

Session Title: Digital Technology to achieve Efficiency and Decarbonization

Name: Sugibayashi Tadahiko

Position: Founder and CEO, NanoBridge Semiconductor

Abstract title: Atom Switch FPGAs to help save power on various devices

With the spread of digital technology, the number of semiconductors used in AI-equipped devices such as small sensor devices and electric vehicles is increasing. However, because the real world is diverse, these AIs also need to be diverse. Programmable semiconductors such as FPGAs are expected to meet the need with low power consumption. FPGAs will be used in more devices in 2030. Our NanoBridge (NB) is a technology that further improves the power efficiency of the devices that use FPGAs by a factor of 10. In 2020, we mounted the NB-FPPGA on the JAXA satellite and demonstrated in orbit.