BitFury to acquire Allied Control and adopt Award-Winning DataTank 2-phase Immersion Cooling technology

Strategic investment will enable efficient and rapid deployment of new BitFury ASIC chip at unprecedented power densities and lower capital expenditure.

SAN FRANCISCO & AMSTERDAM – January 22, 2015 – [BitFury Group](#), the leading Bitcoin infrastructure provider and blockchain transaction processing company has announced today it has signed a definitive agreement to acquire [Allied Control](#), the Hong Kong-based technology startup that builds award-winning immersion cooling systems for supercomputing and data center applications.

In two years, blockchain transaction processing has evolved through several hardware generations arriving at high-end 28nm and 20nm ASIC chips used today. Power consumption per chip can exceed that of high-grade gaming GPUs, supercomputer CPUs and accelerator cards. The rapidly evolving power density of blockchain transaction processing clusters coupled with their short life cycle makes deployment in conventional air cooled data centers challenging. A key solution lies in the use of immersion cooling which eliminates the need to maintain fan or water cooling systems prone to malfunction or breakdowns.

Valery Vavilov, BitFury CEO, commented: *"We are very excited about Allied Control and its founders joining our team. This acquisition will enable us to substantially increase energy efficiency of our data centers and speed up deployment of our new ASIC chip allowing to lower overall capital expenditure. In addition, it provides an opportunity for us to enter new markets such as HPC, using the experience of the Allied Control team. The use of immersion cooling will provide BitFury with flexibility when choosing locations for our data centers."*

Two-phase immersion thermal management is a viable technology for meeting the power density and energy efficiency needs of the high performance computing market. Power densities up to 100 times higher than a typical air cooled server have been cooled this way with efficiency superior to direct water cooling.

In a two-phase immersion cooled system, electronic components are submerged into a bath of dielectric heat transfer liquids, which are much better heat conductors than air, water or oil. With their various low boiling points (49°C vs. 100°C in water), the fluids boil on the surface of heat generating components and rising vapor passively takes care of heat transfer. In contrast to submersion oil cooling, liquids are clean, environmentally friendly and non-flammable. No heat sinks, pumps and jets are required to keep hardware cool. Circulation happens passively by the natural process of evaporation and without spending any extra energy. It is this simplicity that eliminates conventional cooling hardware and results in better cooling efficiency. Compared to traditional air, water or oil cooling, this passive process results in the use of much less energy. Two-phase immersion cooling is 4000 times more efficient at removing heat from chips than air.

Kar-Wing Lau, VP of Operations at Allied Control commented: *"We are very glad to partner with BitFury and to help them further increase the efficiency of their operations. Both*

blockchain technology and two-phase immersion cooling are very disruptive in nature. Passive two-phase immersion cooling is especially promising for blockchain transaction processors as it addresses their need for flexibility and rapid deployment while allowing to take full advantage of higher hardware power density. BitFury, with its focus on efficiency, renewable energy and innovation, is the perfect match for this technology."

The closing of the transaction is subject to customary conditions.

About Allied Control:
Allied Control builds award-winning immersion cooling systems and data center infrastructure to cool the world's hottest supercomputers more efficiently than anyone else. The Hong Kong based technology startup known for its unparalleled efficient systems (sub-PUE 1.01) is 3M™ Technology Partner for 3M Novec™ Engineered fluids. The company's modular and containerized DataTank™ data centers allow inexpensive, efficient and rapid deployment of infrastructure for supercomputer, HPC and cryptocurrency applications at unprecedented power densities. Allied Control's innovative data center designs have recently won prestigious awards such as the Best Green ICT Award for Most Efficient Data Center and the DataCenterDyanamics Award for "Future Thinking & Design Concept".
For more information, visit http://www.allied-control.com

About BitFury Group:
BitFury Group is the leading Bitcoin infrastructure provider and blockchain transaction processing company. Founded in 2011, BitFury currently has more than 70 team members globally at management offices in San Francisco, Amsterdam and Riga, as well as data-centers in Finland, Iceland and the Republic of Georgia. BitFury derives sustainable advantage through its custom-made application-specific integrated circuits (ASICs) optimized to achieve the lowest power consumption coupled with the highest processing metrics – the parameters that drive mining margins. BitFury has an impressive track record, having successfully delivered three prior generations of silicon and has a roadmap to at least double performance-per-watt every 6-12 months. BitFury's management team and board include seasoned industry veterans with a history of execution in silicon engineering, operational build-up and capitalizing businesses.

For more information on BitFury Group, please visit: http://www.bitfury.org/
Follow BitFury Group on Twitter: https://twitter.com/BitFuryGroup
Like BitFury Group on Facebook: https://www.facebook.com/BitFury
Connect with BitFury Group on LinkedIn: https://www.linkedin.com/company/bitfury

###

Media Contact BitFury:
Janna McManus
1-650-400-7256
janna.mcmanus@bitfury.org

Media Contact Allied Control:
Pascal Clarysse
T +852 3145 0055
pascal.clarysse@allied-control.com

*3M and Novec are trademarks of 3M Corporation.
**DataTank is a trademark of the Allied Control Company.