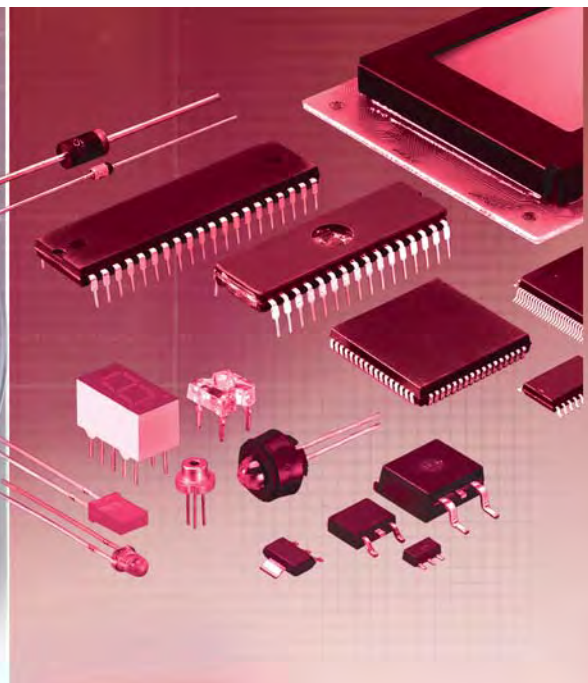
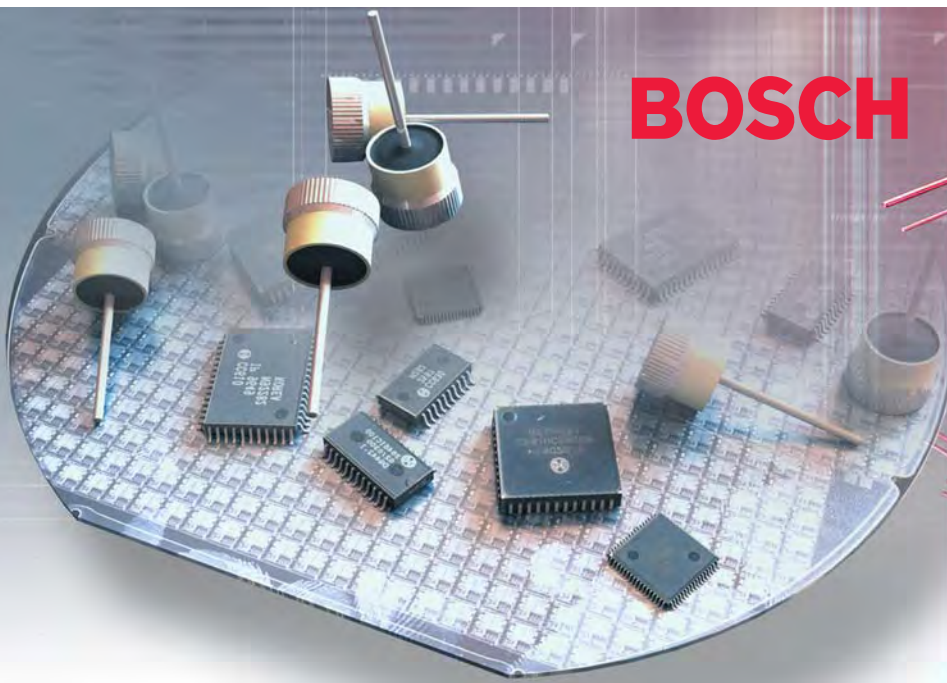




RUTRONIK
E U R O P E

Automotive Competence you can buy!
Semiconductors and Sensors from BOSCH



committed to excellence

Semiconductors and Sensors from BOSCH

System Supply ICs

- Transmission Control, Chassis Systems (ESP, ABS), Restraint Systems (Airbag), Motor Management

Sensor I/F ICs

- Lambda Probe Sensing, Knock Detection, Inductive Wheel Speed

Actuator Driver ICs

- Fully Integrated Current Regulators (Transmission Control, Airbag, Chassis Systems), Power Stages

