RapidPro: Fulfill objectives faster with new standard configurations

# System for Each Application

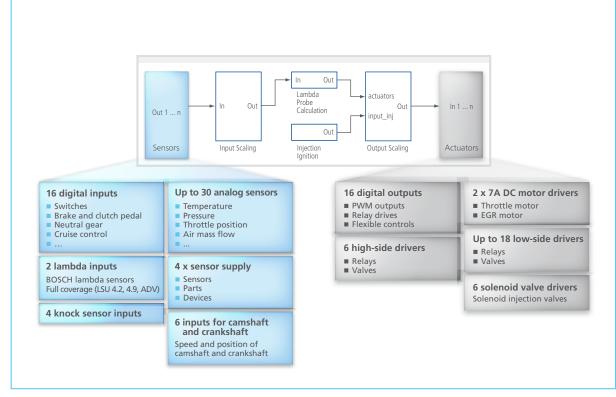
Speedy and convenient:

If you're developing an ECU for an electrified drivetrain, you can now use a preconfigured RapidPro system. dSPACE also provides optimum support for other application areas.

### **Compact and Vehicle-Capable**

dSPACE's modular, compact RapidPro hardware provides signal conditioning and power stages for connecting automotive sensors and actuators to dSPACE prototyping systems. The RapidPro system is perfect for use in a vehicle, on a test bench, and in a laboratory. The RapidPro modules are easy to configure and there are numerous ways to combine them, providing the high flexibility necessary for handling changing

PAGE 47



Developing new combustion processes is much easier with the engine control configurations for combustion engines with up to 6 cylinders. With the dSPACE Simulink® I/O model, developers can connect the sensors and actuators quickly and easily.

# Preconfigured yet flexible: The new configurations cover various applications and can be extended modularly.

project requirements. The result is that dSPACE customers neatly sidestep the expense of developing prototyping systems themselves.

# **Predefined Configurations**

RapidPro's flexibly configurable hardware now has new companions: RapidPro standard configurations tailored to specific development tasks. These include classic tasks such as developing transmission controls and new tasks for current development trends, such as drivetrain electrification, and further optimization of the fuel consumption and emissions of combustion engines, to name but just a few. These predefined configurations are complete, tailored solutions that help users integrate sensors and actuators in their applications. The advantage: Developers do not need to set up and configure the system. They can concentrate completely on their core task, controller development. The configurations cover current development areas in automotives:

- Engine control configuration: for combustion engines with up to six cylinders to develop new combustion processes, for example
- Body electronics configuration: for typical body electronics systems with a large number of digital inputs and outputs
- Chassis control configuration: for vehicle dynamics systems with connection options for typical sensors for acceleration, wheel speed, vehicle inclination, etc.
- Transmission control configuration: for new transmission functions with flexible power stages for valve or DC motor control
- *E-motor control configuration*: as a flexible power stage for a variety of electric motors in the prototyping phase

If a user's requirements are different

from these ready-made configurations, the RapidPro system has the necessary flexibility for adaptations and extensions.

# **Preconfigured I/O Models**

dSPACE also offers Simulink® I/O models designed specifically for the RapidPro standard configurations. These make preconfigured I/O signals available for the sensors and actuators to be connected.