



INTRODUCING...

APPLICATION SPECIFIC MULTI-CHIP CIRCUIT

- REDUCED COMPLEXITY OF APPLICATION CIRCUIT
- SAVE ON COMPONENT COUNT
- SMALLER PCB SIZE
- LOWER OVERALL SYSTEM COSTS
- PROTECTION OF CUSTOMER'S
 INTELLECTUAL PROPERTY

diodes.com

INTRODUCING ASMCC...

1. What is Application Specific Multi-Chip Circuit (ASMCC)?

- It is an Integration of Various Discrete Die in One Package
- Composed of MOSFET, BJT, Schottky, Switching and/or Zener Diodes, Resistor and/or Capacitor Elements

2. ASMCC is Suitable for Various Applications in the Following Market Segments

Consumer, Computing, Communications, Industrial, and Automotive

3. ASMCC is Available in Many Small Form-factor, Power-efficient Packages

- SOT, SOIC, DFN or QFN Packages
- 4. Key Features & Benefits of ASMCC
 - Reduced Complexity of Application Circuit
 - Save on Component Count
 - Smaller PCB Size
- Lower Overall System Costs
- Protection of Customer's Intellectual Property



ASMCC CONCEPT - CUSTOMER SPECIFIES REQUIREMENT





ASMCC integrations have been developed in the following packages to date: DFN Packaging benefits SOT-363 (SC-88) SOT-26 (SC-74) **DFNs** SOIC-8 The most cost-effective approach to multi-element. complex array assembly Does not depend on tandard lead frames Is more thermally efficient than standard packages Body Equivalent to 0805 Increase design flexibility Chip Resistor/Capacitor ASMCC also available in other packages such as SOT 323, SOT23 and QFN

ASMCC PRODUCT CAPABILITIES

Examples of ASMCC solutions and their end markets

CONSUMER MARKET					
Examples	Package	Description			
ASMCC01	DFN2018H4-8	2MOS+2SBR			
ASMCC02	U-DFN2020-6 (Type P)	2MOS+2RES +1SwDi			

INDUSTRIAL MARKET

Examples	Package	Description	
ASMCC03	DFN4030B-12	2BJT+2ZNR +1SwDi	laser
ASMCC04	DFN3020K-8	2PBT+4SwDi	E
ASMCC05	DFN4030B-12	2BJT+2ZNR + 1SwDi	laser
ASMCC06	U-DFN4030-12	2BJT+2TVS	Prii ass
ASMCC07	U-DFN2020-6 (Type R)	2MOS+1RES +2SwDi+1Cap	

AUTOMOTIVE MARKET

Examples	Package	Description	
ASMCC08	DFN3030B-8	2PBT+1BJT +1ZNR +1SwDi	f
ASMCC09	SOT323	1MOS+1ZNR	Hybrid batter b
ASMCC10	V-DFN3020-10	2MOS+2BJT +1RES	Aut diagr

S



control system

lectronic energy netering systems

Conveyor belt, r-based item sensor control system

nted circuit board embly test system

AC/DC power conversion







Application

Automotive fan controller

rid / electric vehicle ery pack cell voltage balance circuit

utomotive engine gnostic test system





CORPORATE HEADQUARTERS AND AMERICAS SALES OFFICE

4949 Hedgcoxe Road Suite 200 Plano, Texas 75024 972-987-3900 USA Email: inquiries@diodes.com

SILICON VALLEY OFFICE

1545 Barber Lane Milpitas, California 95035, USA Tel: 408-232-9100

EUROPE SALES OFFICE

Kustermann-Park Balanstrasse 59, 8th Floor D-81541 Munchen, Germany Tel: (+49) 89 45 49 49 0 Email: inquiries-europe@diodes.com

ASIA SALES OFFICES

Email: inquiries-asia@diodes.com

DIODES-CHINA

SHANGHAI OFFICE

Room 3001-3002, International Corporate City, No. 3000 Zhongshan North Road, Shanghai 200063, China Tel: 86 21-5241-4882

SHENZHEN OFFICE

16th Floor Skyworth Semiconductor Design Building East Wing, No.8 Gaoxin South 4th Road, Nanshan District, Shenzhen, China P.C: 518057 Tel: 86 755-8828-4988

For information or literature, please visit www.diodes.com/contact-us

DIODES-INDIA Email: india_sales@diodes.com

DIODES-JAPAN

Level 18, Yebisu Garden Place Tower 4-20-3 Ebisu, Shibuya-ku Tokyo 150-6018 Japan Tel: 81-3-5789.5526

DIODES-KOREA

1601 ho, ParkView Tower Jeongja 1 dong, Bundang-gu Seongnam-si, Cyeonggi-do, Korea 463-811 Tel: 82-31-786-0434

DIODES-TAIWAN

7F, No. 50, Min-Chuan Road Hsin-Tien District New Taipei City 23141 Taiwan, R.O.C. Tel: 011-886-2-8914-6000

diodes.com

DL00019/R1