Sensors

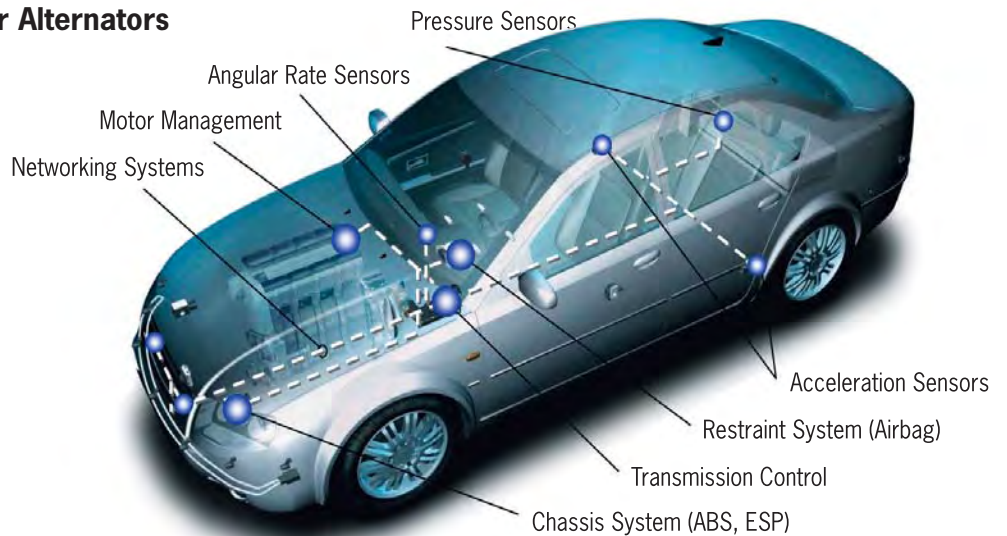
- Pressure, Acceleration, Angular Rate

Networking Systems

- CAN, TT-CAN, Flexray, PAS

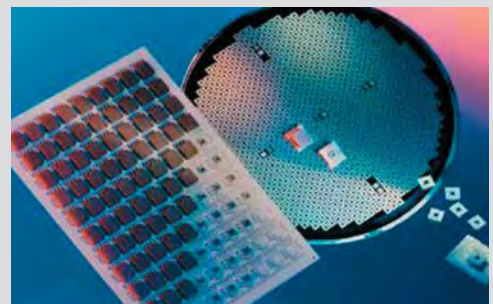
Voltage Regulators for Alternators

Automotive Applications

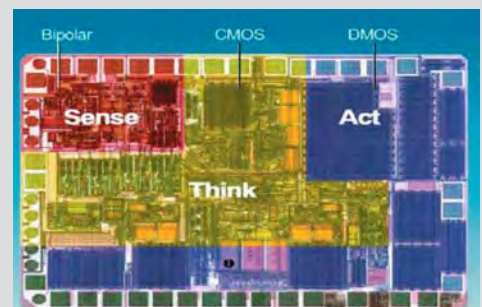


Quality for you

- 100% Focus on Automotive market
- Clear Fab Strategy: 100% Automotive loaded
- Closed loop in Design, Processing and Testing at one Location
- 2nd line capability with Partner Silicon Foundry
- Implementation of Process Improvements for Automotive Requirements
- Outstanding Long Term Availability for Process and Devices
- Competitor Benchmark in Release Procedure for Automotive Semiconductor
- Dedicated to ZERO Failure rate, 100% qualified QS9000, ISO/TS16949
- System Know How on Device Level
- Market Leadership in all our major Segments



Micromachining-Technology



BCD-Technology

CAN-Driver

Features	CF150C	CF151	CF160*	CF163	CF173/175*
Availability	available	available	available	available	available
ISO 11898	+	+	+	+	+
Protection	Short Circuit - 5V ... +36V (with limitation for truck applications)	Short Circuit - 5V ... +36V	Short Circuit Overtemperature	Short Circuit Overtemperature	Short Circuit
Supply Voltage	5V	5V	5V	µC: 3V, Bus: 5V	µC: 3V/5V, Bus: 5V
T ambient	110°C	125°C	125°C	125°C	125°C
Package	SOIC8	SOIC8	SOIC8	SOIC8	SOIC8
Compatibility	-	Fully with CF150C	Pins 1-4, 6, 7 with CF150C	Pins 1-4, 6, 7 with CF150C	-
Remarks	<ul style="list-style-type: none"> ■ High / Low Speed Mode (Slew Rate-Switch) 	<ul style="list-style-type: none"> ■ High / Low Speed Mode (Slew Rate-Switch) 	<ul style="list-style-type: none"> ■ Only High Speed ■ No external Coil ■ Improved EMC Performance ■ Reset Function 	<ul style="list-style-type: none"> ■ Only High Speed ■ No external Coil ■ Improved EMC Performance ■ No Reset Function 	<ul style="list-style-type: none"> ■ Only High Speed ■ 42 V ■ Wake Up ■ Exceptional EMC Performance ■ ESD 8 kV

BOSCH



Fachhochschule
- University of Applied Sciences -
communication & systems group
Prof. Dr.-Ing. W. Lawrenz
- Director c&s -
Salzdahlumer Strasse 46/48
D-38302 Wolfenbüttel

**Authentication on
CAN Transceiver
Conformance (d1.1)**

Test Specification done by
Ford and c&s, derived from

- CAN Low Speed Fault Tolerant Test Specification - GIFT ICT group
- ISO 11898-2 CAN High Speed Transceiver Component
- SAE J 2284 High Speed CAN for Vehicle Applications
- Ford Requirements

