EDUCATION

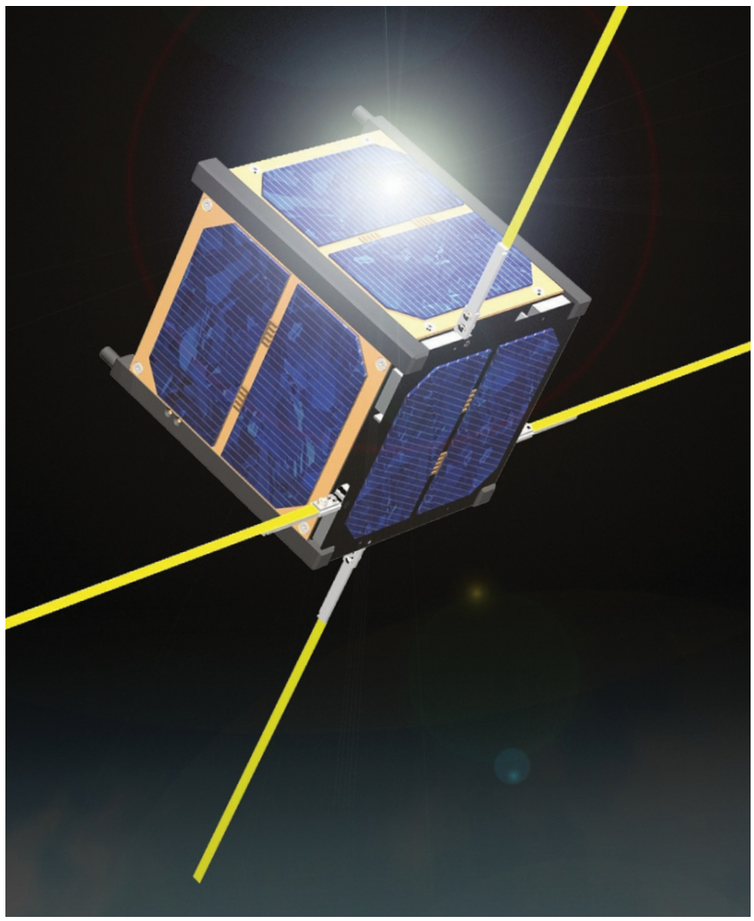
Schools' communications satellite to put the fun back into science lessons

UK educational satellite FUNcube-1 will be launched later this year. The spacecraft, which has been created volunteer radio amateur organisation AMSAT-UK, will join a number of other spacecraft on a DNEPR rocket sometime in the third quarter of 2012.

"Our target audience is students at both primary and secondary levels, and a simple cheap USB dongle 'ground station' for schools has already been developed," said a FUNcube spokesman. The 145MHz dongle means satellite signals can be received directly by students.

"Telemetry will give details of the spacecraft's health – battery voltages and temperatures – and from this it will be possible to determine its spin rate and attitude by plotting simple graphs," said the spokesman. "Additionally, experimental data and messages can be displayed in an attractive format and provide stimulation and encouragement for students to become interested in STEM [science, technology, engineering and mathematics] subjects in a unique way."

There is also a 435MHz to 145MHz linear transponder for radio amateurs to use during local non-school times. Launch will be from Yasny in southern Russia, near to the Kazakhstan border, brokered by Delft-based ISIS Launch Services. "The spacecraft needs to be completed by the end of July 2012, ready for shipping from the Netherlands to Russia," he said.



Its orbit awaits confirmation, but is expected to be nearly circular and approximately sun synchronous. "This will ensure that the spacecraft has the necessary solar illumination and that it will appear at regular times for educational outreach activities at schools and colleges," said AMSAT-UK.

FUNcube production and testing has already been paid for, but "it will really help the project if radio amateurs and other interested supporters could contribute something towards the cost of the actual launch", said the spokesman.

"All donations equivalent to £25 or more will be specially acknowledged by the spacecraft itself." Contributions can be made through the Virgin Giving charity donation website.

There is also a second FUNcube mission – FUNcube-2 on UKube' – which will be a set of FUNcube PCBs flying aboard the UKube triple-cube satellite.

Donations via Virgin Giving
http://bit.ly/zJTPaV
FUNcube
http://funcube.org.uk

DISTRIBUTION

Mouser to capitalise on localisation for growth

Mouser Electronics is increasing its physical presence in the European market as it expects double-digit growth in its business 2012.

The online and catalogue distributor plans to add more European staff and new branch offices next year to provide more local product support.

"We're not just trying to look local, we want to be local," Glenn Smith, CEO at Mouser told *Electronics Weekly*.

"We believe local people are necessary to understand the needs of the local customers, market and product technologies," said Smith.

The distributor believes the addition of local offices, including a European marketing headquarters and support centre in Munich, Germany, has helped drive strong sales growth in 2011.

"By adding more resources and staff members in Europe, we have helped drive further growth over an amazing 2010," said Mark Burr-Lonnon, Mouser vice-president of EMEA business.

"We've seen around 42% further growth in 2011, with no slowing of this success, making us now a true player in the European market," said Burr-Lonnon.

The growth was seen despite the slowing of the market in the second half of the year.

Burr-Lonnon hopes to see sales growth of up to 30% next year. He said the company's sales were growing in all the major European markets in 2011.

Sales in France were up 75%; Spain was up 57%; Sweden 54%; Benelux 54%; the UK 48%; Italy 41%; and Germany was up 40%, Burr-Lonnon said.

Along with the office in Munich, Mouser has offices located in the UK, Czech Republic, France, Israel, Italy, the Netherlands, Spain and Sweden.

Burr-Lonnon said there is a focus on the embedded market. "The embedded market is key in Europe and more than half our new European lines are related to the embedded market," said Burr-Lonnon.

Chief executive Glenn Smith said the distributor had no plan to change its focus on the design sector and go after small-order manufacturing business.

"Semiconductors, displays and sensors are product areas which drive the design. They define the capability of a new design, this is our focus," said Smith.

Mouser
www.mouser.com