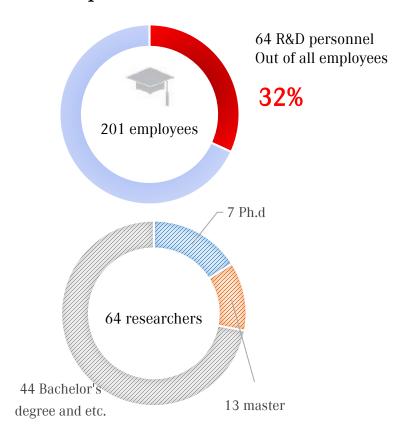


1. Our Company

Outline

Name	Carnavicom Co., Ltd.
CEO	Jong-taek Chong
Established	January 5, 2001
Main Products	LiDAR, V2X (WAVE), ADAS, Dashcam, Navigation, ETCS(Electronic Toll Collecting System)
Head Office	13-25. Songdogwahak-ro 16beon-gil, Incheon, Republic of Korea
Homepage	www.carnavi.com

ullet Manpower (As of May 2021)





1. Our Company

CEO Profile



Jong-taek Chong CEO

- Bachelor of Marine Engineering, Mokpo National Maritime University (Mokpo, South Korea)
- Doctor of Marine Electronic, Communication and Computer Engineering,
 Mokpo National Maritime University
- Advanced Management Program, SEOUL NATIONAL UNIVERSITY
- Selected for a Certificate of Promising Small and Medium in 2016
- Selected for a Certificate of Recognition in 2018

* Current Director of The Korean Society of Automotive Engineers

Management Philosophy

Management Philosophy

A company that prevents accidents and saves lives

Key Members

Sang-myeong Kim COO	Hyundai Autonet (Previous Hyundai Electronics) Executive Bachelor of physical metallurgy , HANYANG UNIVERSITY(Seoul, South Korea)
Keun-baeg An CTO	HUMAX General Director of the Automotive Electronics Business Humax Automotive CEO Innsys CEO Technical Research Institute, HYUNDAI MOBIS Bachelor of Computer Science and Engineering, KYUNG HEE UNIVERSITY(Seoul, South Korea)
Sung-Joo Cho Research Executive Director (Autonomous Driving Lab.)	JUNGSANG LIDAR CTO Meteorological Research Officer, NATIONAL INSTITUTE OF METEOROLOGICAL SCIENCE Doctor of Philosophy(Ph.D) in Physics and Mathematics, Russian Academy of Sciences(Moscow, Russia) Bachelor of Physics, Seoul National University (Seoul, South Korea)



Confidential

2. Company History

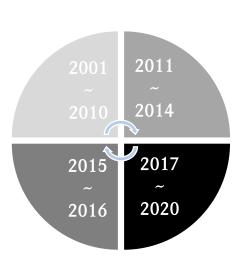
"Preparation for higher growth based on core future automotive technology"

Development of Automotive Electronics

- 2004.04 Signed a Contract for supplying Navigation and Automotive Electronics to Mercedes-Benz
- 2009.08 Manufactured Interface for Mercedes-Benz NGT-4.0 only
- 2010.05 Exportation of the Products to Mercedes-Benz -Taiwan
- 2010.07 Development of ETCS (Electronic Toll Collecting System)
 Rearview Mirror Type

Autonomous Vehicle Technology

- 2015.07 Participation in R&D project "Development of V2X Communication System"
- 2015.08 Participation in R&D project "Development of 8ch LiDAR" as a leader of consortium
- 2015.11 Participation in R&D for Development of LiDAR for Dashcam as a leader of the consortium
- 2016.08 Participation in R&D for Development of European V2X
 Terminal Equipment



Launching "VUGERA"

- 2011.11 Selected as the Supplier to the KT KumHo Rent Car
- 2012.07 Registration BI_"VUGERA"
- 2013.08 Exportation of "VUGERA" Dashcam to Russia
- 2014.08 Exportation of "VUGERA" Dashcam to SSCL(Porsche)
- 2014.10 Signed a Contract with Han Sung Motor to supply "VUGERA"

