

Do-more with Extra Communications Ports!

Both Do-more CPUs have one serial port built in...

Need more serial ports?

Then check out the two SERIO modules. Previously only available for our WinPLC product line, the serial port modules are a great addition to the Do-more PLC line-up, and allow connection of a wide range of serial devices, such as barcode scanners, scales, printers, modems, etc.

Add serial ports for less than \$60 per port*!

Name your devices!

"Device abstraction" makes it easy to connect external devices - give them logical names and then refer to those names throughout your program code for ease and clarity.

Custom protocol instruction...

...makes it possible to "talk" to almost any device by letting you define any non-standard data exchange (serial or Ethernet)!

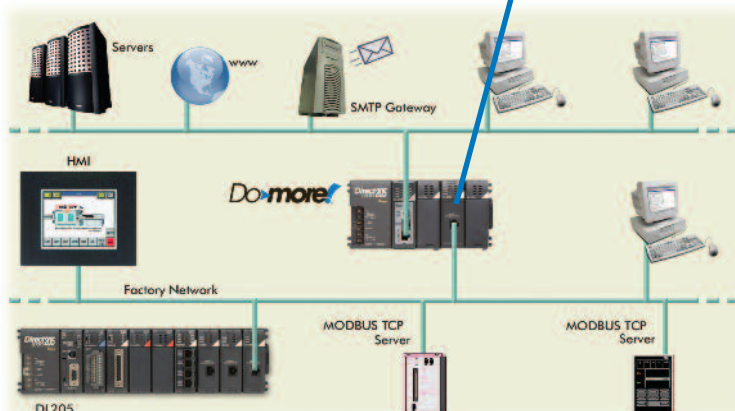
* \$176 for 3-port serial comm module

Download the free Do-more Designer Software today and take a look at these great features and so much more



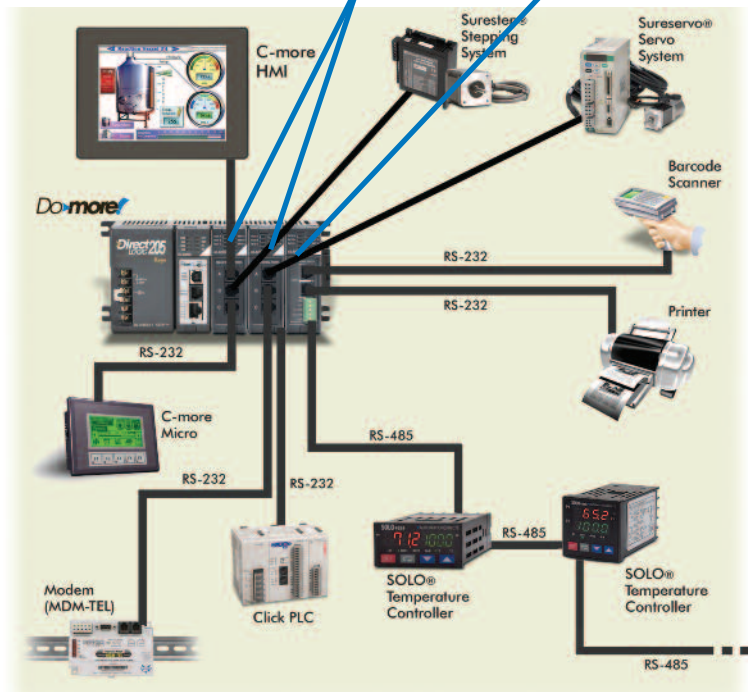
Watch the Video
about this topic:
<http://n2adc.com/domoreserial>

H2-ECOM100 \$301



H2-SERIO-4 \$176
Two RS-232 ports &
One RS-422/485

H2-SERIO \$176
Three RS-232 ports



Improved to Do-more!

All your serial port setup is done through the Do-More Designer Software, and if you should need to replace a serial module, all of its parameters and setup are stored in the CPU and are automatically loaded and ready to go when the system powers up.

Need more Ethernet?

The first Ethernet port is a real bargain - it's built into the Do-more CPU (H2-DM1E) for just \$100 more than the non-Ethernet version (H2-DM1). But many applications require a second Ethernet port. Add an H2-ECOM100 and connect your Do-more to segregated networks for security or isolation.

Do-more with High-speed I/O!

