
Supported Video Format	8bit to 16bit Bayer(8/10/12/14/16) 8bit or 16bit YUV4:2:2 RGB888/RGB565 (MIPI CSI2)
Supported Control Bus	Standard I2C Burst I2C SPI
Memory	DDR4, 16Gbit
Supported Video Resolution	Bayer : Up to 190M Pixels resolution MIPI CSI-2(C-PHY) : 1,2,3 lane, up to 2.0Gbps per lane x 1 Port
MIPI Support	MIPI CSI-2(D-PHY) : 1,2,3,4 lane, up to 2.5Gbps per lane x 1 Port Real-time ECC&CRC
Master Clock Supply	1.0MHz~68MHz x 1 Port
Reset_Standby Channel	Output 2 Channel x 1 Port
GPIO Channel	In/Output 4 Channel x 1 Port
Socket Safety Channel	Input 1 Channel x 1 Port

- Adopting self-developed ASIC for high-resolution
- High-speed interface using Thunder Bolt 3
- MIPI CSI-2(C-PHY) : 1,2,3 lane, up to 2.0Gbps per lane
- MIPI CSI-2(D-PHY) : 1,2,3,4 lane, up to 2.5Gbps per lane
- 32Gbps Daisy-chain up to 4 nodes
- Applied Smart Capture, Multi-ROI

Accurate & Effective H/W Set

+ High Accuracy Electrical Test Solution



- Built in open & short test function
- PMU unit for open & short test
- DPS unit for device power (6 channel)
- Max measure range up to 1.25A by CH1, CH2

+ High performance equipment development

+ Single Camera



+ Dual Camera



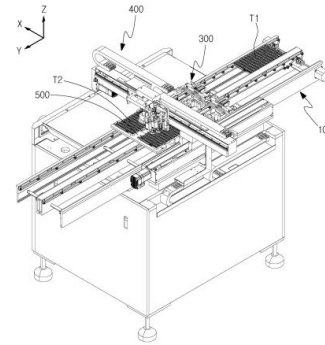
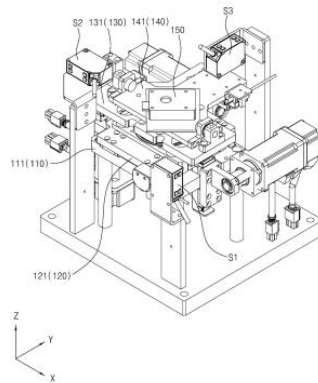
+ Automotive Camera



- Variable Active Alignment equipment.
- Optical alignment monitoring system.
- Optical alignment calibration system.

