

ICCS MICRO CAN 4 I/O

Controllers



ICCS Micro CAN 4 I/O – Standalone module or extension module to an existing CAN bus system. The module is equipped with a Freescale HCS08 processor with flash-technology and offers multiple programming possibility. Therefore, an extensive control system can be built up. The software boot loader has the ability to update the firmware directly through the CAN bus interface. The integrated CAN bus interface supports the data with the vehicle and Wake-On-CAN feature.

Applications

- Input and output extensions for CAN bus systems
- Sensors to CAN module
- Programmable logic allows local execution of complex tasks and data preformatting

Technical data

General information	
Connector	9 pins DIN
Dimensions	30 x 30 x 40 mm
Weight	~30 g
Operating temperature	-40 °C to 85 °C (no full load at 85 °C)
Storage temperature	-40 °C to 85 °C
Ingress protection	IP53
EMC	ECE10 Rev.4 : E1 7199
Operating voltage	9 to 30 V DC 10 A
Current consumption	25 mA
Processor type	Freescale HCS08
Clock frequency	20 MHz
Flash memory	60 kB
RAM	4 kB
EEPROM	1 kB available for graphical programming
EEPROM	1 kB available for graphical programming

CAN bus	
acc. ISO 11898-5	High speed, low power, with wake up
acc. CAN 2.0B	29 Bits extended address identifier
acc. CAN 2.0A	11 Bits address identifier
Baud rate	20 kBit/s to 1000 kBit/s (125 kBit/s default value)

Inputs / outputs overview		
Qty	I/O type	Description
4	Analogue inputs or digital outputs	0 – 10 V DC 12 bits max 2 A
1	Analogue input	0 – 10 V DC 12 bits

Every analogue input is also usable as a digital input in the programming software.

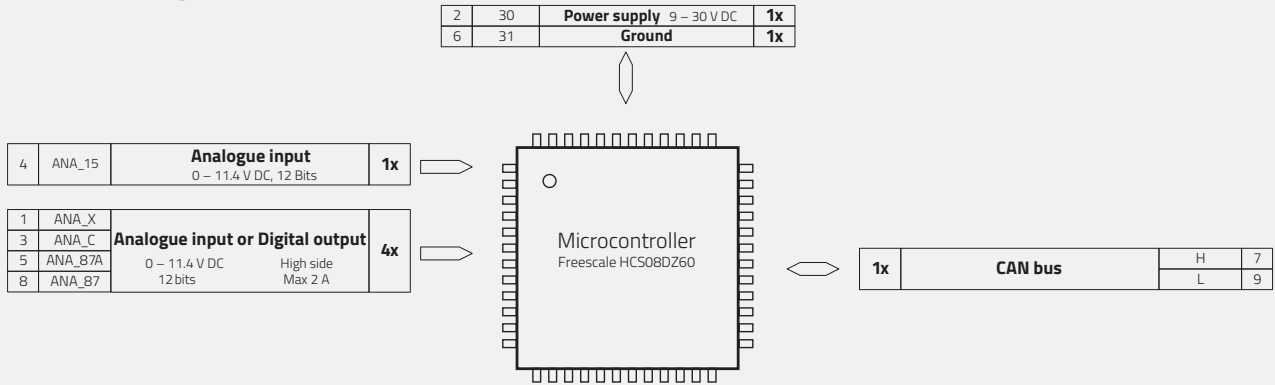
Inputs / outputs details	
Analogue inputs	
Input voltage range	0 – 11.4 V DC
Input voltage max	Vsupply
Resolution	12 bits
Input resistance	22.6 kΩ
Input frequency	max 30 Hz (0 – 11.4 V DC)
Digital outputs	
High side	
Load current	max 2 A
PWM outputs	
PWM frequency	max 1 kHz
Duty cycle	0 to 100 %
Resolution	0.1 %
Load current	max 1 A

If analogue input is used as a digital input, the switch-on and switch-off levels are 7 V and 4 V DC.

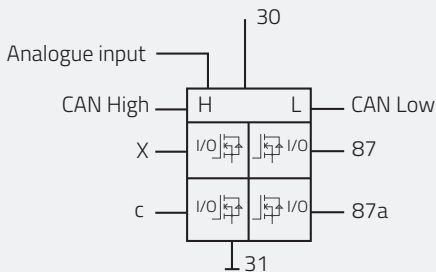
ICCS MICRO CAN 4I/O

Controllers

Hardware map



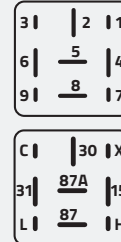
Schematics



FLASH	60 kB
RAM	4 kB
EEPROM	1 kB*

*EEPROM available for user data

Pinout of the module
(bottom view)



Pin assignment

Connector ICCS Micro CAN 4I/O		
Pin	Description	Function
1	X	I/OX
2	30	Main power supply 9 – 30 V DC
3	C	I/O C
4	15	Analogue input 0 – 10 V DC
5	87A	I/O 87 A
6	31	Ground
7	CAN-H	CAN bus high
8	87	I/O 87
9	CAN-L	CAN bus low

Dimensions



Order information

Available references	Part number
ICCS Micro CAN 4I/O	ICS-102399

For more information write us an e-mail
ics@we-online.com, call **+49 7940 9810-0**
or visit us at www.we-online.com/ics

Würth Elektronik ICS GmbH & Co. KG
Intelligent Power & Control Systems
Gewerbepark Waldzimmern · Würthstraße 1
74676 Niedernhall · Germany
Tel.: +49 7940 9810-0 · Fax +49 7940 9810-1099
ics@we-online.com · www.we-online.com/ics