High-speed operations

The CTRIO and CTRIO2 modules are capable of a wide variety of high-speed input and output operations. Many of these operations take place on board the module, and are independent of the scan time of your PLC. With flexible 4-channel input and separate output channel design, these modules can satisfy high-speed counting, timing, and pulse catch operations, along with high-speed discrete output or several profile choices of pulse output operations. Not all combinations of input functions and output functions are possible within the resources of the module, but these examples are typical of the applications for these modules.

\$291



Fast

Counting & timing up to 100 kHz:

H2-CTRIO \$291.00

Four 100 kHz inputs, and two 20-25 kHz pulse train outputs

**NEW
\$299**



Faster

Counting & timing up to 250 kHz:

H2-CTRIO2 \$299.00

Four 250 kHz inputs, and two 20-25 kHz pulse train outputs

Inputs Supported:

- Counter
- Quad Counter
- Pulse Catch
- Edge Timer
- Dual Edge Timer

Outputs Supported:

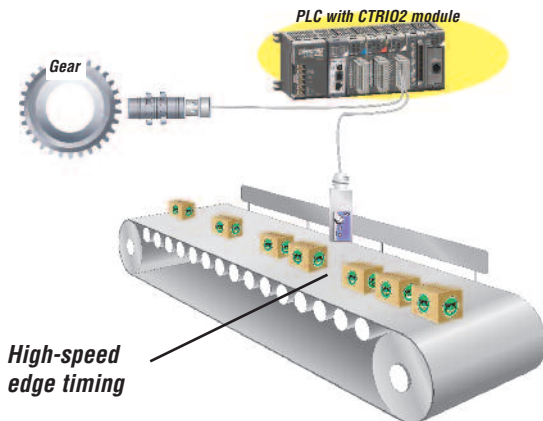
- Pulse train - used for servo/stepper motor control. Configurable for CW/CCW or step and direction.
- Discrete outputs - assigned to Counter/Timer input functions
- Raw output - outputs controlled directly from the CPU interface program
- Programmable limit switch (H2-CTRIO2 only)

Improved to Do-more!

All your CTRIO and CTRIO2 configuration is done through the Do-More Designer Software - no more separate software "workbench". And if you should need to replace a high-speed module, all the setup parameters and profiles are stored in the CPU and are automatically loaded and ready to go when the system powers up.

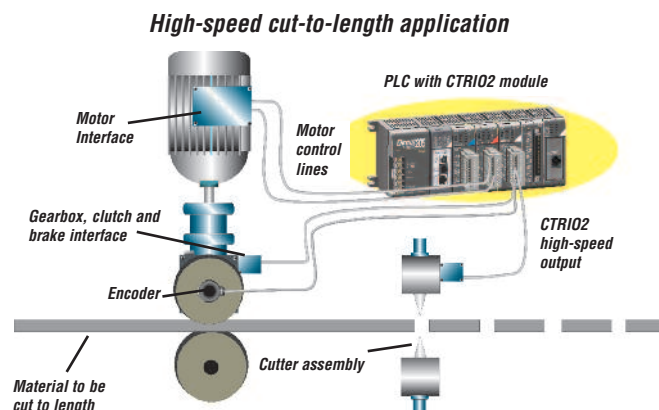
High-speed timing

The CTRIO and CTRIO2 modules can be configured for timing functions based on both count or rate. Using a common configuration of a proximity switch sensing the teeth on a gear, the module is able to calculate the velocity of the gear based on the rate at which it receives counts. This value can be scaled within the module to the engineering units required for the application.



High-speed counting

The CTRIO and CTRIO2 modules can be configured for counting functions via the use of an encoder input. Up to two quadrature encoders per CTRIO or CTRIO2 module are available with connections for external reset, capture and inhibit signals. In a simple cut-to-length application as shown below, the encoder provides an input position reference for the material to the module. The module's high-speed outputs are wired to the cutting device and to the clutch and/or braking device. When the count from the encoder is equal to a pre-programmed setpoint within the module, the high-speed outputs are activated to stop and cut the material to a repeatable fixed length. Additionally, the clutch/brake signal can be used as an inhibit signal so counts are not accumulated while the material is being cut.



Do-more with Precise Motion Control!