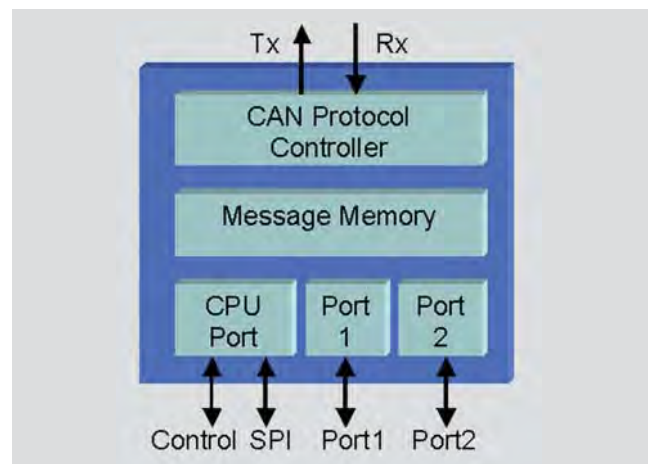
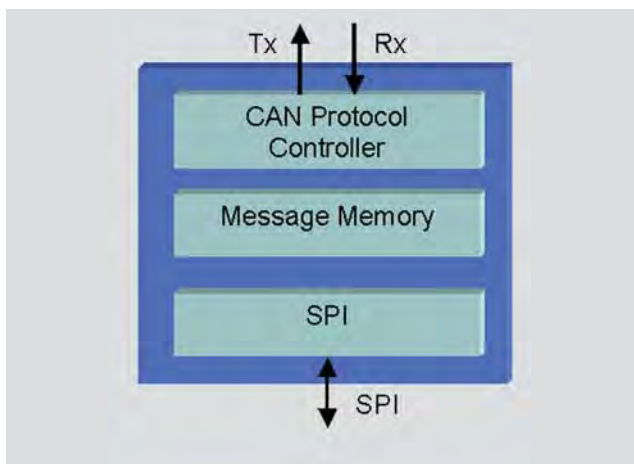
CAN-Controller

CC750 (SPI-CAN)

- CAN Protocol 2.0 Part A,B
- Programmable bit rate
- 15 Message Objects (14 Tx-Buffer; 1 Rx-Double Buffer)
- Programmable ID masks
- SPI
- SOIC16-W package

CC770 CAN-Controller

- CAN Protocol 2.0 Part A,B
- Programmable bit rate
- 15 Message Objects (14 Tx-Buffer; 1 Rx-Double Buffer)
- Programmable ID masks
- Programmable clock out pin
- 8, 16 bit and SPI interfaces
- 2 bi-directional 8 Bit I/O-Ports
- PLCC44, MQFP44



Sensors: Core Competences

- Sensors in Silicon Technology
 - Micromachining
 - Thin Film Technology
 - Microelectronics
- Sensor Design and Simulation
- Packaging/ Assembly and Mounting
- Test, Calibration
- High Volume Manufacturing
- Automotive Quality
- Communication of different systems and sensors over standardized bus systems

Principles

Minimal function

- Transformation and amplification of electrical signal of the sensor into signal which is suitable for the electronic control unit

Further implemented functions

- Supply drive signal to sensor element (current, oscillation, heating....)
- Compensation of manufacturing tolerances of sensor elements by end-of-line sensor specific comparison (e.g. sensitivity, offset)
- Compensation of temperature dependence
- Non-linear signal transformations
- Filtering in the frequency domain
- Integration of self test (electronics and mechanics)
- Over voltage and reverse voltage protection

Silicon Micromachining Technology

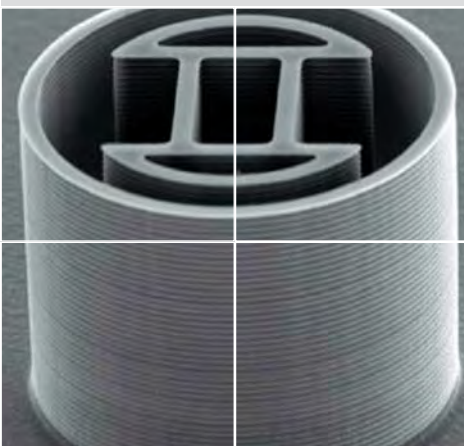
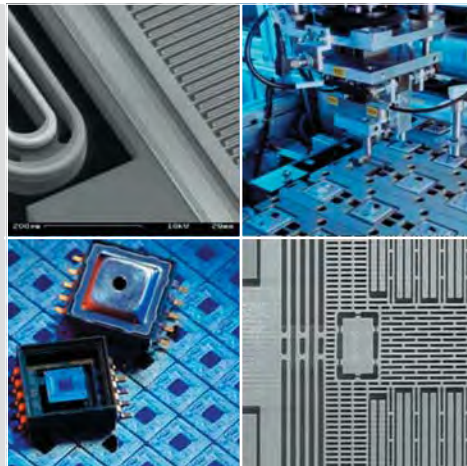
- Introduced in mid-90's as important new technology at Bosch
- Quickly became state-of-the-art

Benefits

- Silicon technology enables standard SMD packages
- Small size
- Reduced manufacturing cost vs. conventional technologies

Trends

- Further shrink and size reduction
- Close hybrid or monolithic integration with electronics



High Acceleration Sensors

- Sensor element: surface micromachining technology
- Small size
- SMD-housing
- Improved self-test capability
- Automotive temp.-range
- Reliability
- Single supply
- Ranges from
- $\pm 35g$ up to $\pm 200g$
- Single (x) and dual axis (x,y) in one package
- Analog or digital 2wire IF (PAS3; PAS4)
- Cost efficient solutions

Applications (automotive):

