

# Silicon Mobility Announced OLEA® LIB and OLEA® APP, software content favoring longer battery range, faster charging time and the adoption of lighter/smaller battery and eMotor for Hybrid and Electric Vehicle

Sophia Antipolis – France, March 13<sup>th</sup> 2017: Silicon Mobility, the technology leader developing semiconductor solutions for cleaner, safer and smarter mobility, announced today OLEA® LIB and OLEA® APP, a software library and an application optimized for OLEA® increasing the energy efficiency, the battery range and the charging speed for hybrid and electric vehicles.

## **Dazzling Fast**

OLEA® LIB is a library of advanced software optimized for OLEA® dedicated to the control of advanced hybrid (HEV) and electric vehicles (EV). It includes cutting edge functions for inverter, DC/DC converter and AC/DC charger systems control. The library includes configurable and customizable algorithms from partial to full algorithm, such as Clarke and Park current transform, Decoupling and Flux Weakening, Inverse Park / Clarke voltage, Space Vector Modulation PWM, Tracking loop position estimator (e.g Magnetic Resistive, Resolver) or Sensorless position estimation and more. Running OLEA® LIB on OLEA® T222 provides up to x40 computation speed improvement on advanced mathematical and computation functions in regards to actual available solution.

OLEA® LIB comes with building blocks available as reference models and target models for MATLAB® Simulink, and tuned for best used of OLEA®. OLEA® LIB models are defined and designed to enable user tuning and calibration under simulations and HiL in accordance with the targeted powertrain system characteristics. By using OLEA® LIB, developers reduce drastically the time required to optimize algorithm's porting onto OLEA® T222 while improving the system performances.

OLEA® LIB is packaged into three levels of integration selectable upon user's application needs: OLEA® LIB System, OLEA® LIB Algo and OLEA® LIB Math.

### More Watts, More Kilometers, Fast Charging Time

OLEA® APP is a full stack software offering leveraging OLEA® and OLEA® LIB for HEV and EV eMotor performances, range and durability extension of batteries, energy consumption and pollutant emission reduction. OLEA® APP is particularly adapted to carmakers who need to take back control on their application with a Build-to-Print business model: they get directly access to OLEA® product range benefits in an all-in-one approach. Silicon Mobility provides OLEA® T222, OLEA® LIB, AUTOSAR low level software, OLEA® COMPOSER's simulation environment, boards for development and calibration and pre-defined application. OEM can focus on its software added-value and select its own Basic SoftWare (BSW). Included into the offer, Silicon Mobility takes care of customizing OLEA® APP to port the software and fine tune the application to the OEM's targeted system. This direct interaction between carmakers and OLEA® technologies insure the design of efficient systems for electromobility applications: extension of the eMotor operating range, better battery usage and lower energy consumption and faster battery charging time.



"With OLEA® LIB and OLEA® APP, Silicon Mobility is now offering a full stack products range adapted to the uniqueness of our OLEA® solution to optimize HEV and EV applications", says Bruno Paucard, CEO of Silicon Mobility. "We are proud of OLEA® LIB which multiplies the performances of our solution at a level never seen in the industry while OLEA® APP perfectly answers to the automotive revolution, serving OEMs direct synergy with technology leaders."

OLEA® LIB Inverter Control is available for evaluation for selected customers. OLEA® APP for Mild/Full Hybrid and EV electric motor control will be available on Q3'17. OLEA® LIB and OLEA® APP will be shown on Silicon Mobility's booth at Embedded World 2017.

# **About Silicon Mobility:**

Silicon Mobility is a technology leader for cleaner, safer and smarter mobility.

The company designs, develops and sells flexible, real-time, safe and open semiconductor solutions for the automotive industry used to increase energy efficiency and reduce pollutant emissions while keeping passengers safe.

Silicon Mobility's products control electric motors, battery and energy management systems of hybrid and electric vehicles. By using Silicon Mobility's technologies, manufacturers improve the efficiency, reduce the size, weight and cost of electric motors and increase the battery range and durability.

Silicon Mobility technologies and products accelerate the car's powertrain electrification and the deployment of driverless vehicles for OEMs. Silicon Mobility is headquartered in Sophia-Antipolis, France.

For more information, visit: <a href="https://www.silicon-mobility.com">www.silicon-mobility.com</a>

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