Here's why

There are many applications that require accurate motion control, whether it's precision position control or tight speed regulation. The Do-more PLC, using the high speed pulse output mode on the H2-CTRIO2 module, offers a superior control solution for closed-loop motion control using SureServo servo systems, or super-low-cost open-loop control with SureStep stepping systems.

Here's how

When coupled with our **SureServo** or **SureStep** motion products, the resulting system is extremely cost-effective.

A Do-more-based motion control system is very well-suited to applications such as:

- cut-to-length
- indexing tables or conveyors
- and many more...



AutomationDirect Do-more PLC with H2-CTRIO2 modules (\$299.00) using pulse output feature

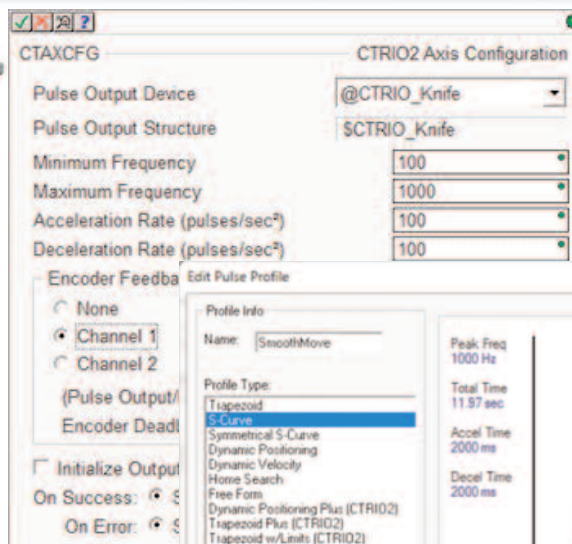
Familiar with H2-CTRIO?

If you've used our H2-CTRIO module in the past, take a look at the new H2-CTRIO2. When coupled with a Do-more CPU, you get:

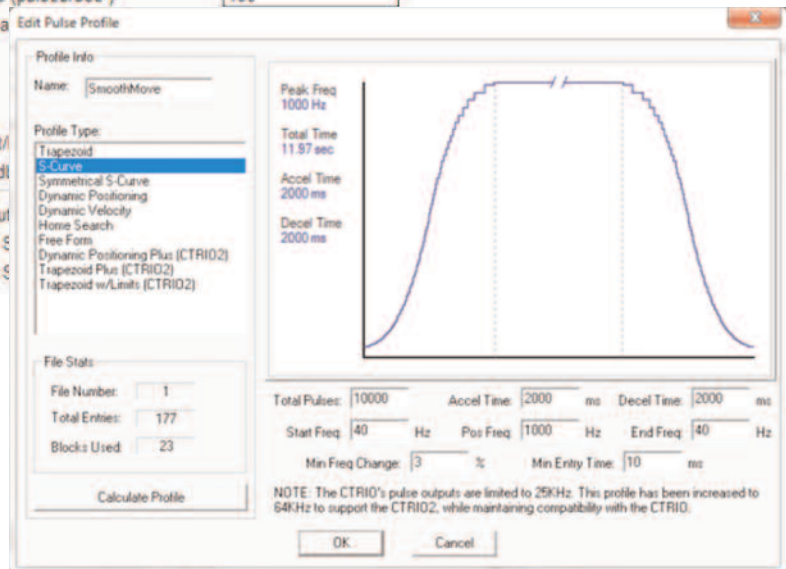
- Faster pulse output frequency (20-250 kHz)
- All configuration and motion profiles are created in the *Do-more Designer* Software and are stored in the CPU.
- The new "Axis Mode" instructions make the code for your motion application a cinch

Download the free software today and see for yourself.

** Note: The Do-more PLC is compatible with the legacy H2-CTRIO module and you will benefit from having the configuration and profiles created in the Do-more Designer Software and stored on the CPU. This alone is a big improvement over the previous functionality.*



Pulse output from H2-CTRIO or H2-CTRIO2 module





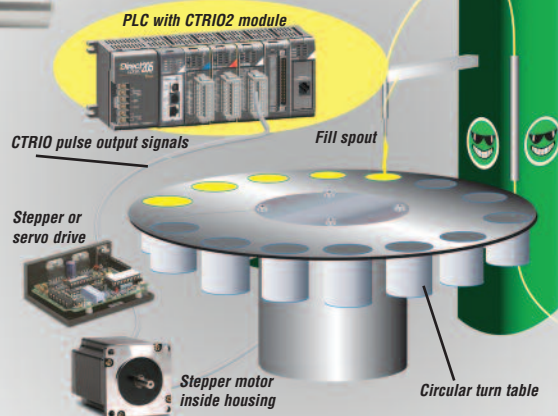
www.sureservo.com



**Sure
servo**

(see section 16 of catalog)

Rotary indexing liquid fill application



The **SureServo** family of brushless servo systems from AUTOMATIONDIRECT is fully digital and offers a rich set of features at dynamite prices. Choose from **eight standard servo motors** that can be **used in combination with one of three standard servo drives**.

