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[17p-Z04-1~9][Open Symposium] Technological Evolution of Advanced Mobility and Power Electronics

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[17p-Z04-6]WBG device module technology optimal for next-generation power electronics

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It is expected that the power electronics technology that applies the wide bandgap device (WBG) will be improved for the expansion of EV and renewable energy, which are effective for carbon neutrality. However, power electronics equipment cannot be expected to significantly improve performance or become smaller and lighter simply by replacing the WBG alone with existing devices.Great effects can be achieved by optimizing gate circuits and passive components, and applying module technology that integrates those components. In this presentation, we will report the research results on module technology that makes the best use of the excellent characteristics of WBG.