

## CONTENTS

IDEC Journal of Integrated  
Circuits And Systems

Volume 2  
Number 2  
July 2016



**JICAS**  
www.idec.or.kr

---

### **Design of DMA controller for loss-less image processing**

Seong Mo Lee, Ji Hoon Jang, Sang Muk Lee, Jung Hwan Oh, and Seung Eun Lee

–  
**P. 01**

---

### **CMOS 2-port Active Inductor using LC Resonance Circuit**

Jageon Koo, Seungwook Lee, and Yongchae Jeong

–  
**P. 07**

---

### **A design of Envelope Detector and DC Rectifier for 8~100% ASK Communication**

Jinho Kim and Yong Moon

–  
**P. 13**

### **Design of RF CMOS Transceiver for Wireless Data Communication of Three-Dimensional Integrated Circuit Applications**

Hooyoung Shin, Dongwoo Moon, Changhyun Lee, Milim Lee and Changkun Park

–  
**P. 21**

---

### **Implementation of Lightweight Encryption Algorithm LEA**

Mi-Ji Sung, Gi-Chur Bae, Kyung-Wook Shin

–  
**P. 27**

---

### **DC-DC buck converter using hopping technique and DTMOS Schmitt Trigger logic gates for EMC**

Hai Au Huynh, SangHyeok Park and SoYoung Kim

–  
**P. 34**

---

### **HV Power Converter topology Wireless Power Receiving in Portable Electric devices**

Se-Yong Kim, Jin-Hwan Yoon, Vijith Vijayakumaran Nair and Jun-Rim Choi

–  
**P. 42**