These servos are designed for flexibility and quick implementation. **SureServo** drives accept a wide range of command sources:

- Built-in motion controller with preset position, velocity or torque
- Select presets with switch inputs and/or the multi-drop Modbus serial interface
- Position commands with "pulse and direction" or CW/CCW format
- Encoder follower
- Analog voltage Velocity or Torque command
- Eight standard systems from 100W to 3kW
- Use with **DirectLOGIC** PLCs or any other host control
- Drives feature on-board indexer and adaptive tuning modes
- Free set-up software
- 2 year warranty

For configuration, tuning and diagnostics, use the drive's integrated keypad/display or take advantage of the free **SureServo Pro™** PC-based software. Tune the system easily with adaptive auto-tuning

selections or manual mode. Adapt to diverse applications with configurable I/O, including 8 digital inputs, 5 digital outputs, 2 analog monitors and a scalable encoder output.



(see section 16 of catalog)

**Sure
step**

**Ease of use out
of the box!**

The **SureStep** stepping family has four standard motors to handle a wide range of automation applications such as woodworking, assembly, and test machines. Our square frame or high torque style stepping motors are the latest technology, resulting in the best torque to volume. We have **NEMA 17, 23, and 34 mounting**

flanges and holding torque ranges from 83 oz-in to 434 oz-in. A 20-foot extension cable with locking connector is a standard accessory to interface any of the four stepping motors to the microstepping drive, and can be easily cut to length if desired.

Do-more with Ethernet I/O!