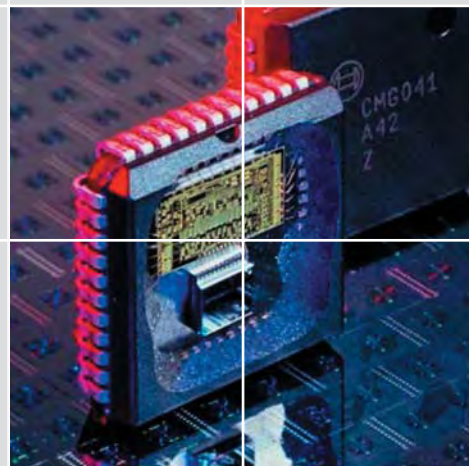
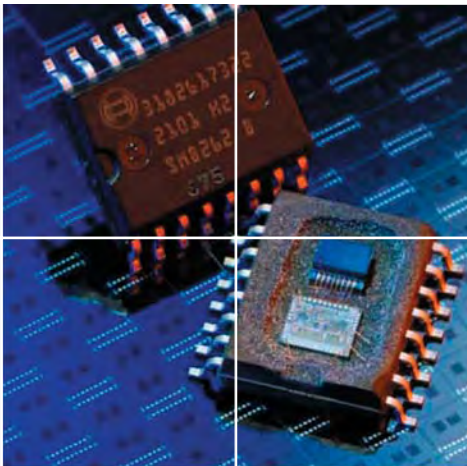
- Crash detection
- Restraint system

Angular Rate Sensors

- Sensor element: surface micromachining technology
- Sensitive axis: in-plane
- Low sensitivity
- Low parameter drift
- SMD-housing
- Full self-test capability (electronics and mechanics)
- Bandwidth adjustable by external capacitor
- Linear acceleration
- Ratiometrical analog Output
- Reliability
- Automotive temp. range
- Cost efficient solutions

Applications (automotive)

- Airbag (Rollover)
- Navigation



Pressure Sensors

Introduction

- Piezoresistive silicon pressure sensor
- On chip compensation circuit
- Electrical end of line trimming

Pressure ranges:

- ± 2.5 kPa up to 500 kPa (relative)
- 100 kPa up to 1000 kPa (absolute)

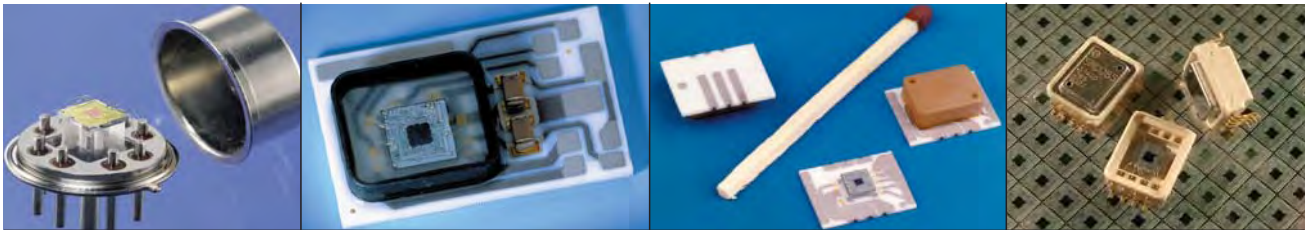
Applications (automotive):

- Barometric pressure
- MAP, turbo pressure
- Fuel tank pressure
- IPS (injection pressure)
- Oil pressure

Mass production since 1995

(more than 50 million pcs. in field)

BOSCH



Metal Can (SMD022/070)	Hybrid (SMD090/091/092)	Hybrid (SMD082)	Premold (SMD084/085/087)
20 - 105 kPa abs 10 - 115 kPa abs 20 - 115 kPa abs 20 - 250 kPa abs 20 - 300 kPa abs 50 - 350 kPa abs 15 - 380 kPa abs 50 - 400 kPa abs 50 - 600 kPa abs 50 - 1000 kPa abs $\pm 2,5$ kPa rel - 3,75 - 1,25 kPa rel 0 - 500 kPa rel	20 - 10 kPa abs 10 - 115 kPa abs 20 - 115 kPa abs 20 - 250 kPa abs 20 - 300 kPa abs 50 - 350 kPa abs 50 - 400 kPa abs -3,75 - 1,75 kPa rel 0 - 100 kPa rel -2 - 108 kPa rel	60 - 115 kPa abs 50 - 135 kPa abs	60 - 115 kPa abs

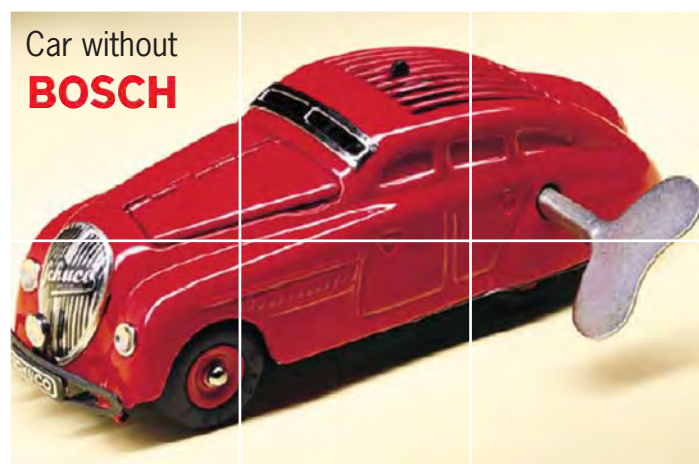
custom ranges on request

Applications:			
MAP Turbo Pressure Fuel Tank Pressure Oil Pressure	MAP Turbo Pressure	Barometric Pressure	MAP Turbo Pressure Barometric Pressure