Ouality Enhancement and Cooperation with Automobile Companies

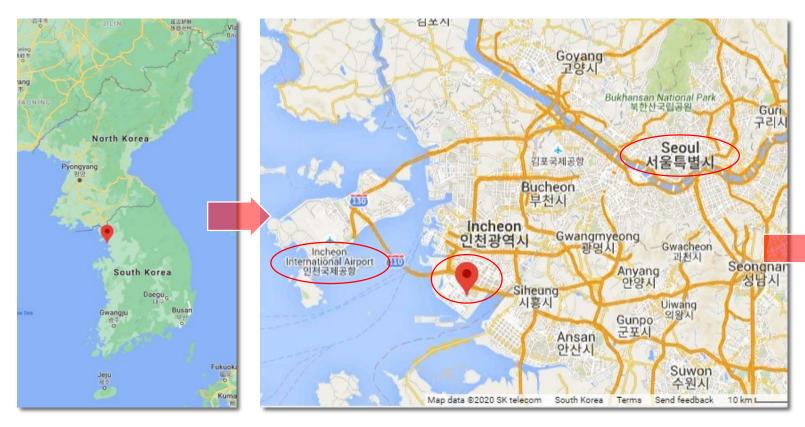
- 2017.03 Development of AUDI Korea ETCS
- 2017.05 Selected as the leader company for localization of 16ch LiDAR
- **2018.02** Development of exclusive Dashcam "Starview_S" for MBK (Mercedes-Benz Korea) only
- **2018.04** Supplying and Developing exclusive ETCS for MBK only
- 2019.07 SMT Line installation complete
- 2020.02 Acquisition of IATF 16949 Certification
- 2020.06 Crosswalk Surveillance 4ch LiDAR Launching



Confidential

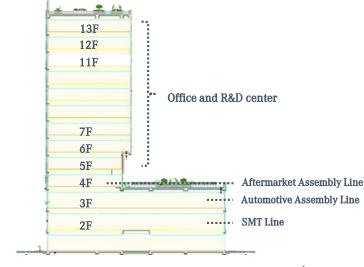
3. Location

Location and Building View



- Note
 - About 30km from Seoul, the capital of South Korea
 - Located nearby Incheon International Airport

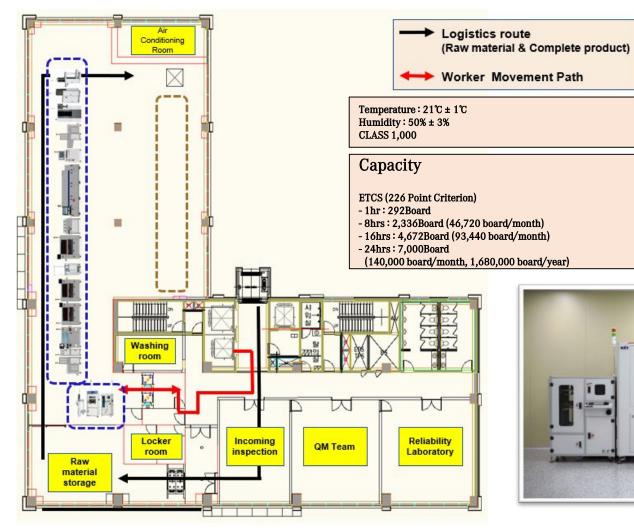






4. Factory - SMT Line

• SMT Line (2F)











4. Factory - SMT Line

• VIP visit to Carnavicom







In October 2020, after receiving a report on the current status of Smart City operations in Incheon, the president Moon visited to digital SoC company Carnavicom to tour its manufacturing facilities.





5. Business Area

Automotive Electronics

- Dashcam
- ETCS
- Navigation



Autonomous Car

- LiDAR Sensor
- V2X Communication Unit
- DCU for Automotive sensor control
- ADAS(FCWS)







Marine Industry

- LTE navigational equipment for small sized ships
- Digital marine chart



5-1. Business Portfolio (2001~2020)

Main Products (As is)







Vehicle video recording device. Records event videos of driving, parking and moments before and after collision and provides information that helps identify the situation of the accident.

o ETCS OBU





Electronic toll collection system that makes it possible to pay tolls for highways through wireless communication in a car while driving. There are RF and IR type.

○ Navigation





Device that checks the exact distance and time required to the destination, and guides the route to a certain destination.