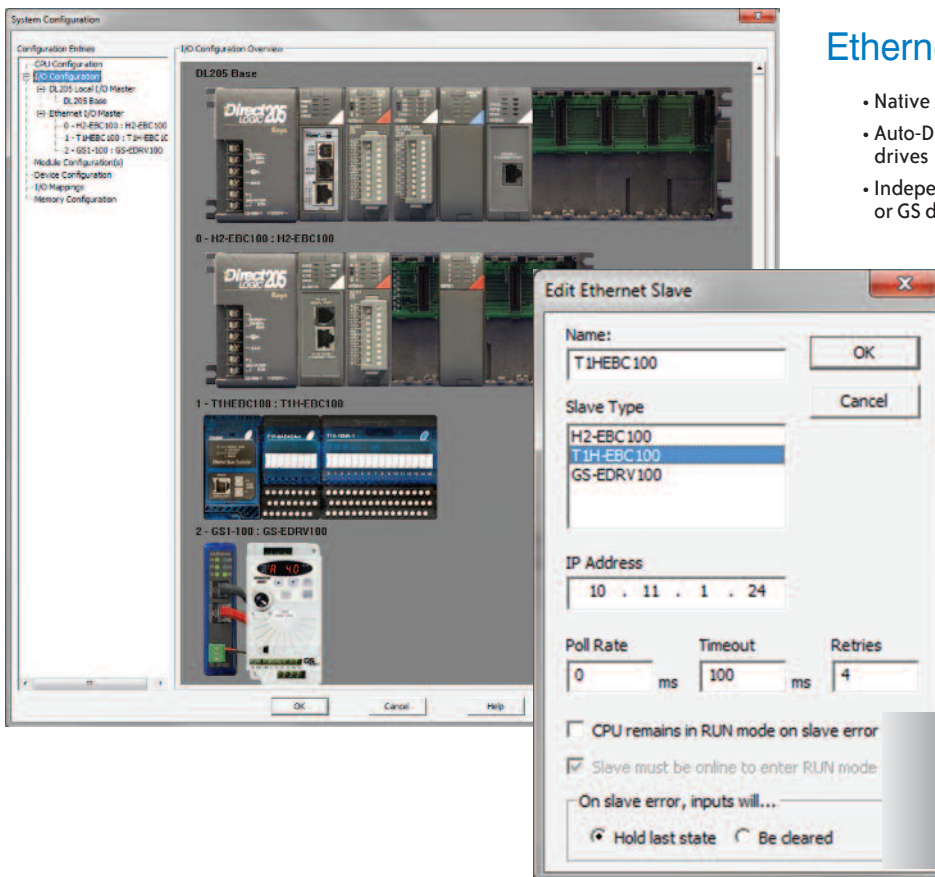
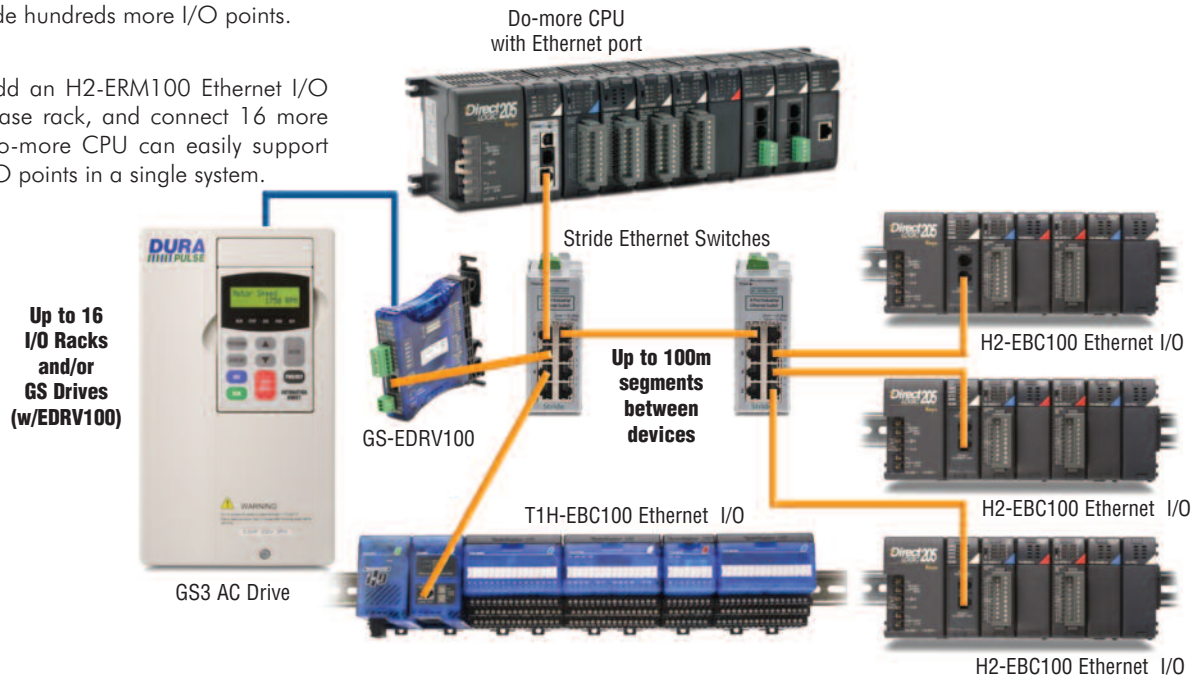
Expand your I/O

Your local Do-more base supports up to 8 I/O slots with as many as 32 I/O points in each. If you need more, you can expand your system with up to 16 I/O racks and/or GS drives using Ethernet I/O, now supported by the embedded Ethernet port on the H2-DM1E CPU. Each of those 16 racks can provide hundreds more I/O points.

Need more? Add an H2-ERM100 Ethernet I/O master in the base rack, and connect 16 more devices. The Do-more CPU can easily support thousands of I/O points in a single system.

Locate I/O Anywhere

DL205 Ethernet I/O bases can each be located up to 100 meters from the local base (or between Ethernet switches) using EBC100 slave modules in the CPU slot. And you have the flexibility of using Terminator rackless field I/O drops as well.