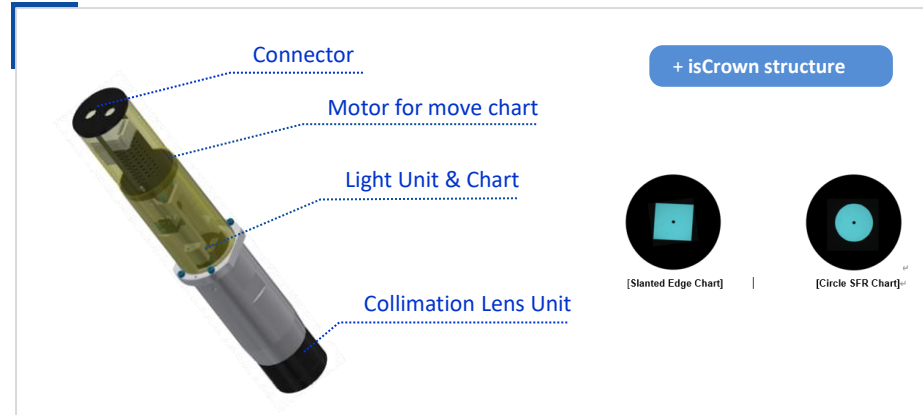
Precise Mechanical Engineering

+ Many patents for mechanical structure



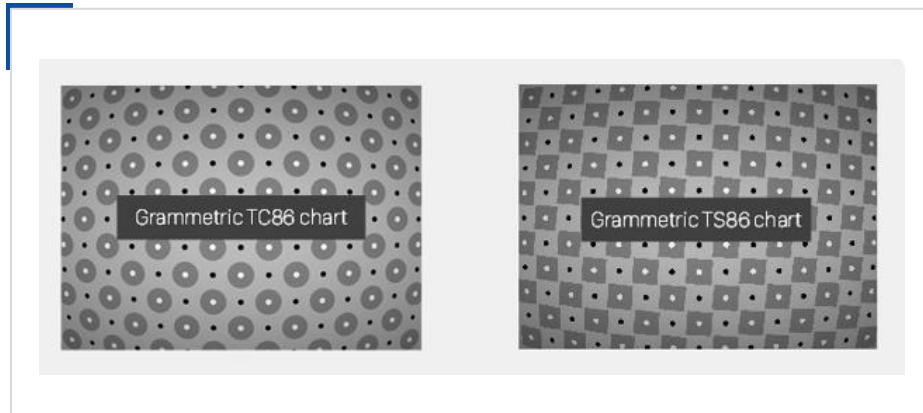
- Image Stabilization Inspection Device for Camera Module
- Dual Camera Optical Alignment and Assembly
- Camera Module Testing using Inline Handler

+ High Quality Collimator Lens (isCrown)



- Various types of charts can be applied..
- The brightness of the LED lights can be controlled through software.
- Object distance can be changed using the motor drive.

