



Cross nozzles (page 33)



**DEPARTMENTS**

	AEI NEWS	8
	IN VIEW THIS MONTH	55
	BUSINESS STRATEGY	56
	COMPANY ON THE MOVE	60
	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 <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 China.

**NEPCON CHINA 2018**

Smart Factory 1.0 Debuts in NEPCON China	10
Japan Unix	12
Tokyo Weld	14
JUKI	16
FUJI	22
Yamaha Motor	29
SMIC	33

**TECH FOCUS**

New Energy-Related Fields Attract Component Makers	36
Quantification of Electron Scattering Lowers Resistance of SiC Power ICs	38
High-Power Flexible Thermoelectric Module Makes Use of Waste Heat	39
Street Lighting Lies at Heart of Smart City Infrastructure	40

**SMT's: IN REVIEW**

**COMPONENT MATERIALS**

**TEST AND MEASUREMENT**

**TECHNOLOGY HIGHLIGHT**

On-Chip Color Filters Evolve with Image Sensor Development	47
Stable MIS GaN Power Transistor Unlocks Ultrafast Power Device	49

**PRODUCT HIGHLIGHT**

JAE Augments USB Type-C Products with Cable Harness	50
---	----

**INDUSTRY REPORT**

Japanese Electronic Parts Makers Focus on Next Growth Phase	51
Capacitor Manufacturers Put Emphasis on Hybrid Varieties	52

**ZOOM-IN**

SIQ Spurs Promotion of Semiconductors, Touts Alliance as Key	54
--	----

**TOP INTERVIEW**

Nihon Denkei Focuses on Automotives, Opens CMS Test Facility in Japan	58
---	----

**SHOW PREVIEW**

PCB Thailand 2018	62
INATRONICS 2018	62