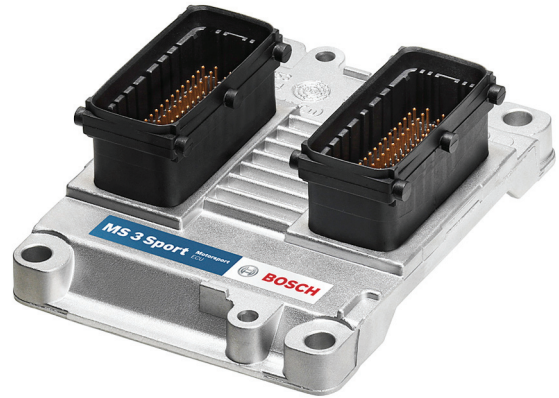


## ECU MS 3 Sport

The MS 3 Sport is the first Bosch engine management system to be manufactured with full hybrid technology. Therefore it is very small, lightly and robust against vibrations. The MS 3 Sport is suitable for engines with up to 6 cylinders and has internal ignition output stages. Two sensor inputs are available for vibration knock detection and knock control. Various engine parameters can be measured with different input channels and transferred via CAN interface to an optional data logger or dash display.



Application	
Engine layout	up to 6 cylinders, 2 bank
Control strategy	alpha/n
Lambda control	dual
Speed limiter	✓
Gear cut for sequential gear box	✓
Map switch (3 positions - each corresponds to different target lambda and spark maps)	✓
Fuel cut off	✓
Sequential fuel injection	✓
Asymmetric injection timing	✓
Asymmetric ignition timing	✓
Knock control	optional
Electronic throttle control	optional
Traction control	optional
Interface to Bosch Motorsport ABS M4 kit	✓
Support of 60-2 and 36-2 ignition trigger wheels	
Max. vibration	<i>Vibration Profile 3 (see Appendix or <a href="http://www.bosch-motorsport.com">www.bosch-motorsport.com</a>)</i>

Mechanical Data	
Extremely small and flat aluminium pressure casting housing	
Four mounting points on housing	
2 connectors with high pin density	
Extremely shock and vibration proof hybrid technology	
Size	120 x 90 x 40 mm
Weight	250 g
Temperature range	-40 ... 125 °C

Connectors	
Mating connector I	D 261 205 139
Mating connector II	D 261 205 140

Software	
Modas Sport Calibration Software	inclusive
WinDarab Analysis Software	on request



## Electrical Data

Max. power consumption 10 W at 14 V

### Inputs

2 lambda sensor interfaces LSU

4 inputs for Hall-effect wheel speed sensors

1 input for inductive crankshaft sensor

1 input for Hall-effect camshaft sensor

17 analog inputs 0 ... 5 V

2 knock sensor inputs

6 digital inputs

### Outputs

6 injection power stages

6 ignition power stages

16 power stages (2 A/1 A; low side; PWM)

2 power stages for lambda heater

1 H-bridge (5 A)

2 sensor supply 5 V/100 mA

### Communication interfaces

1 K-line serial interface

1 CAN interface for external communication

## Optional Accessories

MSA-Box II

Data logger C Sport

Data logger C 40

Data logger C 40 Plus

Display DDU Sport (incl. logger)

Display DDU 4

Display DDU 6

## Optional Functionality

Knock Control SW upgrade F 01T A20 053-01

Electronic Throttle Control SW upgrade  
F 01T A20 051-01

Traction Control SW upgrade F 01T A20 052-01

## Part Number

MS 3 Sport **F 01T A20 067-01**