Product Overview

Sensors

Product	Description	Package	Application	Status
SMD085	MAP, Turbo Pressure, Barometric Pressure Pressure range: 60 - 115 kPa, Burst pressure: 600kPa	SOIC8	Pressure Sensor	In Production
SMD090	MAP, Turbo Pressure Pressure range: 10 - 115 kPa	Hybrid	Pressure Sensor	In Production
SMB05x	Acceleration Sensor single axis; ± 35 g or ± 50 g (other g-ranges on request); analog output; tolerance: 5%	PLCC28	Airbag	In Production
SMB06x	Acceleration Sensor dual axis; ± 35 g or ± 50 g (other g-ranges on request); analog output; tolerance: 5%	PLCC28	Airbag	In Production
SMB25x	Acceleration Sensor single axis; ± 35 g, ± 50 g or ± 140 g (other g-ranges on request); analog output; tolerance: nom. 4% max. 5%	SOIC16	Airbag	In Production +/- 35g not yet in production
SMB26x	Acceleration Sensor dual axis; ± 35 g or ± 50 g (other g-ranges on request); analog output; tolerance: nom. 4% max. 5%	SOIC16	Airbag	In Production +/- 35g not yet in production
SMB120	Acceleration Sensor single axis; ± 50 g; digital 2-wire current I/F with PAS3 protocol; tolerance: nom. 5% max. 9%	PLCC28	Airbag	In Production
SMB124	Acceleration Sensor single axis; ± 100 g; digital 2-wire current I/F with PAS3 protocol; tolerance: nom. 5% max. 9%	PLCC28	Airbag	In Production
SMB172	Acceleration Sensor single axis; ± 200 g; digital 2-wire current I/F with PAS3 protocol; tolerance: nom. 10% max. 15%	PLCC28	Airbag	In Production
SMB180	Acceleration Sensor single axis; ± 50 g or ± 100 g; digital 2-wire current I/F with PAS4 protocol; tolerance: 5%; unique serial part no.	SOIC16	Airbag	In Production
SMB190	Acceleration Sensor single axis; ± 200 g; digital 2-wire current I/F with PAS4 protocol; tolerance: 10%; unique serial part no.	SOIC16	Airbag	In Production
SMG040	Angular Rate sensor Sensitive axis: in plane, $250^\circ/\text{s}$; offset: 2.5V; sensitivity: $6.72\text{mV}/^\circ/\text{s}$; noise: $<2\%$; non-linearity: $\pm 1\%$; analog output	PLCC44	Airbag (Roll-over)	In Production
SMG045	Angular Rate sensor Sensitive axis: in plane, $75^\circ/\text{s}$; offset: 2.5V; sensitivity: $24\text{mV}/^\circ/\text{s}$; noise: $<0.5\%$; non-linearity: $\pm 1\%$; analog output	PLCC44	Navigation	In Production



Product Overview



Sensor I/F Driver ICs

Product	Description	Package	Application	Status
CC195	Knock Detection IC 4 Inputs; Programmable Gain; Programmable BP Filter; Programmable Input Clock	PLCC 28	Motor-Management	In Production
CC196	Knock Detection IC 4 Inputs; Data RAM; Coefficient RAM; Freely Prammable FIR; SPHInterface; Coefficient Change on the fly	SOIC16W/ SOIC20	Motor-Management	In Production
CY100	8ch 5V ADC, 3V SPI 5V, 10 bit ADC; 3V SPI; Conversion Time 120µs; Interfaces: SPI, ISO; 8ch Multiplex	LQFP 32	Motor-Management	SOP 2005
CY30	Inductive Wheel Speed Measurement Sensor I/F for Inductive Rotation Speed Sensors, Open Drain Output	SOIC 8	Motor-Management	SOP 2005
CJ120	Lambda Probe Sensing IC For LSU4.x; Ri Measurement; SPHInterface; Diagnostics	SOIC 24	Motor-Management	In Production
CJ125	Lambda Probe Sensing IC For LSU4.x; Ri Measurement; SPHInterface; advanced Diagnostics	PLCC28/QFP32/SOIC24	Motor-Management	In Production
CJ110	Lambda Probe Sensing IC For LSU4.x	SOIC 16	Motor-Management	In Production
CA500	System Supply IC µC-Supply 5V,150mA; Reset; Analog-Supply 5V, 50mA; CAN-Transceiver; 3 * Lowside Switches 50mA	POS020	Chassis Systems	In Production
CG642	Seat Occupancy IC 25 sense inputs for precise resistor measurement (23 with low current driver capability, 2 with high current driver capability); Multiplexer; SPHInterface	PLCC44	Body Electronic	In Production
CS800	Wheel speed Interface IC Sensor supply for wheel speed sensors with magnetized pulse wheel (DF11); 4 current and voltage regulated high side power switches; VDA sensor interface	SOIC24	Chassis Systems	on request
CS830	Wheel speed Interface IC Sensor supply for wheel speed sensors with magnetized pulse wheel (DF11); 4 current and voltage regulated high side power switches; VDA sensor interface		Chassis Systems	In Development
CA700	Delta Sigma A/D Converter Delta Sigma A/D Converter for AMR sensors; high resolution; Digital signal processing and filtering, 2-wire digital power line communication		Chassis Sytems	
CG974	3*PAS4 IF for side airbag sensors Cascadable sensor supply; PAS3- and PAS4 protocol compatible data receiver; all functions controlled via SPI; analog output for sensor supply monitoring; for 5V and 3.3V systems	SOIC24	Airbag	In Production
CG975	Airbag Safety Controller 3 Watchdogs, Safety Path Feature, 12 Dedicated I/Os, Key Lock Control, 3 Channel Satellite Interface; SPI, Monitor-SPI	QFP44	Airbag	
CG570	2*PAS3 IF for side airbag sensor Sensor supply; PAS3-protocol compatible data receiver; all functions controlled via SPI; for 5V systems	SOIC16	Airbag	In Production

