

2022 年 11 月 7 日

研究室 OB の活躍

天下の英才を得て教育するのは、第三の楽しみである。 孟子

群馬大学 小林春夫

研究室 OB 元澤篤史君（学士卒、修士修了、ルネサスエレクトロニクス勤務、群馬大学非常勤講師兼任）が IEEE Asian Solid-State Circuits Conference 2022 でオンライン発表を行った。今後のますますの研鑽を期待したい。



A-SSCC 2022

IEEE Asian Solid-State Circuits Conference

The Grand Hotel, Taipei, Taiwan

November 6-9, 2022



Home
How to participate in the virtual conference
Organization
Technical Program
Floor Plan
SDC Exhibition
FPGA Demo
Industry Demo
Submission
Registration
Venue & Transportation
Restaurants
Accommodation
General Information
Quarantine Rules
Visa Application
Sponsorship
Contact Us

Regular Sessions

Session 1: Design Techniques for Industrial Applications

Session Chair: Jinwook Oh, Rebellion
Session Co-chair: Po-Hung Lin, National Yang Ming Chiao Tung University
Date: Nov. 07, 2022 (Monday)
Time: 10:50 - 12:30 (UTC+8)
Room: Auditorium 國際會議廳, 10F

ID	Time	Title / Authors / Affiliation
1.1 (7033) (Highlight)	10:50 11:15	Energy Efficient BNN Accelerator using CiM and a TimeInterleaved Hadamard Digital GRNG in 22nm CMOS Richard Dorrance, Deepak Dasalukunte, Hechen Wang, Renzhi Liu, Brent Carlton Intel Corporation, USA
1.2 (7176) (Highlight)	11:15 11:40	Sub-GHz RF Energy Harvester including a Small Loop Antenna Darshan Shetty ¹ , Christoph Steffan ¹ , Wolfgang Bösch ² , Jasmin Grosinger ² ¹ Infineon Technologies AG, Austria ² Graz University of Technology, Austria
1.3 (7022) (Highlight)	11:40 12:05	An Attachable Fractional Divider Transforming an Integer-N PLL Into a Fractional-N PLL with SSC Capability Atsushi Motozawa, Yasuyuki Hiraku, Yoshitaka Hirai, Naoaki Hiyama, Yusuke Imanaka, Fukashi Morishita Renesas Electronics Corporation, Japan
1.4 (7024) (Highlight)	12:05 12:30	A Learning-Based Algorithm for Early Floorplan With Flexible Blocks ¹ JEN-WEI LEE, ¹ YI-YING LIAO, ¹ TE-WEI CHEN, ¹ YU-HSIU LIN, ¹ CHIA-WEI CHEN, ¹ CHUN-KU TING, ¹ SHENG-TAI TSENG, ¹ RONALD KUO-HUA HO, ¹ HSIN-CHUAN KUO, ¹ CHUN-CHIEH WANG, ¹ MING-FANG TSAI, ¹ CHUN-CHIH YANG, ¹ TAI-LAI TUNG, and ² DA-SHAN SHIU ¹ MediaTek, Taiwan ² MediaTek Research, Taiwan



An Attachable Fractional Divider Transforming an Integer-N PLL Into a Fractional-N PLL with SSC Capability

Atsushi Motozawa, Yasuyuki Hiraku, Yoshitaka Hirai,
Naoaki Hiyama, Yusuke Imanaka, and Fukashi Morishita

Renesas Electronics Corporation, Tokyo, Japan



IEEE Asian Solid-State Circuits Conference



Outline

- Motivation
- Proposed Attachable Fractional Divider
 - PLL Transformation
 - Level Shifter
 - Automatic Region Keeping
- Measurement Results
- Conclusion

Session 1

IEEE Asian Solid-State Circuits Conference

Slide 1



新しき葡萄酒は新しき皮袋に入れよ。新約聖書

新しい時代のメインストリームは若い人が牽引するのが良いのだろう。

もう一花咲かせるというなら誰もやっていないことであろう。