



12 Bell Nexus (page 10)

DEPARTMENTS

-  AEI NEWS **08**
-  IN VIEW THIS MONTH **10**
-  COMPANY ON THE MOVE **48**
-  BUSINESS STRATEGY **49**
-  PRODUCT NEWS **64**

ASIA ELECTRONICS INDUSTRY (ISSN 1342-422X) is published monthly by Dempa Publications, Inc., 1-11-15 Higashi Gotanda, Shinagawa-ku, Tokyo 141-8715, Japan Tel: +81-3-3445-6111 Fax: +81-3-3445-6890. Editorial e-mail: may@dempa.co.jp;

Subscription e-mail: circulationmanila@dempa.co.jp. The magazine is distributed free to qualified subscribers in ASEAN countries (Thailand, Indonesia, The Philippines, Malaysia, Singapore, Brunei, Vietnam, Myanmar, Cambodia and Laos), as well as Korea, Taiwan and Hong Kong.

Paid air mail subscription is available to non-qualified subscribers in the Asian and Pacific regions for US\$150 per year and US\$260 for two years. For other areas, air mail subscription fees are US\$160 per year and US\$280 for two years. Paid subscription is accepted at <https://www.dempa.co.jp/en/pdfs/orderform.pdf>

Send address corrections to Dempa Publications, Inc., c/o Quantum Solutions (HK) Ltd, Unit 3-6, G/F Pacific Trade Centre, 2 Kai Hing Road, Kowloon Bay, Kowloon, Hong Kong

TAIWAN: International Dempa Trade Co. Ltd., 7F, No. 34, Sec. 1, Nanjing East Road., Taipei, Taiwan 104 Tel: +886-2-2563 4595 Fax: +886-2-2567-5559 **KOREA:** Dempa Publications, Room 1019, Punglim VIP Tel, 404, Gongdeuk-dong, Mapo, Seoul, Korea 04144, Tel: +82-2-714-2983 Fax: +82-2-714-2984 **PHILIPPINES:** Dempa Publications, Inc. - Regional Headquarters, Herrera Tower, Room 2510, 98 V.A. Rufino Street, Salcedo Village, Makati City, Philippines, Tel: +63-2-845-0906 Fax: +63-2-845-1829

President & Publisher: Tsutomu Hirayama
Copyright © 2019 by Dempa Publications, Inc.

All rights reserved. The contents of this magazine may not be reproduced in whole or in part without the prior permission of the copyright owner. Printed in China.

SPECIAL REPORT

- Capacitors Thrive on Budding Automotive Field **12**
- Small Lithium Ion Rechargeable Battery Ideally Suits IoT Market **14**
- Advanced Technology Lowers Profile of Conductive Polymer Capacitors **17**
- Conductive Polymer Capacitors Expand Equipment Reach **20**

TECH FOCUS

- Solder Paste Achieves Residue with Dew Condensation Resistance **23**
- Thin Noise Suppression Sheets Beef up Role in 5G **26**
- Color Reflective LCD Modules for IoT Devices Conserve on Power **28**

COMPONENT MATERIALS

SMTs: IN REVIEW

ZOOM-IN

- High Process Standards Stand Out in ASM's Production Line **36**
- Next-Generation Mobility Services Take Center Stage **46**

TECHNOLOGY HIGHLIGHT

- Superconductor Reinforces New Energy Harvesting Function **37**
- Antiferromagnet Yields Ultra-High Recording Density Magnetic Memory **38**
- Flexible Thermoelectric Generator Module Captures Energy at Low Temperature **40**

PRODUCT HIGHLIGHT

- Metal-Base Substrate Halves Thermal Resistance of Alumina **41**
- Halogen-Free Board Material Boosts Data Transmission in 5G **41**
- GaN Amplifier Widens Capacity for Mobile Base Stations **42**

INDUSTRY REPORT

- Automotive Field in China Benefits Component Makers **43**
- Makers Ramp up Global PWB Production **44**

TOP INTERVIEW

- AIS Company of Panasonic Adopts New Corporate System **50**

SHOW REPORT

- Automotive World 2019 **52**
- SEMICON Korea 2019 **56**
- CAR-ELE JAPAN 2019 **62**