Floadia's MTP IP, LEE Flash-ZT, 8kb Memory Array supporting 150C with ZERO Mask, proven on Maxchip 0.18um BCD Process Node

LEE Flash-ZT provides 20years data retention @ 150C and 1K endurance with zero additional mask, available for Maxchip customers in automotive market.

Tokyo, Japan and Hsinchu, Taiwan May 20th, 2016 – Floadia Corporation (Floadia), a leading provider of embedded flash semiconductor intellectual property (IP), and Maxchip Electronic Corporation (Maxchip), a leading global wafer foundry, today announced LEE Flash-ZT (ZT) – Multiple Times Programmable (MTP) IP with zero additional mask, has been verified on Maxchip's 0.18um Bipolar-CMOS-DMOS (BCD) process node. ZT on Maxchip 180BCD process node provides 20 years data retention @ 150C and 1K endurance, while not affecting Maxchip's process characteristics. ZT will enable Maxchip's foundry customers designing automotive ICs with a highly reliable MTP IP.

As the demand of automotive electronics increase, more and more IC providers are entering into the market. Not only for safety and vehicle control purpose, but telematics and in-car entertainment systems are requiring stringent specifications and high reliability under extreme temperature condition. How to secure the reliability of embedded non-volatile memory (eNVM) IP in high temperature condition, and long data retention lifetime becomes the challenge for both, eNVM IP providers and foundries.

"As the demand of MTP IP increases for automotive ICs, we are pleased to partner with Maxchip, providing our ZT, highly reliable MTP IP with ZERO additional mask and ZERO extra process step", said Yasuhiro Taniguchi, CTO of Floadia Corporation. "We appreciate Maxchip's great foundry expertise, as we could quickly enable 8kb ZT memory array, fully compatible with their 180um BCD process, by making it successful

at the first trial of shuttle tape-out."

ZT is based on floating gate structure and uses Fowler-Nordheim (FN) Tunneling Effect for both program and erase, achieving extremely low power consumption. It reduces customer's cost by its small IP size, short test time and short bake time. Also, one of the most remarkable ZT feature is achieving 20years data retention at 150C.

Ying-Jen Lin, vice president of sales and marketing at Maxchip said, "Maxchip is seeing more and more customers' demand on automotive ICs and we would like to assist customers by building comprehensive IP ecosystem. Floadia's ZT is a welcome addition to Maxchip's 180um BCD platform and it further adds the eNVM IP options to Maxchip customers."

About Floadia Corporation

Floadia was established in 2011 and a spin-out of experienced engineers who were developing embedded non-volatile memory at Hitachi/Renesas for more than 20 years. Floadia licenses its intellectual property (IP), including manufacturing process and circuit designs, necessary for the embedded memory production. Floadia's development team comprises not only circuit designers but also engineers with expertise in the manufacturing process. Currently Floadia has over 85 patents, filed and pending.

About Maxchip Electronic Corporation

Maxchip Electronics Corporation was established at Hsinchu Science-based Industrial Park in April, 2008. Maxchip currently has two 8 inch fabs and It provides professional wafer foundry service to major domestic and international semiconductor industry.

For more information, visit floadia.com, or contact us from inquiry form at the following URL. http://floadia.com/formmail_eng/inquiry_form_eng.html