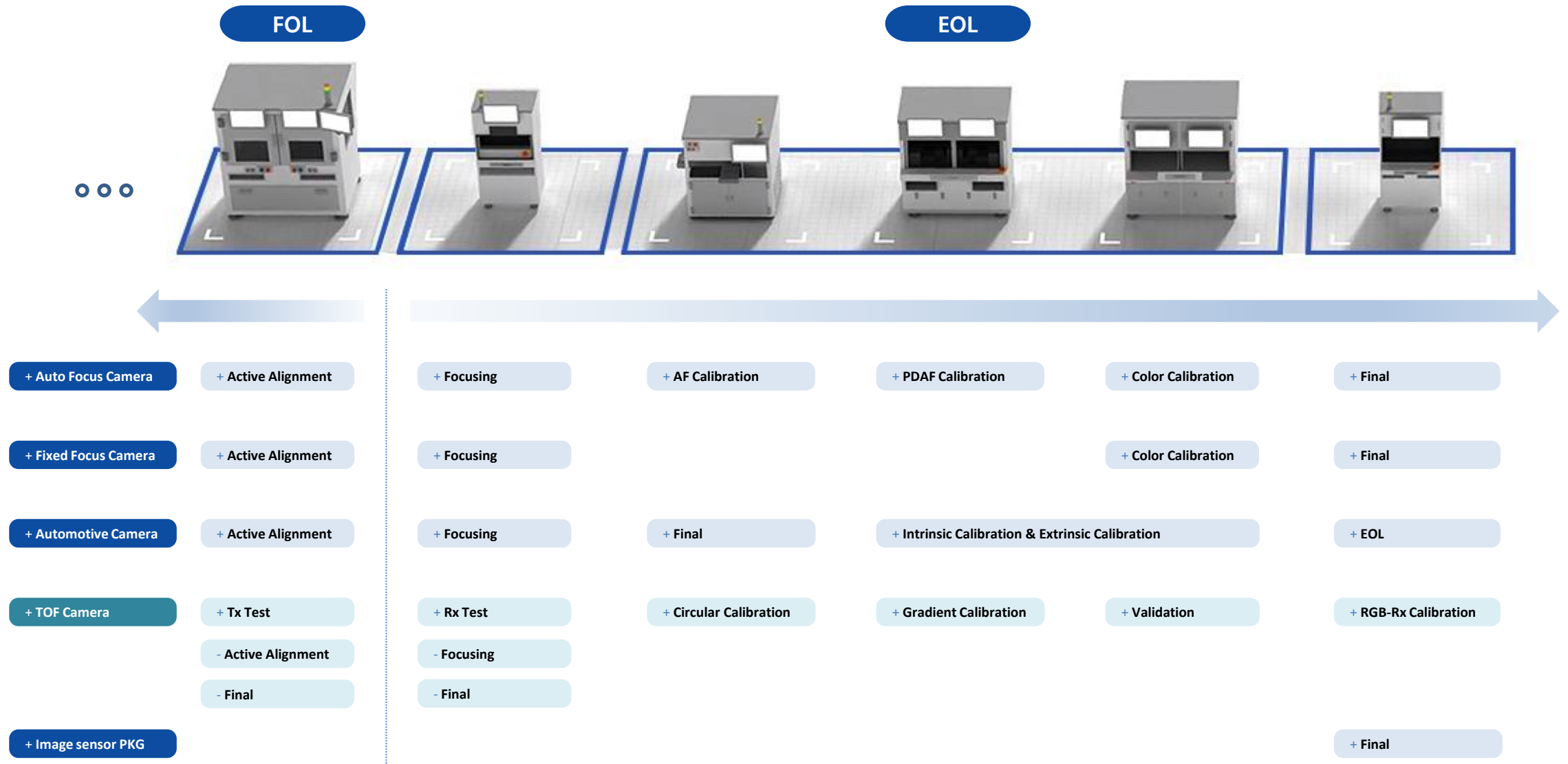
+ Grammetric Circle SFR®



- isMedia has partnered with Grammetric (www.grammetric.com) to enable isCrown R&D PNG images to work with Circle SFR® Studio—industry first commercial-grade circular edge spatial frequency response (SFR).

- The circular edge SFR can enable users to maximally utilize the benefit of using isCrown R&D to scan over a wide range of field angles to analyze the resulting impact on sagittal and tangential MTF instead of the traditional horizontal and vertical MTF as illustrated below.

High Quality Collimator Lens





1st FACTORY - HQ

- + Factory Name : isMedia
- + Area : 848 m²
- + Capability : Tester 100 sets / Month
- + Address : 12-18, Simin-daero 327beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055 Korea



2nd FACTORY - ICN

- + Factory Name : TBT
- + Area : 3,300 m²
- + Capability : Tester 390 sets / Month
- + Address : 9, Baekbeom-ro 677beon-gil, Seo-gu, Incheon, 22829 Korea

Product Line-up

Valuable Technology



+ Image grabber

UCI72s



C-PHY & D-PHY Single

+ Feature

- Single interface
- Thunder Bolt 3
- * D-PHY 2.5 Gbps/lane
- * C-PHY 2.0 Gbps/lane
- Open short tester
- Current measure unit
- Power supply
- Main board

+ Test Function

- Open short test
- Power supply
- Current measure
- Image transfer
- Image processing

UCI72d



C-PHY & D-PHY Dual

+ Feature

- Dual interface
- Thunder Bolt 3
- * D-PHY 2.0 Gbps/lane
- * C-PHY 1.8 Gbps/lane
- Open short tester
- Current measure unit
- Power supply
- Main board

+ Test Function

- Open short test
- Power supply
- Current measure
- Image transfer
- Image processing

UCI62-A



Automotive

+ Feature

- Single interface
- USB 3.0
- * NTSC, LVDS, SERDES
- Open short tester
- Current measure unit
- Power supply
- Main board

+ Test Function

- Open short test
- Power supply
- Current measure
- Image transfer

UCI62C-T



ToF

+ Feature

- Single interface
- USB 3.0
- * MIPI CSI2 2.0 Gbps/lane
- * Embedded line data acquisition
- Open short tester
- Current measure unit
- Power supply
- Main board

