



**Scaleo chip introduces *easyBCU™*,
new highly-integrated and powerful 32-bit Flash microcontroller family
for next-generation car body electronics.**

Sophia Antipolis, May 25 2009. Scaleo chip, a leading automotive System-on-Chip (SoC) company launches *easyBCU™*, a highly-integrated 32-bit Flash microcontrollers family for automotive Body Control Unit (BCU). This highly featured family of products complements the successful Scaleo chip car interior electronic solution, *easyCAN®*, delivered in millions units each year.

The increasing demand in car functions centralization, electronic events control and in-vehicle high-speed networking drives microcontrollers to be more sophisticated and robust to sustain the increase of correlative software resources needs. *easyBCU™* microcontrollers series addresses this new challenges and eases next-generation car electronic designs optimization such as central gateway module, one of the most compute-intensive Electronic Car Unit (ECU). *easyBCU™* offers best-in-class processing performances together with large on-chip flash capacity (up to 4 MBytes), high-speed networking capabilities and state-of-the-art peripherals autonomy to off-load CPU from recurrent tasks while enabling drastic power consumption cut. Indeed, to perfectly address the next-generation car body control systems, *easyBCU™* is a Fault-tolerant microcontroller while providing ECC (Error Correction Code) on all memories, Memory Protection Unit (MPU), registers protection, clock safety system and on-chip backup 16-MHz RC oscillator.

Thanks to an extended operating temperature range from - 40 degrees C to + 125 degrees the series targets ECUs located whether in the vehicle cabin or under the hood. Addressing a wide range of car body control applications including Gateway, Door Control Unit, Seat Control Unit, Smart junction box, HVAC (Heating Ventilating and Air Conditioning) systems, the *easyBCU™* series offers high scalability features to fully match the overall applications requirements. The family comes with a set of on-chip flash sizes (from 128KBytes to 4MBytes), on-chip RAM sizes (from 4KBytes to 512KBytes) and package types (from LQFP-64 to BGA-256). This flexibility, combined to an ultimate automotive focused flash technology, achieves the best-trade-off between system cost and performances.

This makes **easyBCU™** microcontrollers a very cost-effective solutions.

“In addition to being a very efficient microcontroller, **easyBCU™** also contributes to the green-car trend. One direction for CO₂ emission reduction is to lower vehicle environmental impact, reducing weight, caring for power consumption and reducing footprint. This goes by using fewer ECUs, less cable and more generally upgraded system architecture for electronic functions while supporting the need for more features, more comfort, more safety and more performances. With its greater integration and high-speed networking capabilities, **easyBCU™** is in total accordance to current market expectations“ said Bruno Paucard, CEO of Scaleo chip.

The first **easyBCU™** product to be introduced is **easyBCU6-F1536K** featuring:

- ◆ AUTOSAR ready architecture
- ◆ ARM® Cortex®-M3 processor
- ◆ On-chip 1,5 MBytes Program Flash
- ◆ On-chip 48 KBytes Secured Data Flash
- ◆ On-chip 80 KBytes SRAM
- ◆ Memory Error Correction Code (ECC)
- ◆ Memory Protection Unit (MPU)
- ◆ 6 channels 32 Mail-Boxes CAN
- ◆ 6 channels LIN
- ◆ 40 channels advanced ADC
- ◆ 40 channels advanced PWM
- ◆ Low Power Management Unit
- ◆ On-chip 16 MHz RC oscillator
- ◆ On-chip voltage regulator
- ◆ Deep sleep mode using RTC
- ◆ 5V or 3.3V supply
- ◆ -40° to +125° Operating conditions
- ◆ AEC-Q100 grade-1 qualification

Along with its **easyBCU™** microcontrollers, Scaleo chip offers optimized AUTOSAR (AUTomotive Open System ARchitecture) MCAL (Micro-controller Abstraction Layer) software compliant with the CMMi quality management system. This software offering can be enlarged with an AUTOSAR OSEK and an entire AUTOSAR Basic Software platform.

As for all its products, Scaleo chip has experienced **easyBCU™** functionalities and performances working closely with leading car-makers and tier-1s companies by using its automotive prototyping platform **Fast2SoC®**. This platform has enabled greater system integration and architecture optimizations before production launch. As a result, the **easyBCU™** prototyping has demonstrated that Scaleo chip's advanced peripherals combined with the ARM® Cortex®-M3 processor change the rules in defining a new level for state-of-the-art solutions. Using reference customers benchmarks, **easyBCU™** microcontrollers achieve the best results for performances and code density aspects.

About quality:

Scaleo chip ensures a high-degree of quality and support to satisfy automotive customers' requirements. The company zero-defects initiative leads to high quality level production, while error correction code (ECC) ensures flash-based microcontroller reliability and long life endurance. With more than ten years of experiences, Scaleo chip provides a supreme support thanks to its quality assurance and automotive design teams.

About Scaleo chip:

Scaleo chip is an automotive System-on-Chip company bringing together System and Silicon. With millions of units delivered to the automotive market every year, Scaleo chip is a European leader of the automotive silicon fabless industry. Scaleo chip is headquartered in Sophia-Antipolis in the south of France. Additional information about Scaleo chip can be found at www.scaleochip.com

For more product information:

Please consult <http://www.scaleochip.com/easyBCU.php>

Communication/Press contact:

Scaleo chip

Marie Redureau

Tel : +33 (0)497 152 050

E-mail : marie.redureau@scaleochip.com

Marketing/Sales contact:

Scaleo chip

Tel: +33 (0)497 152 000

E-mail: sales@scaleochip.com