

December 10, 2019

DENSO Corporation
Toyota Motor Corporation

MIRISE Technologies to be Launched to Develop Semiconductors in Effort to Achieve Safe and Comfortable Future Global Mobility Society

– Aiming to contribute through the development of advanced semiconductor electronics technologies–

DENSO Corporation and Toyota Motor Corporation today announced that they have named the joint venture to be established in April 2020 MIRISE Technologies (“MIRISE”). The joint venture will conduct research and advanced development of next-generation in-vehicle semiconductors. MIRISE is an acronym for Mobility Innovative Research Institute for SEMiconductors. It also conveys “mirai” (a Japanese word for “future”) and “rise.” Yoshifumi Kato has been appointed President and Representative Director of the new company.

The goal for 2030 has been established and the priority activity policy (Mid-term Policy 2024) has been drawn up for building a rapid, competitive development system after the company is formed.

■ Goal for 2030

Achieve the future of mobility while preserving a pleasant environment and ensuring safety and comfort, based on the semiconductor electronics of MIRISE Technologies.

■ Priority activity policy (Mid-term Policy 2024)

MIRISE will accelerate the development of next-generation in-vehicle semiconductors that play a key role in technology innovation for electric vehicles and automated driving vehicles from aspects of both vehicles and components by combining Toyota’s knowledge on mobility with DENSO’s knowledge on in-vehicle components.

MIRISE will work on three technology development fields: (1) power electronics, (2) sensing, and (3) SoC (System-on-a-Chip). In the power electronics field, the company will work on R&D mainly for in-house production (including contract manufacturing) by leveraging the semiconductor material technologies as well as manufacturing and design technologies accumulated by Toyota and DENSO in electrification technologies, mainly in hybrid vehicles. In the sensing field, the company will work on development for in-house production and cooperation with joint development partners. In the SoC field, the company will strengthen

its ability to determine the specifications of optimal SoCs for mobility in the future.

To achieve the above goals based on a speedy and competitive system, MIRISE will start negotiations on cooperation with universities, research institutes, start-ups, and semiconductor-related companies. The recruitment of semiconductor engineers will also be strengthened.

* Establishment of the joint venture requires the approval of antitrust authorities.

Profile of the new company

- | | |
|------------------|--|
| 1. Name | MIRISE Technologies |
| 2. Location | 500-1 Minamiyama, Komenoki-cho, Nisshin City, Aichi Prefecture, Japan (on the premises of the Advanced Research and Innovation Center) |
| 3. President | Yoshifumi Kato (currently a Senior Executive Officer of DENSO) |
| 4. Establishment | April 1, 2020 (planned) |
| 5. Capital | 50 million yen |
| 6. Ownership | DENSO: 51%, Toyota: 49% |
| 7. Employees | About 500 (when the company is established) |
| 8. Business | Research and advanced development of in-vehicle semiconductors and development of electronic components using semiconductors |

Contact information regarding this news release

- DENSO Corporation: Public Relations Div. +81-566-55-9752
- Toyota Motor Corporation: External & Public Affairs Div.
Tokyo: +81-3-3817-9111 to -9117, Nagoya: +81-52-552-0603 to -0609,
Toyota: +81-565-23-3510 to -3518