plug & play instruments
oscilloscopes

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Cleverscope Hardware Upgrade

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For immediate release

Cleverscope is pleased to announce a major hardware upgrade for their USB based oscilloscopes. The new models are the CS320A which has two analogue inputs and the CS328A with two analogue and eight digital inputs.

We have upgraded the Altera FPGA from 6000 to 20,000 logic elements which allows for much greater complexity in the virtual hardware – logicware - that can be installed. The current build fits into the 6000 LE space but we have plans for extra options that will benefit from having the extra capacity – such as a tracking narrow band spectrum analyser rather than the simple analyser that is currently available.

All units will be field upgradeable to take advantage of new logicware and firmware features as they are developed. Upgrades can downloaded from our website and installed by the end-user. This is a great benefit as future features can be added without difficulty in a similar way to software on a PC being upgraded without changing the platform.

The acquisition units now use USB2 for connection to the computer, significantly increasing the data rate to 480 Mbit/second. This allows faster data transfer which we will take advantage of in increased update rate and for future data intensive applications.

Units can now be factory ordered with 8Msample of memory rather than the standard 4Msample. Note that the memory is per channel so the standard unit has the 4Msamples of storage available for each of the two analog, eight digital and the external trigger channels - a total of 44 million samples! This provides up to 80 ms of simultaneous storage with 10 ns resolution, acquired in 2-1000 triggered frames with minimal inter-frame delay.

The sampler is now a plug-in module to allow for variants to be offered. The plug-in modules can be factory ordered or field upgraded to 12 or 14 bit samplers, with much increased spectral analysis dynamic range to a maximum of 96 dB including FFT process gain. There are no 14 bit 100MS/sec oscilloscopes available so this will fill a much needed gap.

The other major change is the computer connection is now a module. We plan to have Ethernet and isolated USB modules available for field exchange by the second quarter. This will increase the units' flexibility in meeting the requirements for machine monitoring and automation.

These hardware changes will drive many logicware, firmware and software releases over the coming months, as well as providing for further modules for specialist requirements. By purchasing one of these units you know that your investment is future-proofed. Existing owners are not forgotten, the user interface is common to all units and enhancements in that will be available and will use the level of hardware available.