

NOVEMBER 3 2011 9:00 A M E1

NASA Ames Research Center Deploys Cypress Envirosystems' Wireless Pneumatic Thermostat to Save Energy and Reduce Costs



SAN JOSE, Calif.--(BUSINESS WIRE)--November 03, 2011--

Cypress Énvirosystems, a subsidiary of Cypress Semiconductor Corp. (Nasdaq:CY), today announced that its Wireless Pneumatic Thermostat (WPT) has been installed in fourteen buildings at NASA Ames Research Center in Mountain View, California. The WPTs replaced almost 1,400 legacy analog pneumatic thermostats in approximately 1.5 million square feet of office and laboratory space in order to save energy, enable ongoing commissioning and reduce maintenance costs. The work was part of a larger Utility Energy Service Contract (UESC) facilitated by Pacific Gas and Electric (PG&E) to help meet the requirements of the Energy Independence and Security Act of 2007, which mandates Federal agencies to reduce the energy intensity of buildings by 30% from 2005 levels by the year 2015. AECOM Technology Corporation developed the energy conservation measures employed under the UESC and was the general contractor during implementation.

The NASA Ames WPT retrofit project was completed in three months for less than \$850,000. A retrofit with traditional direct digital control (DDC) technology would have taken more than a year and over \$4 million. In addition, many of the buildings at NASA Ames date back to the 1940s and may contain asbestos in walls and ceilings. Since the WPT is non-invasive, the retrofit took place without disturbing potentially hazardous materials. In contrast, a traditional DDC retrofit would have required asbestos abatement and safety measures over and above basic retrofit costs since walls and ceilings would have been cut open.

NASA Ames originally installed a small pilot of the WPT system in January 2010 to verify the benefits of the technology. AECOM and NASA personnel evaluated the performance and reliability of the system before specifying the energy conservation measures for the UESC project. The full deployment of the WPT took place between June and September 2011. The WPT system will be integrated with the existing Siemens Apogee system to enable campus-wide control and optimization of HVAC equipment down to the zone level.

Harry Sim, the CEO of Cypress Envirosystems, noted, "The NASA Ames project is one of the largest to date using the WPT, and it was accomplished on time and on budget. It is satisfying to know that we helped NASA meet its project goals while significantly reducing costs relative to alternatives." Sim added, "We value the partnership we have with AECOM and PG&E and believe this project can be the model for many more opportunities to come."

PG&E and Cypress Envirosystems jointly presented details of the NASA Ames UESC project at the Federal Utility Partnership Working Group (FUPWG) meeting last week in Philadelphia. http://www1.eere.energy.gow/femp/financing/uescs_fall11_agenda.html The Federal Energy Management Program (FEMP) hosts FUPWG meetings twice annually for Federal agencies, utilities and energy service organizations to share best practices and to identify, develop and implement cost-effective energy efficiency, water conservation, and renewable energy projects.

Cypress Envirosystems' patent pending WPT solution non-invasively retrofits existing pneumatic thermostats to deliver the benefits of DDC at a significantly lower cost. Compared with a conventional DDC retrofit, the WPT costs 80% less, pays back in around 18 months, and can be installed in under 20 minutes with minimal disruption to occupants. It enables remote temperature sensing and control of setpoints, programmable zone control and night setback, automatic self-calibration, BACnet integration with existing building automation systems, and communication with utility Auto-Demand Response programs. Diagnostic data generated by the WPT enables retro and ongoing commissioning to save energy and reduce maintenance costs. It is estimated that over 70% of buildings in North America still have pneumatic thermostats and can benefit from the WPT system. Introduced in 2008, the WPT has been deployed in over 300 sites, including the Architect of the Capitol, GSA, VA Hospitals, the Social Security Administration, Google, UC Berkeley, Catholic Healthcare West, White Plains School District, Cushman & Wakefield, and many others.

About Cypress Envirosystems, Inc.

Cypress Envirosystems is a subsidiary of Cypress Semiconductor (Nasdaq: CY). Its mission is to save energy and improve productivity in existing plants and buildings, using state-of-the-art non-invasive and wireless technologies to minimize disruption and cost, delivering payback of 18 months or less. Visit Cypress Envirosystems at www.CypressEnvirosystems.com.

About Cypress

Cypress delivers high-performance, mixed-signal, programmable solutions that provide customers with rapid time-to-market and exceptional system value. Cypress offerings include the flagship PSoC(R) programmable system-on-chip families and derivatives such as PowerPSoC(R) solutions for high-voltage and LED lighting applications, CapSense(R) touch sensing and TrueTouch(TM) solutions for touchscreens. Cypress is the world leader in USB controllers, including the high-performance West Bridge(R) solution that enhances connectivity and performance in multimedia handsets. Cypress is also a leader in high-performance memories and programmable timing devices. Cypress serves numerous markets including consumer, mobile handsets, computation, data communications, automotive, industrial and military. Cypress trades on the NASDAQ Global Select Market under the ticker symbol CY. Visit Cypress online at www.cypress.com.

Cypress, the Cypress logo, and PSoC are registered trademarks of Cypress Semiconductors Corp. Cypress Envirosystems and the Cypress Envirosystems logo are trademarks of Cypress Systems Corporation. All other trademarks are property of their respective owners.