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Mitsubishi Electric Advance is published on line quarterly (in March, June, September, and December) by Mitsubishi Electric Corporation. Copyright © 2023 by Mitsubishi Electric Corporation; all rights reserved. Printed in Japan.

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Digital transformation (DX) advances innovation in business activities and transformation in lifestyles, so the importance of communications infrastructure and sensor technology is rising. In this issue, we introduce highly efficient GaN amplifiers and high-speed optical devices for the latest information communications, as well as infrared sensor modules required in applications in the areas of crime prevention and surveillance.