

### **New AnalogicTech LED Backlight Drivers with CABG Save Power and Smooth Brightness Transitions in Handheld Devices**

***New Drivers Offer CABG Mode and Auto-Dimming in Small Form Factor; Further Extend Company's White LED Backlighting Family***

Santa Clara, Calif. – September 28, 2010 - Advanced Analogic Technologies, Inc.

(AnalogicTech™) (Nasdaq: AATI), an analog semiconductor company focused on powering innovative solutions in consumer, industrial, and communications markets, today introduced the AAT2868 and AAT2869 LED backlight drivers. The AAT2868 and AAT2869 are 1x/1.5x dual-mode, high-efficiency charge pump based white LED backlight drivers that drive four constant current LED channels and now offer content adaptive brightness control (CABG) or dynamic backlight control (DBC) to further reduce power consumption by up to 50 percent. To form a complete lighting solution, both devices include two linear low drop-out (LDO) voltage regulators.

“Two of the key issues facing the use of white LEDs in handheld devices center around power consumption and smooth transitions between brightness levels,” said Phil Dewsbury, product line director for display and lighting for AnalogicTech. “With consumers demanding both long battery lifetimes and an enhanced user experience, the feature sets in these new products offer critical market advantages. The CABG feature can reduce power consumption by as much as 50 percent, while offering automated LED fading to improve user satisfaction while simplifying programming by transferring the burden of communicating and timing the fading of the LED current.”

For CABG and dimming functions, the AAT2868 provides the user with a pulse-width modulation (PWM) dimming input for external brightness and fading control that functions in parallel to the fully scaled 32 step LED current that is programmed through the AS<sup>2</sup>Cwire™

interface. The AAT2869 replaces the manual PWM input with an AS<sup>2</sup>C based auto-dimming and fade capability that reduces requirements on system resources. The AAT2869 automated fade-in and fade-out feature makes backlight turn-on and turn-off more visually pleasing. Both backlight drivers deliver improved power savings by allowing the system to continuously adjust the backlight current level in relation to the displayed image.

The AAT2868 and AAT2869 are high-efficiency, low-noise, constant-frequency, dual-mode (1x/1.5x) charge pump DC/DC converters capable of driving four white LEDs at a total 124mA from a 2.7V to 5.5V input. The integrated dual linear LDO regulators are independently programmable from 1.2V to 3.0V at a total load of 150mA each. These LDO voltage regulators can be used to power an additional display controller, CMOS image sensor, vibration motor or other accessories.

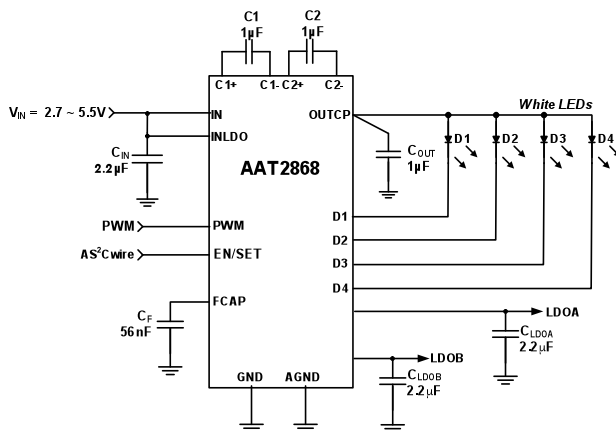
“These products further move AnalogicTech towards delivering integrated, feature-rich devices for LED backlight,” continued Dewsbury. “We have rapidly grown our backlight driver family with nearly 50 now available and five using this charge pump architecture. Adding new and unique features to expand our portfolio, while at the same time replacing older products with updated and smaller designs, is key to maintaining our leadership position as the backlight supplier to the mobile phone industry and bringing in new customers in other related portable applications.”

The AAT2868 and AAT2869 offer significant flexibility for implementation, with the easy-to-use single wire AS<sup>2</sup>Cwire interface to enable LED dimming options in 32 current steps, smooth fading transitions and LDO programming. Both are provided in a compact, low-profile TQFN package that has a 76 percent smaller footprint compared to discrete solutions. These new drivers are ideal for power-sensitive battery operated handheld applications with LCD displays of up to 3.5 inches. Such devices include smart phones, personal navigation devices, portable media players, portable medical equipment and portable industrial instrumentation.

### AAT2868 Key Features and Benefits:

- 2.7V to 5.5V Supply Voltage Range
- Dual Mode 1x/1.5x Charge Pump for LED Driver
  - Drives Up to 4 LEDs with up to 31mA each
- Linear LED Output Control Options
  - Max Current Set by AS<sup>2</sup>C wire with 32 Step Control
  - PWM Interface Dimming from 100% to 1% Duty Cycle with Frequency up to 100kHz
- Charge Pump 0.9MHz Constant Switching Frequency
- Automatic Soft-Start Limits Inrush Current
- Dual 150mA LDOs
  - Enable and Output Voltage Set by AS2Cwire: 16 Combinations of 5 Output Voltages: 1.2V, 1.5V, 1.8V, 2.8V, & 3.0V
  - Integrated Discharge Resistor when Disabled
- < 1.0microA in Shutdown
- Short-Circuit Protection
- -40°C to 85°C Temperature Range
- TQFN3.0x2.2-18 Package

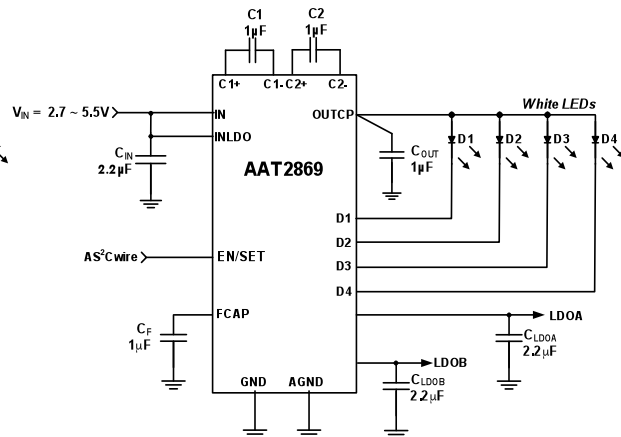
### AAT2868 Typical Application



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- Short-Circuit Protection
- -40°C to 85°C Temperature Range
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**About Advanced Analogic Technologies, Inc:**

Advanced Analogic Technologies, Inc. (AnalogicTech™) (NASDAQ: AATI) develops advanced semiconductor system solutions that play a key role in the continuing evolution of feature-rich, energy efficient electronic devices. The company focuses on addressing the application-specific power management needs of consumer devices such as mobile handsets, digital cameras, and netbooks/notebooks, as well as devices in a broad range of industrial, medical and telecom applications. AnalogicTech also licenses device, process, package, and application-related technologies. Headquartered in Silicon Valley, AnalogicTech has design centers in Santa Clara and Shanghai, and Asia-based operations and logistics. For more information, please visit [www.analogictech.com](http://www.analogictech.com) (AnalogicTech - G).

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