+ Test Function

- Open short test
- Power supply
- Current measure
- Image transfer

+ Software

IVI

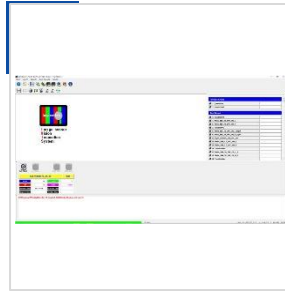


Image Vision Inspector

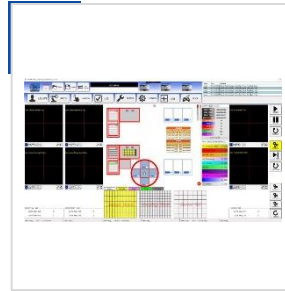
+ Feature

- Machine control
- Electrical board control
- Image test library
- Data read/write
- Resolution test
- Verify data

+ Test Item

- Electrical test
- Image test
- Vision inspection
- Resolution test
- VCM control
- Memory read/write

IPM



Pick & Place Manager

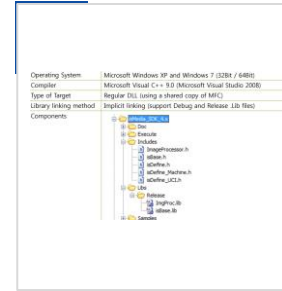
+ Feature

- Handler control
- Machine control
- Vision inspection
- Bar code reader
- Dispenser control
- Yield manager
- Data transfer

+ Test Item

- Pick & Place
- Dispensing
- Vision test
- Bar code read
- Yield management

SDK



SW Development Kit

+ Feature

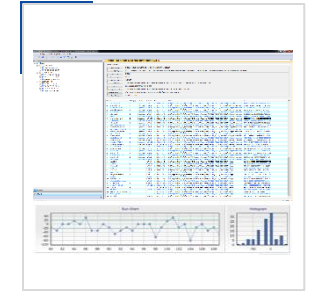
- Easy to make new test items
- No need to reveal customers own test algorithms
- Convenient S/W maintenance
- SDK(Software Development Kit)
- DLL(Dynamic Linking Library)
- Windows support
- Need Microsoft Visual C++

+ Test Item

- Camera control
- Grabber control
- Display(Drawing View) control
- Machine control
- Image processing library

+ Management SW

isCMS



Central Management System

+ Feature

- Management software
- Server program
- IVI client connect
- Yield management software

+ Test Item

- Software update
- CCF download
- Production management

+ Mobile Camera

FA10A72s



Active Alignment

+ Feature

- Full automation
- 3 para
- 6 Axis actuators
- Vision camera
- Dispenser
- UV cure unit
- ULPA filter

+ Test Item

- Electrical test
- Dispensing inspection
- Active Alignment
- UV Curing

FDA20F72s



Dual Cam AA

+ Feature

- Full automation
- 2 para
- 6 Axis actuators
- Vision camera
- Dispenser
- UV cure unit
- ULPA filter

+ Test Item

- Electrical test
- Dispensing inspection
- Active Alignment
- UV Curing

S22FW72s



Focus adjustment

+ Feature

- 4 para
- Facing upward Chart
- Focusing unit
- Laser phase sensor
- Vision camera
- Dispenser
- UV cure unit

+ Test Item

- Electrical test
- Focus adjustment
- Image test
- Dispensing
- UV cure

S200EW72s



Focus adjustment

+ Feature

- 2 Feeder focusing
- Focus & Image
- Facing upward chart
- Vision camera
- Laser phase sensor

+ Test Item

- Electrical test
- Image test
- Focus adjustment

S31CW72sH



Final test

+ Feature

- 8 para
- Facing forward Chart
- Far focus chart
- Macro focus chart
- Image test unit
- High UPH

+ Test Item

- Electrical test
- Image test
- Resolution test(Far)
- Resolution test(Near)

+ Mobile Camera

SK40D72sH



Dual Cam calibration

+ Feature

- 8 para
- Facing forward chart
- Individual light source
- Motorized stages
- AWB calibration light

+ Test Item

- Electrical test
- Dual cam calibration
- AE calibration
- AWB calibration
- EEPROM write

