



TOSHIBA

December 8, 2023

ROHM Co., Ltd.

Toshiba Electronic Devices & Storage Corporation

ROHM and Toshiba Agree to Collaborate in Manufacturing Power Devices ***METI recognizes joint plan as supporting stable, secure supply***

A plan by ROHM Co., Ltd. (“ROHM”) and Toshiba Electronic Devices & Storage Corporation (“Toshiba Electronic Devices & Storage”) to collaborate in the manufacture and increased volume production of power devices has been recognized and will be supported by the Ministry of Economy, Trade and Industry as a measure supporting the Japanese Government’s target of secure and stable semiconductor supply. ROHM and Toshiba Electronic Devices & Storage will respectively make intensive investments in silicon carbide (SiC) and silicon (Si) power devices, effectively enhance their supply capabilities, and complementally utilize other party’s production capacity.

Power devices are essential components for supplying and managing power supply in all kinds of electronic equipment, and for achieving a carbon-free, carbon-neutral society. Current demand is expected to see continued growth. In automotive applications, development of more efficient, smaller and lighter electric powertrains has advanced alongside the rapid expansion in vehicle electrification. In industrial applications, stable supply of power devices and improved characteristics are widely required to support increasing automation and higher efficiency requirements.

Against this backdrop, ROHM has formulated a management vision, “We focus on power and analog solutions and solve social problems by contributing to our customers’ needs for energy savings and miniaturization of their products.” and accelerates its efforts for a carbon-free. SiC power devices are the keys to energy savings. Since the world's first mass production of SiC MOSFETs, ROHM has been constantly developing industry-leading technologies. Among these are ROHM’s latest 4th Generation SiC MOSFETs that will be adopted for numerous electric vehicles and industrial equipment. As one of its priority projects, ROHM is working on SiC business, which contains aggressive and continuous investment to increase the production capacity of SiC and meet strong demand growth.

Toshiba Group, with its long-standing Basic Commitment, “Committed to People, Committed to the Future.,” aims to advance the achievement of carbon neutrality and a circular economy. Toshiba Electronic Devices & Storage has for decades supplied Si power devices, mainly for automotive and industrial markets, that have helped to secure energy saving solutions and equipment miniaturization. The company started production on a 300mm wafer line last year, and is accelerating investment to enhance production capacity and meet strong demand growth. It is also advancing development of a wider lineup of SiC power devices, especially for automotive and power transmission and distribution applications, taking full advantage of the expertise it has cultivated in railway vehicle applications.

ROHM has already announced its participation in the privatization of Toshiba, but this investment did not serve as the starting point for manufacturing collaboration between the two companies. Under intensifying international competition in the semiconductor industry, ROHM and Toshiba Electronic Devices & Storage have been considering collaboration in the power device business for some time, and that resulted in the joint application.

ROHM and Toshiba Electronic Devices & Storage will collaborate in manufacturing power devices, through intensive investments in SiC and Si power devices, respectively, toward enhancing both companies’ international competitiveness. The companies will also seek to contribute to strengthening the resilience of semiconductor supply chains in Japan.

Outline of the supply enhancement plan

Company names	ROHM Co., Ltd. and LAPIS Semiconductor Co., Ltd. Toshiba Electronic Devices & Storage Corporation and Kaga Toshiba Electronics Corporation
Total investment amount	JPY388.3 billion: ROHM and LAPIS: JPY289.2 billion, Toshiba Electronic Devices & Storage and Kaga Toshiba: JPY99.1 billion
Maximum subsidy	JPY129.4 billion: 1/3 of the total investment amount
Production sites	LAPIS Semiconductor Miyazaki Plant No.2: SiC power devices and SiC wafers, Kaga Toshiba: Si power devices
Scope	Enhanced production capacity in Japan for SiC and Si power devices and SiC wafers