

Dr. Noorfazila Kamal

#### **EXPERTISE**

- VLSI
- Analog design

### RE**SEARCH**

- Frequency synthesizer
- RF transceivers

### PROFESIONAL AFFILIATIONS

• BEM (member)

CONTACT

office | +603-8921 6942 mobile | +6017-656 3303 e-mail | fazila@ukm.edu.my

RID | I-9867-2016

ORCID ID | 0000-0002-4061-2699

# **BRIEF RESEARCH/COMMUNITY/CONSULTATION SNAPSHOT**

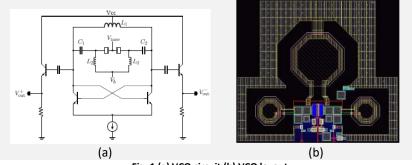


Fig. 1 (a) VCO circuit (b) VCO layout

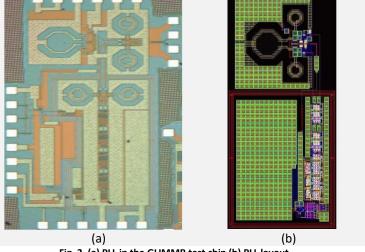


Fig. 2. (a) PLL in the GLIMMR test chip (b) PLL layout

## **SELECTED PUBLICATIONS**

- 1. "Review of low power digital delay locked loop (DLL)," (2015) Journal of Theoretical & Applied Information Technology 77(2) pp. 259-265.
- 2. "A low power phase frequency detector for delay-locked loop," (2015) Journal of Theoretical & Applied Information Technology 74(3) pp. 391-397.
- 3. "Design of a Current Starved Ring Oscillator Based VCO for Phase-Locked Loop," (2014) TELKOMNIKA Indonesian Journal of Electrical Engineering pp. 6667-6672.
- 4. "Reference spur suppression technique using ratioed current charge pump," (2013) Electronics Letters 49(12) pp. 746-747.
- 5. "An accurate analytical spur model for an integer-N phase-locked loop," (2012) 4th International Conference on Intelligent and Advanced Systems pp. 659-664.

- 6. "A phase-locked loop reference spur modelling using simulink," (2012) Intl. Conf. on Electronic Devices, Systems and Applications. pp. 279-283.
- 7. "A SiGe 6 modulus prescaler for a 60 GHz frequency synthesizer," (2007) Proc. SPIE, Microelectronics: Design, Technology, and Packaging III pp. 67980E-67980E-9.