SK10L72sH



Color calibration

+ Feature

- 4 para
- Electrical test unit
- 4 LED light

+ Test Item

- Electrical test
- AWB calibration
- Image test
- EEPROM write

SK23CW72s



PDAF calibration

+ Feature

- 4 para
- Facing forward Chart
- LED light for PDAF
- LED light for PD

+ Test Item

- Electrical test
- PD cell calibration
- PDAF calibration
- EEPROM write

Si10H72s



OIS calibration

+ Feature

- 8 para
- Electrical test unit
- LED light
- Actuator for Shakers

+ Test Item

- Electrical test
- OIS calibration
- SNR

SK12L72sH



O/S & Verify

+ Feature

- 4 para (8 Socket)
- Facing forward Chart
- LED light x 4

+ Test Item

- Electrical test
- Image test
- Verify

+ TOF Camera

FTB10CW62BG



Tx Final Tester

+ Feature

- LIV sphere
- Power meter
- Electrical test unit
- Far field chart
- Eye safety

+ Test Item

- Circular calibration

SR200EW62



Rx Focusing & Final

+ Feature

- 2 Feeder focusing
- Focus & Image
- Facing upward chart
- High UPH
- Vision camera
- Laser phase sensor

+ Test Item

- Electrical test
- Image test
- Focus adjustment

FXD01KR62



Circular Calibration

+ Feature

- 4 para
- Facing upward Chart
- High UPH

+ Test Item

- Circular Calibration

FXD02KR62



Gradient Calibration

+ Feature

- 12 para
- 0,90,180,270 degree
- Facing upward Chart
- High UPH

+ Test Item

- Gradient calibration

FXD03KR62



TOF Validation

+ Feature

- 8 para
- Facing Forward Chart
- High UPH

+ Test Item

- Validation

+ Automotive Camera

EF300A62



Active Align

+ Feature

- Full Automation
- 2 para
- 6 Axis actuators
- Vision camera
- Dispenser
- UV cure unit
- ULPA filter

+ Test Item

- Electrical test
- Dispensing inspection
- Active Alignment
- UV Curing

EF400C62



Final Test

+ Feature

- Full Automation
- 2 para
- 6 Axis adjustment
- Half sphere
- ULPA filter

+ Test Item

- Electrical test
- 6 Axis adjustment
- Image test

ES100A62



Focus Adjustment

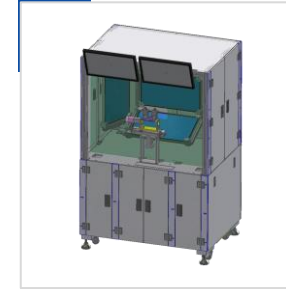
+ Feature

- Semi automation
- 1 para
- Focus unit
- Vision Camera
- Laser phase sensor

+ Test Item

- Electrical Test
- Focus Adjustment
- Vision inspection

EF200K62H



Intrinsic Calibration

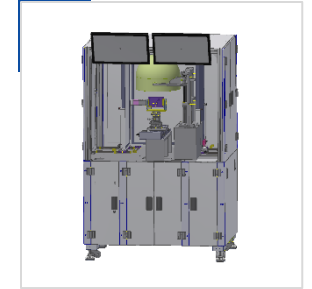
+ Feature

- Full, Semi automation
- 1 para
- 5 Monitor chart
- Electrical test unit

+ Test Item

- Electrical test
- Intrinsic calibration

ES200C62H



EOL

+ Feature

- 2 para
- 3 Chart
- Electrical test unit
- Half sphere

+ Test Item

- Electrical test
- Resolution test
- Image test

+ Image sensor PKG

FC08A72sC



Final Test

+ Feature

- Full Automation
- 8 para (16 sockets)
- Vision camera
- LED light
- ULPA filter

