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For Immediate Release

SPACEQUEST DEVELOPS CANBus HARDWARE FOR RAPID SMALL SATELLITE DESIGN

Fairfax, Virginia, April 14, 2006 – SpaceQuest, Ltd, a fixed-price spacecraft avionics developer, today announced the release of its first Control Area Network-based (CAN) hardware – the aptly named General Purpose Terminal or "GPT". The GPT adheres to CAN hardware specifications, and embraces CANOpen protocol as its Application Level interface.

The GPT was designed for a proprietary venture SpaceQuest is involved in, but its application is more than widespread. It was specifically designed as a flexible unit, able to meet an amazing variety of spacecraft needs – large or small! The name General Purpose Terminal may seem a bit vague, but it truly is the perfect name for this device.

The GPT can be powered by an 8 – 28 VDC power bus, making it compatible with a wide variety of spacecraft without custom design. Controlled by an on-board embedded processor, the GPT is itself a very capable computer. The GPT is further endowed with 4 analog inputs, 1 analog output, 8 digital telemetry lines configurable as digital inputs/outputs and analog inputs, 2 serial ports, SPI, CAN, 6 switched bus voltage lines, 1 switched regulated voltage line and 1 regulated current output as well as a proportional number of power and analog grounds.

The GPT utilizes a standard interface design SpaceQuest has dubbed SIF – Standard Interface. The Topic of Discussion at the 2005 Small Satellite Conference at Utah State University was Standards – coincidentally at the same time SpaceQuest was developing the GPT. The CAN architecture, CANOpen protocol and SIF bus between GPT "nodes," defines an amazingly simple and flexible spacecraft bus.

Gone are the days of the custom, "work-of-art" harnesses associated with many small satellites. The GPT and SIF bus architecture provides the engineer the flexibility to meet mission requirements without the vicious cycle of spiral-design! Instead of redesigning around a single, limited flight computer or telemetry board, the GPT provides the engineer with the flexibility to easily double or more the computational and telemetric capabilities of the spacecraft. Adding an additional GPT is as simple as

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connecting a SIF cable between the two – no harnessing! Power and data are both routed via the SIF cables, eliminating the need for complex harnesses between disparate spacecraft components and subsystems.

The applications for the flexibility of the GPT design are many. It allows real-time re-design potential for otherwise intractable spacecraft designs all the way up to launch, in most cases without ever modifying the actual hardware! This effect on satellite design might have the most impact in university small satellite programs, where several classes of students collaborate to complete a mission, such as the FalconSAT suite of small satellites developed by cadets at the United States Air Force Academy. Instead of locking into one design early on, with later classes "inheriting the problems of the older generation," new students may apply their own design changes to meet the needs of evolving mission requirements.

Doug Sinclair will present a paper on the GPT and SIF standard at the 2006 Small Satellite Conference. The annual conference is held at the Utah State University in Logan, Utah. See www.smallsat.org for details.

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About SpaceQuest, Ltd. (www.spacequest.com)

SpaceQuest has been a developer of advanced satellite technology for government, university and commercial use for almost a decade, specializing in the design, development, testing and manufacture of spacecraft as well as space and ground components for operation with low-earth orbiting satellites. SpaceQuest Canada Inc., a subsidiary of SpaceQuest, Ltd, was established as a Canadian corporation in 2001 to better serve government and private organizations throughout Canada.

About Aprize Satellite Inc. (www.aprizesat.com)

Aprize Satellite, a privately held company headquartered in Fairfax, Virginia, was established to provide a reliable, low cost satellite communications system for monitoring the status of remote and mobile assets worldwide. The company is deploying next generation low-Earth orbit satellites (LEOSats) using an innovative system architecture that significantly reduces user equipment costs and service fees.

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