



**Fairchild Semiconductor®** is a leading global provider of semiconductor technology that powers the products we use and makes them more energy efficient. Fairchild continues to build on its rich history of innovation to address one of the greatest challenges we face today – reducing wasted energy and improving efficiency in an increasingly power-hungry world.

### **The Power Franchise®: Driving Energy-Efficient Solutions**

The conservation of energy and the development of energy-efficient products is a critical challenge facing the world today. Energy-efficient solutions from Fairchild play a pivotal role in answering these design issues. With advanced packaging, proprietary technologies and experience in both the design and manufacturing of power semiconductors, Fairchild's products provide the electronics industry with innovative ways to conserve energy. Fairchild's high performance semiconductors optimize energy in applications such as power supplies, mobile, lighting, motor, computing, consumer and automotive applications.



**Power supplies** are found in everything from cell phone chargers, to set-top boxes, to industrial control, and offer a large potential for energy savings. Fairchild's suite of power switches, power MOSFETs, IGBTs, rectifiers, PWM ICs, PFC ICs, HVICs, optocouplers, voltage references and LDOs are instrumental in increasing efficiency, while reducing standby power, size and cost.

**Mobile devices** are an omnipresent aspect worldwide. Fairchild's expertise in power, backlighting and signal conditioning allow system designers to solve their challenges of miniaturization, convergence and longer battery life. Fairchild's IntelliMAX™ advanced load switches,  $\mu$ SerDes™ solutions, MicroFET™ switches, LED drivers, power regulators, MOSFETs, charge pumps, analog switches and logic translators improve energy-efficiency, extend battery life and provide greater flexibility in portable devices.

**Lighting applications** offer the greatest opportunity to reduce wasted energy because incandescent bulbs are only ten percent efficient. These applications are transitioning to fluorescent and LED or HID lamps, which drive significant efficiency improvements. Fairchild's ballast control ICs, IGBTs, MOSFETs, HVICs, PFC/PWM controllers, Green FPS™ products, transistors, rectifiers, diodes and optocouplers increase efficiency, extend system life and provide greater flexibility for lighting applications.

**Computing applications** demand higher performance, system efficiency and signal quality while decreasing board space. Fairchild's integrated power switches (FPS™), low and high power MOSFETs, MOSFET drivers, DC-DC controllers, audio amplifiers, diodes, transistors, operational amplifiers, backlight inverters and PFC ICs are instrumental in conserving energy and space in these applications.



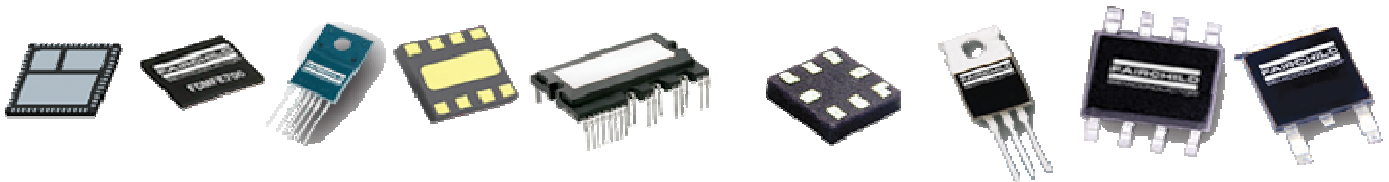
**Consumer applications** are subject to increasingly stringent regulations, such as ENERGY STAR and the 1-Watt initiative that mandate efficiency. Fairchild's power regulators, MOSFET drivers, FPS switches, optocouplers, HVICs, PDP-SPM™, rectifiers, transistors and diodes increase power performance, system efficiency and signal quality and decrease board space in these applications.

**Motors** are moving from single-phase AC motors to variable speed motors, which can realize 40 percent energy savings. Fairchild is the industry's leading supplier of high performance discrete and highly-integrated module solutions for motor applications. Fairchild's power MOSFETs, Motion-SPM products, optocouplers, Zener diodes, power switches, PFC-SPM products, HVICs, STEALTH™ diodes and triacs increase efficiency, simplify design and reduce system cost in motor applications.

**Automotive applications** are moving to solutions that provide higher efficiency and better fuel consumption. This is imperative because only 15 percent of the fuel is used to propel the car. Fairchild's power MOSFETs, Smart MOSFETs, IGBTs, ignition IGBTs, rectifiers, LED drivers and IR sensors offer a broad array of solutions to optimize system power.

### **Pioneers in the Semiconductor Industry**

Fairchild is regarded as the "Father of Silicon Valley," with a history of leading-edge innovation; this tradition continues today through the design and development of high performance, innovative and energy efficient products. Established in 1957, the goal of the original company was the development and production of silicon diffused transistors and other semiconductor devices. In 1958, Fairchild developed the planar transistor and with it a new industry was born. Today, Fairchild is a global leader delivering energy-efficient analog, discrete, signal path and optoelectronic solutions.



### **Saving Our World, 1mW at a Time™**

The global concern for energy efficiency calls upon businesses and individuals to each do our part. Fairchild is focused on the design and development of products that foster a greener, 'cooler' world, and we will continue to work closely with leading electronic manufacturers to understand the power challenges of new platforms and develop innovative technologies that break new barriers in efficiency.

**From 1Watt to 1200Watts, Fairchild solutions drive energy-efficiency to **save our world 1mW at a time.****