

The IPCEI initiative: open innovation toward industrial development for digital transformation

(Rome, 16 Nov 2020) The fourth national event promoted by AIRI (Italian Association for Industriale Research) on the IPCEI Microelectronics initiative, and its role for industrial development at national and EU level, has been held on line on November 11th.

Over 100 delegates from 10 EU countries joined the webinar, organized by Airi, Bruno Kessler Foundation, STMicroelectronics, and with the participation of CEA-LETI (FR), Elmos Semiconductors (DE) and non-IPCEI organizations such as the National Research Council (Italy), the NanoRegion network of Italian and Slovenian nano-laboratories, and the Association for Promoting Electronics Technology (APTE) in Romania.

The first session provided an overview on the five technological fields of the IPCEI initiative, energy efficient chips, power semiconductors, smart sensors, optical equipment and compound materials.

The focus session has been on smart sensors and IoT solutions in the frame of the IPCEI Microelectronics initiative, such as Light Detection And Ranging (LiDAR), MEMS, Neuromorphic and Silicon photonics devices, for the industrial, medical, environment, and transport sectors.

In the second part, a panel discussion with speakers and delegates from Italy, Slovenia and Romania addressed opportunities and challenges for technology transfer and spillover toward the industrial community, Startups and SMEs in particular.

Challenges included the variety of sectors addressed by IPCEI, the complexity of the different value chains, the differences in the type of organizations (research organizations, companies, infrastructures; large, small) and their languages, practices, attitudes and models toward cooperation.

However, all speakers agreed that an integrated and multi-sectoral approach is needed to take advantage of the enabling and pervasive characters of enabling technologies, such as microelectronics: open innovation approaches, including close cooperation among research, tech developers and end-users, and in particular Startups and innovative SMEs, is key to develop novel applications fitting the needs of users, and as well launch new markets.

The discussion showed that open innovation is already part of the management strategy of all the organizations participating to the panel, within and beyond the IPCEI Microelectronics initiative. Practices include knowledge and creation actions with partners, customers and professional users, and sharing and education & training with professionals, universities and schools. Specific actions have been put in place to access IPCEI Microelectronics technologies, through technology customization, prototyping, proof of concept networks, access to facilities, and other opportunities.

The [IPCEI \(Important Projects of Common European Interest\) Microelectronics](#), notified by the European Commission on 2018 and that will end on 2024, could receive an overall funding up to 1,75 billion euro for the participants in Italy, France, Germany and UK. IPCEI aims to increase the production and innovation capacity of the national and European system.

The next IPCEI webinar is planned for the beginning of 2021. Information will be provided on www.airi.it, www.fbk.eu, www.st.com and www.ipcei-me.eu.

Information: info@airi.it

