

# 2012 Spintronics Workshop on LSI



June 11, 2012, 19:30 – 22:45

( Onsite registration 19:00- )

Mid-Pacific Conference Center 2nd floor / Room: South Pacific

Hilton Hawaiian Village, Honolulu, Hawaii



## General Information

The 2012 Spintronics Workshop on LSI will be held at Hilton Hawaiian Village, Honolulu, Hawaii, on June 11, 2012, just prior to the VLSI Symposium on Technology as a Satellite Workshop of the 2012 VLSI Symposia for the 2nd time. The workshop will focus on spintronics-based LSI technologies for high performance and ultra low power systems. Seven papers will be presented from invited speakers. The workshop is sponsored by Center for Spintronics Integrated Systems (CSIS), Tohoku University, which has been conducting the FIRST program supported by JSPS.

## Registration

The workshop fee is free of charge. Onsite registration is required. (at the entrance of Room "South Pacific" from 19:00.)

## PROGRAM

<b>Opening</b> 19:30 - 19:50	<b>Opening Remarks :</b> Hideo Ohno (Tohoku University, Workshop Program Chair)
<b>Invited talk</b> 19:50 - 20:15	<b>Commercial ST-MRAM Development: Recent Results and Outlook</b> Jon Slaughter (Everspin Technologies)
<b>Invited talk</b> 20:15 - 20:40	<b>Magnetic Random Access Memory Current Status and Perspectives</b> Janusz Nowak (IBM)
<b>Invited talk</b> 20:40 - 21:05	<b>Progress and Challenges in Scalable STT-MRAM</b> Jeong Heon Park (Samsung)
<b>Invited talk</b> 21:05 - 21:30	<b>Restructuring of Memory Hierarchy in Computing System with STT-MRAM Technologies</b> Tetsuo Endoh (Tohoku University)
<b>Invited talk</b> 21:30 - 21:55	<b>STTRAM for Embedded Memory: A Model Study</b> Arijit Raychowdhury (Intel)
<b>Invited talk</b> 21:55 - 22:20	<b>Embedded STT-MRAM: Recent Progress as an Application-Aware Technology</b> Seung Kang (Qualcomm)
<b>Invited talk</b> 22:20 - 22:45	<b>Challenge of Nonvolatile Logic-in-Memory Architecture Towards Cool LSI Chips</b> Takahiro Hanyu (Tohoku University)

**Program Chair:** Hideo Ohno (Tohoku University)

**Program Committee:** Philip Wong (Stanford University, Executive Committee Member of the 2012 Symposia on VLSI Technology and Circuits)

Hitoshi Wakabayashi (Sony, Symposium Co-Chair of the 2012 Symposium on VLSI Technology)

Takahiro Hanyu (Tohoku University)

Tetsuo Endoh (Tohoku University)

**Secretary:**

Naoki Kasai

(Tohoku University, Program Committee Member of the 2012 Symposium on VLSI Technology),  
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**Secretariat:**

Secretariat for VLSI Symposia (Japan), c/o ICS Convention Design, Inc.

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**South Pacific**  
2012 Spintronics  
Workshop on LSI

**MID-PACIFIC  
CONFERENCE CENTER**  
(6th floor)

**TAPA TOWER**

**GRAND  
WAIKIKIAN**

**DIAMOND  
HEAD  
TOWER**

**MAIN  
LOBBY**

**ALI'I  
TOWER**

**LAGOON  
TOWER**

**RAINBOW  
TOWER**

Benihana of Tokyo

ATM

Bus & Tour  
Transportation

Diamond  
Head  
Apartments

Activities Desk

Post Office

Parking  
Elevators

Tapa Bar

Ononicious Dog  
at Tapa Pool

Camp Penguin

**RAINBOW  
BAZAAR**

Ocean Crystal Chapel

Concierge Desk

Hatsuhana  
Restaurant

ATM

VILLAGE GREEN

Hanajuban  
Noodle Shop

Activities Desk

ALI'I  
TOWER  
PLAZA

C.J.'s New York Style  
Delicatessen

Front Desk

Starbucks

Sergio's Italian  
Restaurant  
(2nd Floor)

Concierge Desk

Manager on Duty

Round Table  
Pizza

Valet and Taxi

Concierge Desk

Pronto Pickle

Tropics Bar & Grill

Port Waikiki  
Cruises

Lagoon Drive

GREAT LAWN

SUPER POOL

PARADISE POOL

Pool  
Stand

Pool Stand

Atlantis Adventures

Beach  
Stand

Concierge  
Desk

Rainbow Lanai

Paradise Lounge

Bali Steak  
& Seafood

Hau Tree Bar

Pool/Beach  
Stand

**RAINBOW  
TOWER**

Ononicious Dog  
Beachside

Port Hilton

DUKE KAHANAMOKU  
LAGOON

PACIFIC OCEAN

Kalia Road

Ala Moana Blvd.

Kahanamoku Street