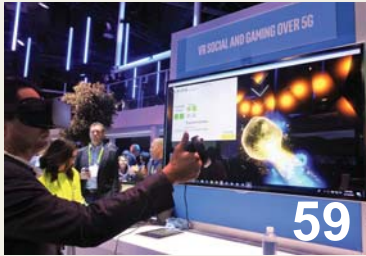




28



Insulated step-down DC/DC converter (page 19)



59

DEPARTMENTS

-  AEI NEWS 8
-  IN VIEW THIS MONTH 10
-  COMPANY ON THE MOVE 53
-  PRODUCT NEWS 62

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 <http://aei.dempa.net/paidsub/subscription.html>

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, Seoul Office, Masters Tower, Room 1404, 553 Dohwa-dong, Mapo-ku, Seoul, Korea, 121-040, 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 © 2018 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 Hong Kong.

SPECIAL REPORT:

Semiconductor Market Breaches New Industry High _____ 12
 Cutting-Edge Equipment, Materials Converge for Semiconductors _____ 14
 Higher-Functionality Chips Drive Thriving Equipment Market _____ 17

TECH FOCUS

PCB Promotes Low-Cost Packaging Technology for Power Electronics _____ 19
 Carbon-Nanotube Sheets Top Heat Dissipation of Silicon Materials _____ 24
 LPWA-Compliant Sensor Avoids Battery Replacement _____ 26

ZOOM-IN

Korean IC Sector Tracks Path of Global Chip Market _____ 28
 Murata Manufacturing Ramps up Production of Multilayered Substrates _____ 52

COMPONENT MATERIALS

SMT's: IN REVIEW _____ 32

TEST AND MEASUREMENT

IN THE KNOW

New Technique Sets to Revolutionize Display Production _____ 37

TECHNOLOGY HIGHLIGHT

Wireless Multi-Hop Transmission Frees up Surveillance Systems _____ 40
 Silver Nano Ink Printing Yields Bendable Touch Panels _____ 41
 Tamura Develops Gallium Oxide-Based MOS Power Transistor _____ 42

PRODUCT HIGHLIGHT

Shield FFC Connector Satisfies V-by-One US Standards _____ 43
 Thin Film Redistribution Yields Space Transformer LTCC Substrate _____ 44
 Three Wafer Structure Realizes 3G Crystal Timing Device _____ 45

INDUSTRY REPORT

TOP INTERVIEW _____ 54

SHOW REPORT

ELEXCON 2017 _____ 56
 CES 2018 _____ 58