+ Test Item

- Open short test
- Current measure
- Defect
- Blemish
- Dark
- SNR

ST01A72s



Final Test

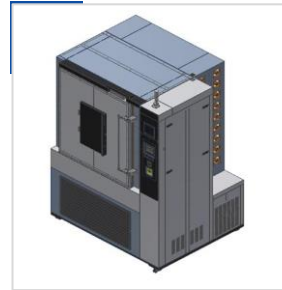
+ Feature

- Semi Automation
- 2 para
- LED light

+ Test Item

- Open short test
- Current measure
- Defect
- Blemish
- Dark
- SNR

M200C72s



Reliability test

+ Feature

- Chamber
- 40 sets test boards

+ Test Item

- Open short test
- Current measure
- Dark
- SNR

+ Device Level Tester

F205C



Focus Adjustment

+ Feature

- Full automation
- 4 para
- Focus unit
- Image test unit

+ Test Item

- Focus check
- Defect, Blemish
- Shading
- AF function
- Dark noise

+ Auto Handler

+ Semi Auto Tester



+ Handler



+ Full Auto Tester



+ Full Auto Tester



+ Full Auto Tester



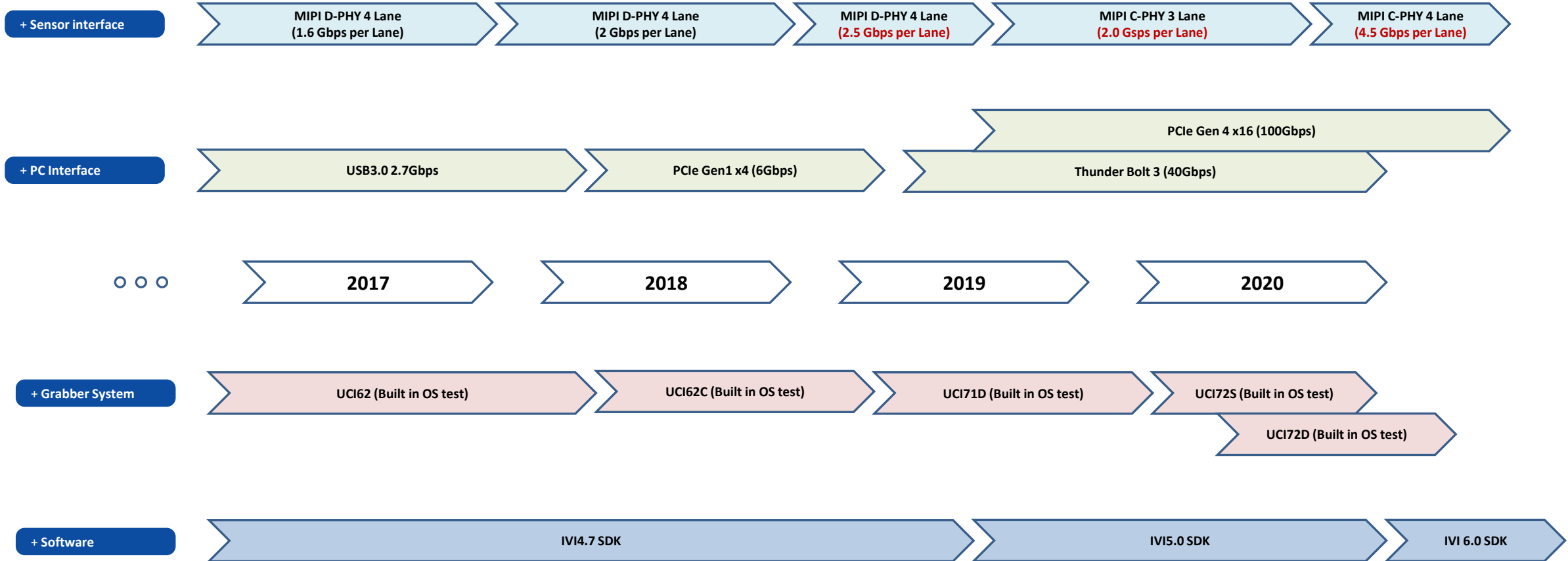
+ In-Line Full Automation System

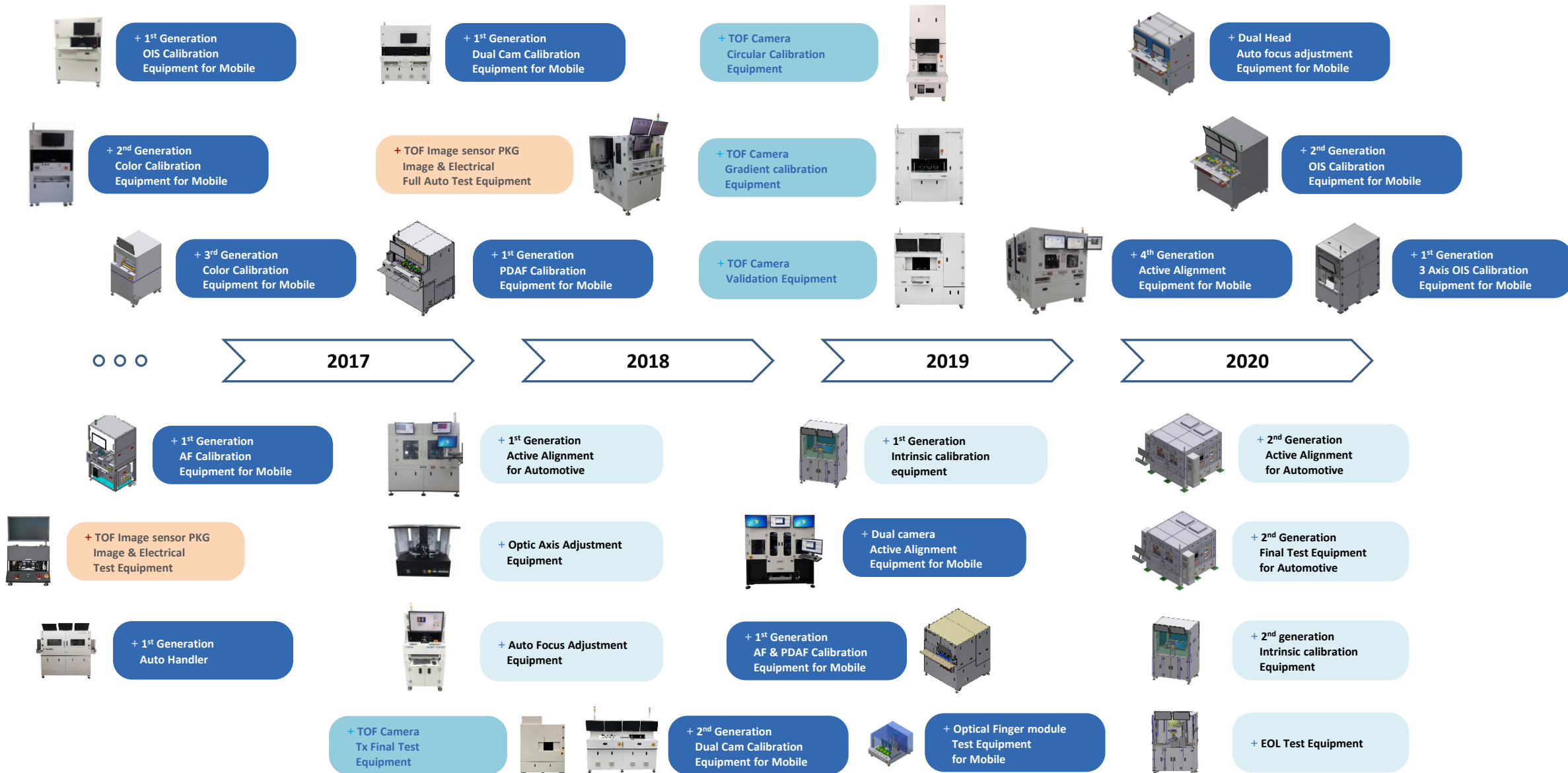


Technical Roadmap |

