

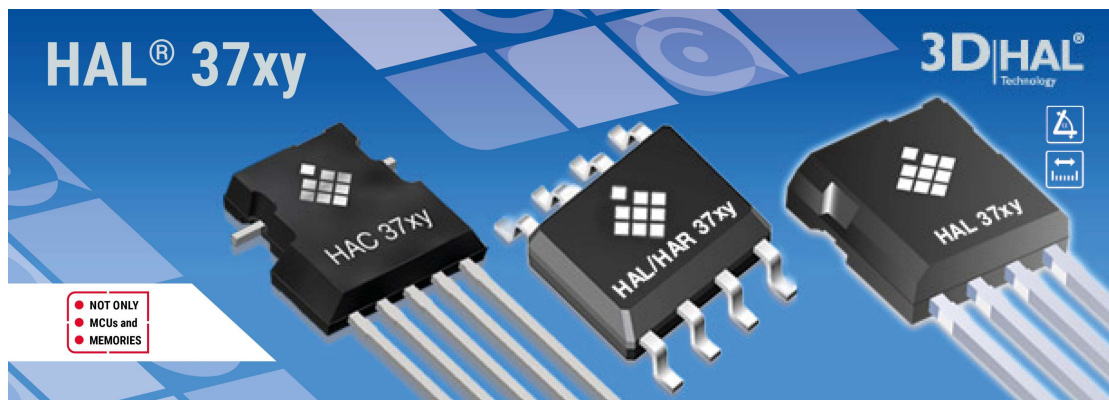


SOLUTIONS FOR THE PROGRAMMING INDUSTRY

WriteNow! Programmer is now able to program Micronas Hall-Effect Sensors

It is a school of thought that an in-circuit programmer is used only for the programming of the internal memory of the MCU, external memory or CPLD/FPGA devices. Frequently there are other ICs on the boards that have non-volatile internal memory to be set with defined parameters from the user during the programming of the board.

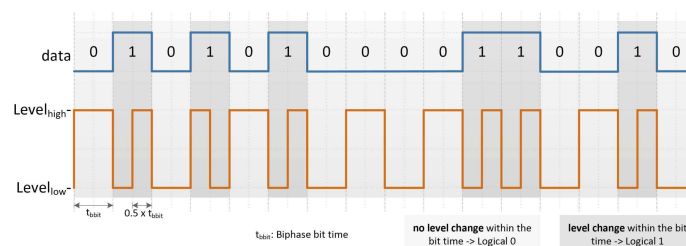
In the past these devices were pre-programmed before the soldering of the component, whereas now it is more convenient using an in-circuit system like **WriteNow!** that guarantees more flexibility to the productive cycle.



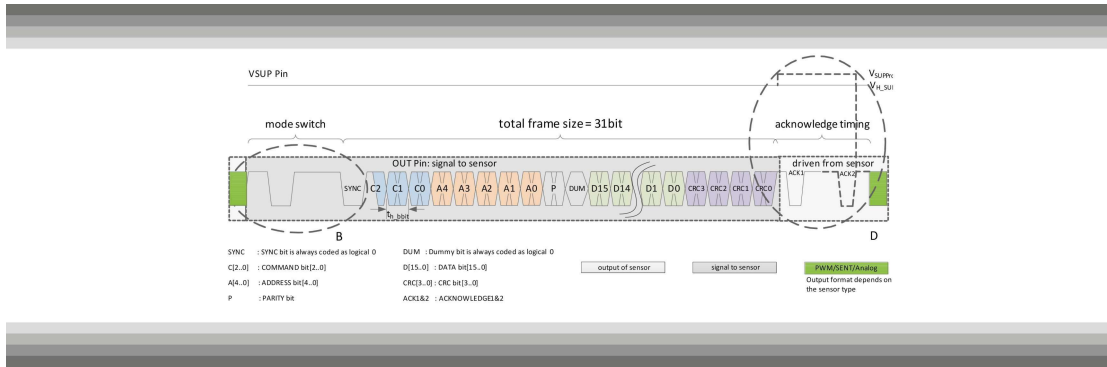
Thanks to its hardware setup structure, **WriteNow!** guarantees the possibility to program any device with non-volatile memory (even OTP), supporting specific and dedicated programming protocols.