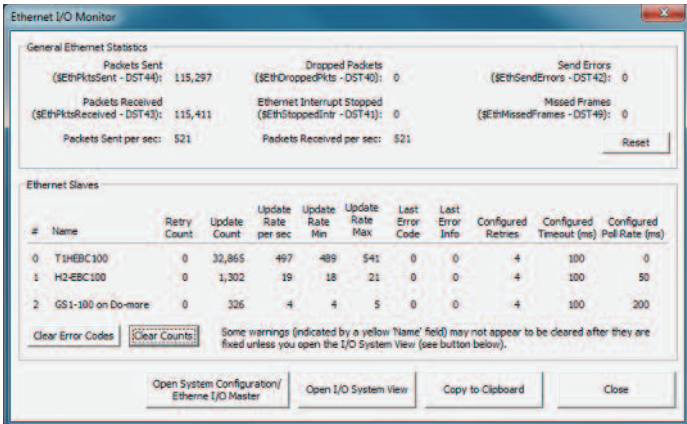
Ethernet I/O Features

- Native Addressing (X/Y, WX/WY tags)
- Auto-Discovery of all attached I/O racks, modules and drives
- Independently adjustable poll rates for each I/O rack or GS drive (with GS-EDRV100 Ethernet interface card)

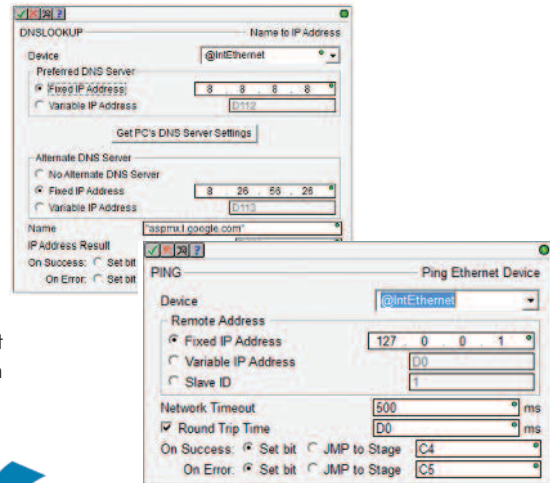
Configure 'critical' I/O so that the CPU will "drop out of run mode" if that I/O rack or GS drive disconnects for some reason.

Or allow the CPU to continue running using the last known values or cleared values.

Do-more with Ethernet I/O Diagnostics

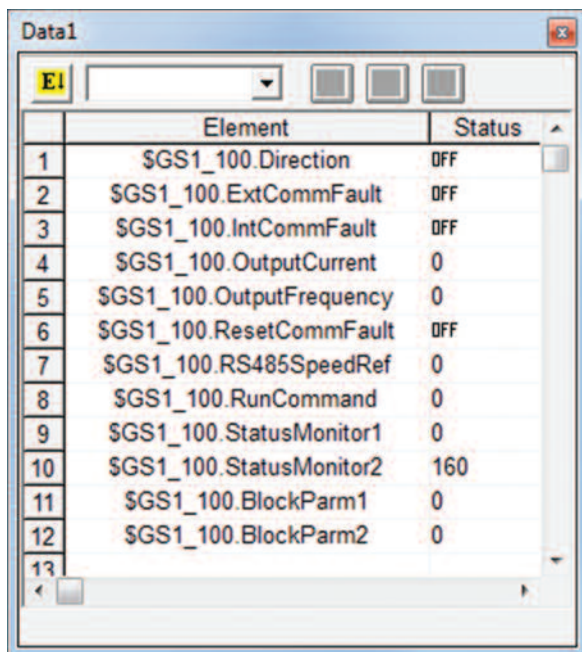


Instructions for DNS Lookup and Ping operations allow your ladder logic code to perform network-centric operations.



Ethernet I/O Monitor offers unparalleled visibility of all traffic on your Ethernet I/O network. Identify specific problems at a glance and jump to the System Configuration or Viewing screens with a single click.

Do-more with GS Drives



A 'Structure' for GS Drives

- Automatically created whenever you attach a GS drive to the Ethernet I/O network via a GS-EDRV100 module
- Contains the most popular drive parameters
- Parameters in the structure sync automatically with the drive. No need to read or write these values - just use these tags in your ladder, like native I/O tags
- 15 user-defined registers allow customization of the structure
- If you need access to other drive parameters use the GS Register Instructions below.

Two Extra Instructions for GS Drive Communications

- GS EDrive Register Read (GSREGRD) allows reading of any drive register that is not in the 'Structure'
- GS EDrive Register Write (GSREGWR) allows writing of any drive register that is not in the 'Structure'