System ICs

Product	Description	Package	Application	Status
CY320	System Basis Chip for µC IFX TC17xx System supply: 5V + 3.3V + 2.5V + 1.5V; Sensor Supply: 2 x 5V + 3 x 3.3V; multiple wakable CAN-Transceiver; ISO-I/F; SPH/F; Sleep-Wake Control; STOP Counter; buck converter; advanced 3 level watchdog	Power SO 36	Motor-Management	SOP 2005
CY317	System Basis Chip		Motor-Management	In Production
CY315	System Basis Chip for µC MOTOROLA Oak System supply: 5V + 2.6V; sensor supply: 3 x 5V ; Standby supply: 3.3V; CAN-Transceiver; 2 x ISO-I/F; SP-I/F; RPM-I/F/ 4 x LSPS; 1 x HSPS; Wake Up Terminal 15; buck converter; reverse polarity protection	HiQUAD 64	Motor-Management	In Production
CY310	System Basis Chip for µC MOTOROLA Oak µC supply: 5V + 3.3V; Sensor supply: 3 x 5V; Standby supply: 3.3V; CAN-Transceiver; 2 x ISO-I/F; SPH/F; RPM-I/F; 4 x LSPS; 1 x HSPS	HiQUAD 64	Motor-Management	In Production
CG980	System Basis Chip for µC TI TMS470 µC supply: 5V + 3.3V + 1.8V; energy reserve for loss of battery		Airbag	
CS241	Power Supply for TI µC based Systems (ABS, EHB, ASR8) System supply: 5V + 3.3V + 1.8V; Sensor supply: 5V; Voltage reference; Loaddump monitor; Watchdog; ISO diagnostic interface; CAN-Transceiver; I/F for active wheelspeed sensors+F28/9 low side switches/ 2 drivers for external high side switches	HIQUAD64	Chassis Systems	on request

System ICs - continued

BOSCH

Product	Description	Package	Application	Status
CA500	Steering Wheel Signal and μ C Supply μ C-Supply: 5V, 150mA; Analog supply: 5V,50mA; CAN-Transceiver; 3 x LSPS 50mA; μ C Reset	POS020	Chassis Systems	In Production
CG680	Power Supply System supply for 5V system		Airbag	
CG681	Power Supply Supply for 2 Peripheral Acceleration Sensors (PAS3 Standard) and 2 ISO Interfaces	PLCC44	Airbag	
CJ910	SBC Supply: 5V \pm 2%, 600mA; Standby supply: 5V \pm 10%, 475mA in standby mode; 5V \pm 2%, 100mA the operating mode; Sensor supply: 5V \pm 2%, 130mA; HSPS: 100mA; LSPS: 100mA; overvoltage shutdown; free wheeling clamping voltage 40V	SOIC36	Motor-Management	In Production
CJ911	SBCPOS036	Motor-Management		In Production
CY141	Buck-Boost-converter/ semiconductor relay control Gate control for 5 external main relay MOSFET transistors; 1 main relay path with internal bypass in stand by mode for continuous supplied systems or components; short circuit monitoring; diagnosis for main relay paths; step up/step down switching regulator; short circuit current limiter; charge pump; SPI Interface; after run function; programmable via SPI	POS036	Motor-Management	In Production