An example is the support by WriteNow! for Programmable Hall-Effect Sensor Family for Rotational or Linear Position Detection based on 3D HAL[®] Technology of Micronas (HAL 37xy series).

The HAL 37xy is programmable by modulation of the output voltage (OUT pin). The implemented communication interface is based on the Biphase-M encoding scheme. Biphase-M uses a constant bit time over the entire telegram.



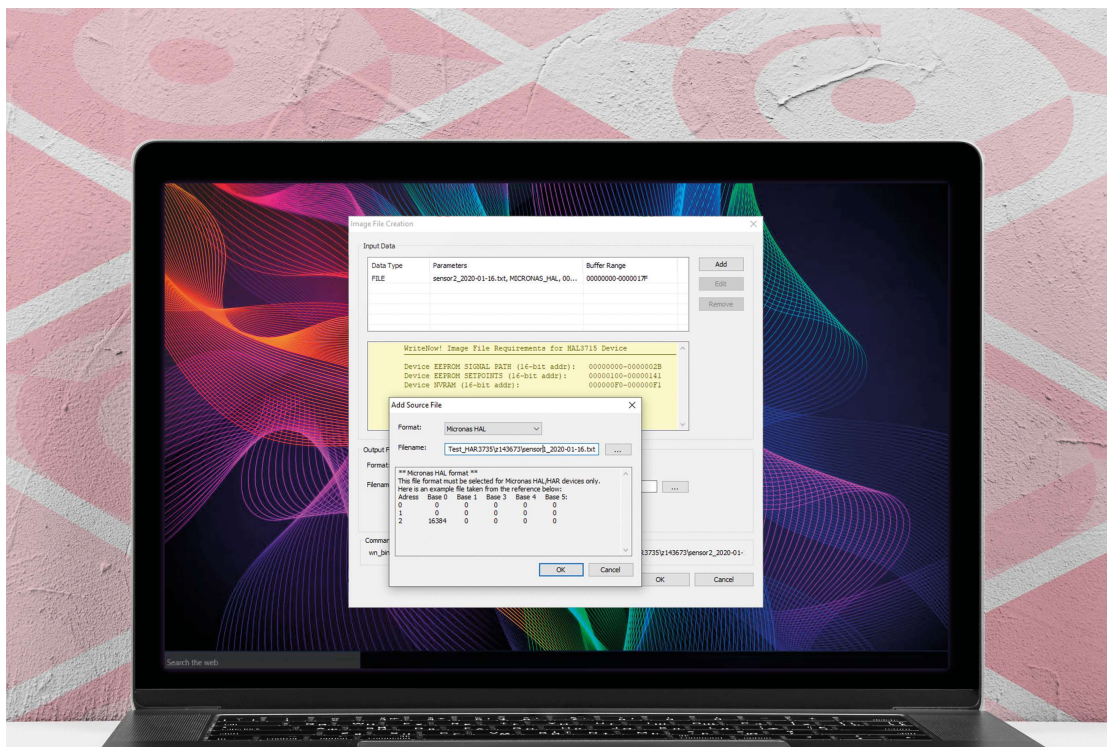
The sensor transmits either a data telegram or sends an acknowledge by a modulation of the output voltage.



The entire handling of the modulation via OUT pin and the management of the transmission and reception's frame were implemented by reconfiguring the internal FPGA of the programmer.

By implementing the software of the algorithm, the user has the possibility to program the EEPROM area including the SIGNAL PATH zone, either the NVRAM register which includes all the configurations (lock of the device included). It is also present a dedicated command which controls the LOCK status bit as for production and qualification tests it is mandatory to set the LOCK bit after final adjustment and programming.

In the end, the WriteNow! GUI allows you to load directly the file format generated by the application of Micronas configuration, easing the integration of the product further.



WriteNow! from **Algocraft** is a consolidated programming platform in the market which has been created not only in order to support MCU or serial memories but even particular devices where it is required to configure non volatile locations. A complete offer is given by a single and multiple channel solutions.