Schleicher GRED®: a new and unique type of software for retain data

Schleicher GRED® software from the Berlin electronics company Schleicher Electronic reduces the costs and memory requirements of so-called retain data, which holds a key function in automation solutions, for example. The advantage of Schleicher GRED® is that the saved data needs less memory capacity, which in turn leads to a reduction in costs. Schleicher GRED® is particularly suitable for embedded systems, which have to process large quantities of data in real time, such as in production or logistics.

The following applies for many applications: data, such as state values, positions, inputs or counter values, has to be saved when the machine is switched off, so that it can be used when switched on again. Until now, this so-called retain data was organised through its own hardware components, so-called NV-RAM modules, which are already integrated in industrial PCs in the form of a small chip. The problem is that NV-RAM modules are not available in all capacities and are too small for many applications – such as embedded systems, which have to process large quantities of data in real time. In addition, depending on the necessary storage capacity, they are very cost intensive.

Enter Schleicher GRED® (pronounced gee-red). Schleicher now has a patent pending on a procedure that reduces large quantities of data for small memory media, and thus represents an economical alternative to standard solutions: the software now only saves changes to data, so that just a small NV-RAM is required for the saving process. In this, Schleicher GRED® accesses all three storage media – NV-RAM, hard disk memory and RAM. The advantage is that there is no impairment in system behaviour. The hard disk is not over-stressed, and neither are real-time processes blocked. In addition, Schleicher GRED® runs in the background – without impairing the application.

For the first time, Schleicher GRED® has been implemented in the XCI600 Schleicher system control. The solution is not dependent on the target application or industry, and can be implemented individually in any customer application. The only precondition is that the system must have a NV-RAM.