Actuator Driver ICs

Product	Description	Package	Application	Status
CK110	Ignition Driver 6ch Ignition Transistor Driver for IGBT and BIP; Diagnostics function	SOIC20L	Motor-Management	In Production
CK200	Ignition Driver 6ch Ignition Transistor Driver for IGBT and BIP; SPHInterface; Reset; Bidirectional Igniter	SOIC20L	Motor-Management Diagnosis	on request
CJ450	4 x Low Side Power Switch 4 x 0.6A; 46V; Serial Interface; Diagnosis	PLCC28	Motor-Management	In Production
CJ406	4 x Low Side Power Switch 4 x 2.2A, 70V; Serial Interface; Diagnosis	Multi Watt 15	Motor-Management	In Production
CJ420	4 x Low Side Power Switch 6 x 2.2A, 70V; 2 x 2.2A, 45V; 2 x 2.7A, 45V; 4 x 0.6A, 40V; Serial Interface; Diagnosis	Power SO 20	Motor-Management	In Production
CJ920	14 x Low Side Power Switch 6 x 2.2A, 70V; 6 x 2.2A, 45V; 2 x 2.7A, 45V; 4 x 0.6A, 40V; Serial Interface, Diagnosis	HiQUAD 64	Motor-Management	In Production
CJ945	18 x Low Side Power Switch 6 x 2.2A, 70V; 6 x 2.2A, 45V; 2 x 3A, 45V; 4 x 1.1A, 40V; SPHInterface; Parallel Port; Diagnosis; High speed μ -sec. channel I/F	HiQUAD 64	Motor-Management	In Production
CJ220	H-Bridge RDSON 150mOhm; I _{max} = 6.3A; Diagnosis	Power SO 20	Motor-Management	In Production
CG202	Current Regulator Lowside for ext. Shunt Current Range with ext. 1W shunt: 0-1200mA; accuracy of arithmetic mean current with 1W Shunt: \pm 7mA at T _j = 25°C; opt. external Sync.; Diagnosis output; current setting by PWM; suitable also for highside application	SOIC16	Transmission-Control	In Production
CG205	Integrated Current Regulator Lowside Current range (integrated shunt): 0-1200mA; Regulation of arithmetic mean current; current setting by PWM; switching frequency set by ext. cap.; diagnosis output; opt. ext. Sync for output switching frequency; digital out for external power switch	SOIC16	Transmission-Control	on request
CG207	High Precision integrated Current Regulator Lowside Dual Channel Current Regulator; current range up to 1A , accuracy < 2,5%; fully integrated current controllers; digital control loop; LSPS; shunts and free wheeling diodes integrated; SPI controlled loop characteristics; full fault detection and protection	bare die	Transmission-Control	on request
CG208	High precision low cost Current Regulator Lowside Dual Channel Current Regulator; current range up to 1.2A; accuracy < 2%; fully integrated current controllers; LSPS; shunts and free wheeling diodes integrated; SPI controlled load current; SPI controlled dither ampl. and freq.; SPI controlled loop characteristics; fault detection and protection	POS036 or TQFP44_ePad	Transmission-Control	Under Specification

