



## **Jireh Semiconductor, Inc.**

### ***Bringing Manufacturing Back to America***

#### **About AOS**

As a global provider of power semiconductors, AOS integrates design, development and sales to deliver the best power semiconductor devices with world class advanced proprietary technologies. Alpha and Omega Semiconductor (AOS) was incorporated in 2000, with headquarters in the city of Sunnyvale, California, USA. Its products include low voltage to high voltage Power MOSFETs as well as Power ICs. As AOS continues to grow, so does its market share within the power semiconductor industry. AOS' products are widely used in applications such as high performance servers, laptops, desktop computers and graphic cards, LCD TVs, communications and networking equipment, etc.

*"Delivering the best power semiconductor devices"*

#### **Acquisition of Jireh**

Innovation and technology have always been the philosophy of AOS since its inception. AOS' decision to acquire an 8-inch wafer factory located in Oregon from Integrated Device Technology (IDT) will help AOS to speed up the development of innovative Power Device technologies. The new in-house wafer fab, now known as Jireh Semiconductor, Inc., will allow the company to grow revenue faster by expanding into new applications and markets. As a result of this acquisition, the company has transitioned from its original Fabless model to a Fablite model which will enhance its ability to respond quicker to customers' needs for innovative products to further strengthen its partnerships with strategic customers.

*"From Fabless to Fablite with Jireh"*

#### **Company's Rapid Growth**

AOS was founded just over a decade ago, which is relatively young for a global high-tech company. Its advanced proprietary technologies for power MOSFET products have enabled the rapid growth of the company. However, its staff possesses rich experience in the semiconductor industry and have also worked for numerous well known semiconductor firms. AOS' development team understands the industry trends and the needs of its customers; they possess practical technology knowledge, which enables them to create products with new technology, of great quality and exceptional performance. AOS pays great attention to research and development, which are the fundamental motivation to drive the company forward.

*"R&D of advanced technologies is the key"*

## Customers and Products

AOS' products are utilized in devices branded by original equipment manufacturers (OEMs), which include ASUSTeK Computers Inc., Dell Inc., Hewlett-Packard Company and Samsung Group, and into devices manufactured by original design manufacturers (ODMs) which include Compal Electronics, Inc., Hon Hai Precision Industry Co. (Ltd.), Quanta Computer Incorporated, TPV Technology Limited and Wistron Corporation.

The company designs and sells more than 800 types of analog power semiconductors, including power ICs (integrated circuits) and power discrete (non-integrated circuits) chips, such as power MOSFETs (metal-oxide semiconductor field-effect transistors). Power semiconductors are used in power switches to control the amount of electricity needed to run electronic devices.

### POWER ICs

AOS provides best-in-class power management solutions combining Power Discrete and IC technologies. The portfolio of products includes EZBuck™ Step-down DC/DC regulators, EZBoost™ Step-up DC/DC regulators, linear regulators, EZPower™ smart load switches and Analog Switches. AOS' approach is to provide high power density solutions to reduce design complexity and development time.

### TRANSIENT VOLTAGE SUPPRESSORS (TVS)

AOS provides a family of ultra-low capacitance Transient Voltage Suppressor (TVS), EMI Filtering, and Diode Array products that are designed for ESD protection of high speed interfaces like HDMI1.3, USB3.0, IEEE1394, SATA and Gigabit Ethernet ports. These products may be used to meet the ESD immunity requirement of IEC61000-4-2, Level 4 for mobile, digital consumer, networking, and computing applications.

### MOSFETs & IGBTs

AOS is an innovator in the Trench Power MOSFET field, developing leading-edge products that are exclusively manufactured in state-of-the-art 8-inch fab. Advanced proprietary silicon and packaging processes are designed in AOS' U.S. headquarters and are then produced with its very efficient manufacturing model. Our product portfolio covers 12V to 1000V MOSFETs and will soon add 600-1200V IGBTs.