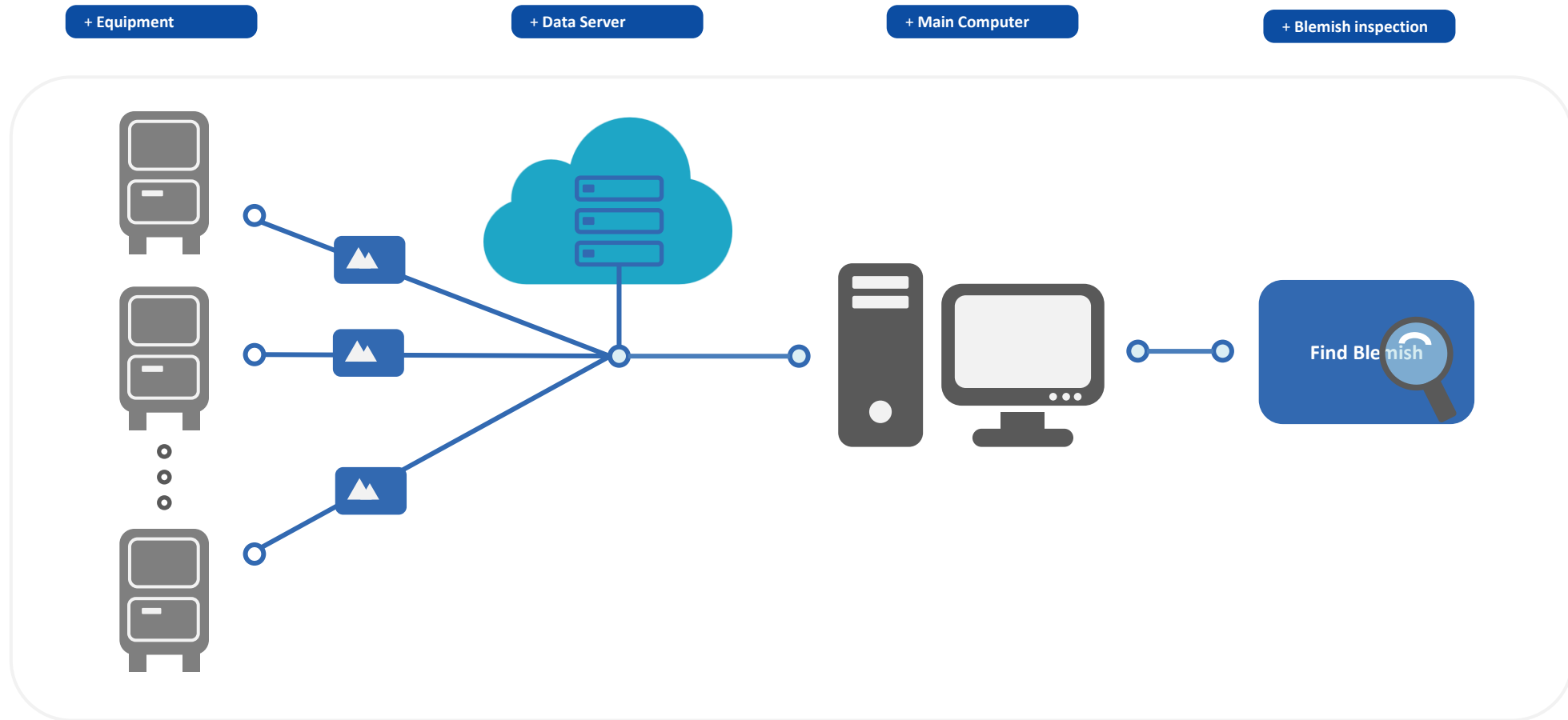
Valuable Technology







+ AI Solution for Blemish





A company where everyone is the owner
Technology that goes ahead of customer needs
A company that can run side by side for customer success
We will strive to become **is Media** for value creation.

CEO
S.Ch.Hong

A handwritten signature in black ink, appearing to read 'S.Ch.Hong'.



Thank **you**

is Media

All Cameras All Technologies, Breathe Camera On™