Product Overview

Actuator Driver ICs – continued



Product	Description	Package	Application	Status
CS363	Current Regulator Lowside Synchronized switchmode current controller for valves in electro hydraulic application; 4 Fold Valve Current Controller; current range: 50mA - 1.87A; PWM input control (synchronized)	HIQUAD64	Brake Systems	on request
CY220	Power stage control Power stage control of 2 x 4 (1 x 8) power stages for High pressure-DieselInjectors	MQFP64	Motor-Management	In Production
CG685	4 x Firing Loop IC for Airbag SystemsHigh Energy firing current 4 x 1.75A, 3ms; detection of: short to Ubat, short to ground, short in between firing loops; leakage to Ubat, leakage to ground, leakage to firing loops; squib resistance measurement; test current for resistance measurement; basic safety concept; SPI interface; 8 Channel; Tristate	SOIC24	Airbag	In Production
CG687	2 x Firing Loop IC for Airbag Systems Firing current 2 x 1.75A, 3ms; detection of: short to Ubat,short to ground, short in between firing loops, leakage to Ubat, leakage to ground, leakage to firing loops; squib resistance measurement; test current for resistance measurement; basic safety concept included; SPI interface; 6 Channel; Tristate	SOIC24	Airbag	In Production
CG984	4 x Firing Loop IC for Airbag SystemsHigh Energy Firing current 4 x 3.4A max, 3ms >25V; 4 x 2.8A max, 3ms <25V; detection of: short to Ubat, short to ground, short in between firing loops, leakage to Ubat, leakage to ground, leakage to firing loops; squib resistance measurement; test current for resistance measurement; sophisticated safety concept; SPI Interface; Firing current counter; full crosscoupling capability; 15 Channel; Tristate; Energy reserve voltage: 35V	QFP44	Airbag	In Production
CG988	8 x Firing Loop IC for Airbag SystemsHigh Energy Firing current 8 x 3.4A max, 3ms >25V; 8 x 2.8A max, 3ms <25V; detection of short to Ubat, short to ground, short in between firing loops, leakage to Ubat, leakage to ground, leakage to firing loops; squib resistance measurement; test current for resistance measurement; sophisticated safety concept; SPHInterface; Firing current counter; full crosscoupling capability; 26 Channel; Tristate; Energy reserve voltage: 35V	QFP44	Airbag	In Production
CG983	4 x Firing Loop IC for Airbag Systems - High Energy Firing current 4 x 2A max, 1ms or 1.2Amax, 3ms, >25V; 4 x 1.75Amax, 3ms <25V; detection of: short to Ubat, short to ground, short in between firing loops; leakage to Ubat, leakage to ground, leakage to firing loops; squib resistance measurement; test current for resistance measurement; sophisticated safety concept; SPI Interface; Firing current counter; full crosscoupling capability; 15 Channel; Tristate; Energy reserve voltage: 35V	QFP44 / QFP32	Airbag	In Production
CG987	8 x Firing Loop IC for Airbag Systems - High Energy Firing current 8 x 2A max, 1ms or 1.2A max, 3ms >25V; 8 x 1.75A max, 3ms <25V; detection of: short to Ubat, short to ground, short in between firing loops; leakage to Ubat, leakage to ground, leakage to firing loops; squib resistance measurement; test current for resistance measurement; sophisticated safety concept; SPI Interface; Firing current counter; full crosscoupling capability; 26 Channel; Tristate; Energy reserve voltage: 35V	QFP44	Airbag	In Production
CG989	8 x FLIC for Airbag Systems - Low Energy Firing current 8 x 1.2A max, 2ms; 8 x 1.75A max, 0.5ms; detection of short to Ubat, short to ground, short in between firing loops, leakage to Ubat, leakage ground, leakage to firing loops; squib resistance measurement; test current for resistance measurement; sophisticated safety concept; SPI interface; Firing current counter; full crosscoupling capability; 26 Channel; Tristate; Energy reserve voltage: 35V	QFP44	Airbag	SOP E2005
CG985	4 x Firing Loop IC for Airbag Systems - Low Energy Firing current 4 x 1.2A max, 2ms; 4 x 1.75A max, 0.5ms; detection of: short to Ubat, short to ground, short in between firing loops / leakage to Ubat, leakage to ground, leakage to firing loops; squib resistance measurement; test current for resistance measurement; sophisticated safety concept; SPI Interface; Firing current counter; full crosscoupling capability; 15 Channel; Tristate; Energy reserve voltage: 35V	QFP44	Airbag	SOP E2005
CM156	Dashboard Driver IC Power-On reset; On-Chip oscillator; SPI-interface (4 MHz); 6 fold stepping motor driver; 5 low side driver for illumination; 11 low side driver (max. 50mA) for telltales brightness regulated; 8 low side driver (max. 50mA) for telltales open load and over current detection,max. current 50mA for each driver	QFP64	Body Electronic	In Production
BIP172	CE voltage clamp: 360V Max. base current: 100mA; Vsat: <2V	TO220/ D2PAK	Ignition stage	In Production
BIP350	CE voltage clamp: 375V Max. base current: 100mA; Vsat: <2V	TO220/ D2PAK	Ignition stage	In Production
BIP355	CE voltage clamp: 375V Max. base current: 500mA; Vsat: <2V	TO220	Ignition stage	In Production
BIP372	CE voltage clamp: 375V Max. base current: 200mA; Vsat: <2V; Over temp. det.: 195°C	D2PAK	Ignition stage	In Production
BIP380	CE voltage clamp: 375V Max. base current: 200mA; Vsat: <2V; Over temp. det.: 195°C	TO218/3	Ignition stage	In Production
BIP390	CE voltage clamp: 375V Max. base current: 150mA; Vsat: <2V; Collector current flag: 2A	TO218/5	Ignition stage	In Production
BIP142	Vsat: <2V		Ignition stage	
BIP306	CE voltage clamp: 375V Max. base current: 200mA; Vsat: <2V; Over temp. det.: 195°C; collector current flag: 2A; Voltage flag: 105V	PSO10	Ignition stage	In Production

CAN from Bosch

BOSCH

Product	Description	Package	Application	Status
CF150	CAN Transceiver 5V- μ C Interface; High-Speed CAN-Transceiver acc. to ISO 11898; Slew rate Control	SOIC 8	CAN Transceiver	In Production
CF151	CAN Transceiver 5V- μ C Interface; High-Speed CAN-Transceiver acc. to ISO 11898; Slew rate Control; Optimised for 24V bordnet Application	SOIC 8	CAN Transceiver	In Production
CF160	CAN Transceiver 5V- μ C Interface; High Speed CAN-Transceiver acc. to ISO 11898; Reset function; improved EMC	SOIC 8	CAN Transceiver	In Production
CF163	CAN Transceiver 3V- μ C Interface; High Speed CAN-Transceiver acc. to ISO 11898; improved EMC	SOIC 8	CAN Transceiver	In Production
CF173	CAN Transceiver 3V- μ C Interface; High Speed CAN-Transceiver acc. to ISO 11898; Sleep-Wake Up; ESD 4kV	SOIC 8	CAN Transceiver	In Production
CF175	CAN Transceiver 5V- μ C Interface; High Speed CAN-Transceiver acc. to ISO 11898; Sleep-Wake Up; ESD 4kV	SOIC 8	CAN Transceiver	In Production
CC750	CAN Controller 15 Message Objects	SOIC16C	CAN Controller	In Production
CC770	CAN Controller 15 Message Objects; 2 x 8bit Bidirectional I/O Ports; programmable Clock Input	PLCC44	CAN Controller	In Production



Quality

- certified quality management
- certified company management
- permanent process control

Profile

- prompt decisions
- maximum performance
- personal commitment



rutronikplus⁺

For quality and security.



Europe

- local presence all over Europe
- economic independence
- maximum supply capability

Innovation

- leading manufacturer
- direct innovation transfer
- comprehensive portfolio



committed to excellence



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