



# M2600 CAN PLC





## Technical Data

Construction	Metal housing
Connector	42 pin Tyco JPT
Housing Dimensions	160 x 120 x 50 mm
Weight	
Ambient Temperature	-40°C up to 85°C
Storage Temperature	-40°C up to 85°C
Protection Class	IP65
Operating Voltage U <sub>B</sub>	9-30 V
Protection against reverse polarity and electrical transients. The connectors are rated for 10 A, so the module can deliver up to 20 A.	
Current Consumption	ca. 3 mA
Protection	ca. 30 A

## Processor

	Main Processor	Watchdog
Manufacturer	Freescale	Freescale
Processor Type	S12XEQ384	S9S08DZ60
Clock Frequency	100 MHz	40 MHz
Flash	384 K	60 K
Ram	24 K	4 K
EEPROM	4 K	2 K

## Interfaces

### CAN-bus

According to ISO 11989-3/5	Low/high-speed
According to CAN 2.0B	29-bit extended address identifier
According to CAN 2.0A	11-bit address identifier
Baud Rate	20 kBit/s – 1000 kBit/s Default 125 kBit/s

### RS232 & RS485

Baud Rate	4.8 kBit/s – 115.2 kBit/s
After assembly, the bus option RS232 or RS485 can't be changed	

## Technical Examination

EMV	2006/96/EG; DIN 40839 in progress
E1 Approval Number	047279

## Possible Inputs and Outputs

Digital Inputs		6
Analog Inputs		8
Digital Outputs	with integrated current measurement	12
PWM Outputs	with integrated current measurement	8



## Technical Data Inputs and Outputs

### Characteristics of Digital Inputs

Input Voltage	0 V ... U <sub>B</sub>
Start-up Level	U <sub>B</sub> / 3
Start-off Level	U <sub>B</sub> / 3 – U <sub>hysteresis</sub>
Hysteresis	2 V
Input Resistance	2.79 k
Input Frequency	6 kHz

### Characteristics of Digital Outputs

Load Current	2.5 A
Overload Capability	Max. 5 A

### Characteristics VRef-Output

Output Voltage	5 V / 10 V
Load Current	500 mA

### Characteristics Analog Inputs

Input Voltage	0.0 – 12.1 V / 35.6 V / 24 mA
Resolution	12-bit
Input Resistance	80 k / 54.7 k
Pull-up Resistor	10 K
Pull-down Resistor	1.8 k / for current measurement 0.5 k
Input Frequency	10 Hz

### Characteristics PWM-Outputs

PWM-Frequency	1 kHz
Duty Cycle	0 ... 100 %
Resolution	Frequency dependent
Load Current	2.5 A
Overload Capability	Double switching current for max. 5 minutes

## Programming

Interface	CAN-bus
Software	MRS Developers Studio with built-in function library, similar programmable like FUP. Customized program components can be integrated into "C-code". Program memory is sufficient for about 300 simple components.

## Connection assignment

Pin	Signal	Pin description
1	GND	Mass
2	DO12	Digital output
3	DO11	Digital output
4	DO10	Digital output
5	DO09	Digital output

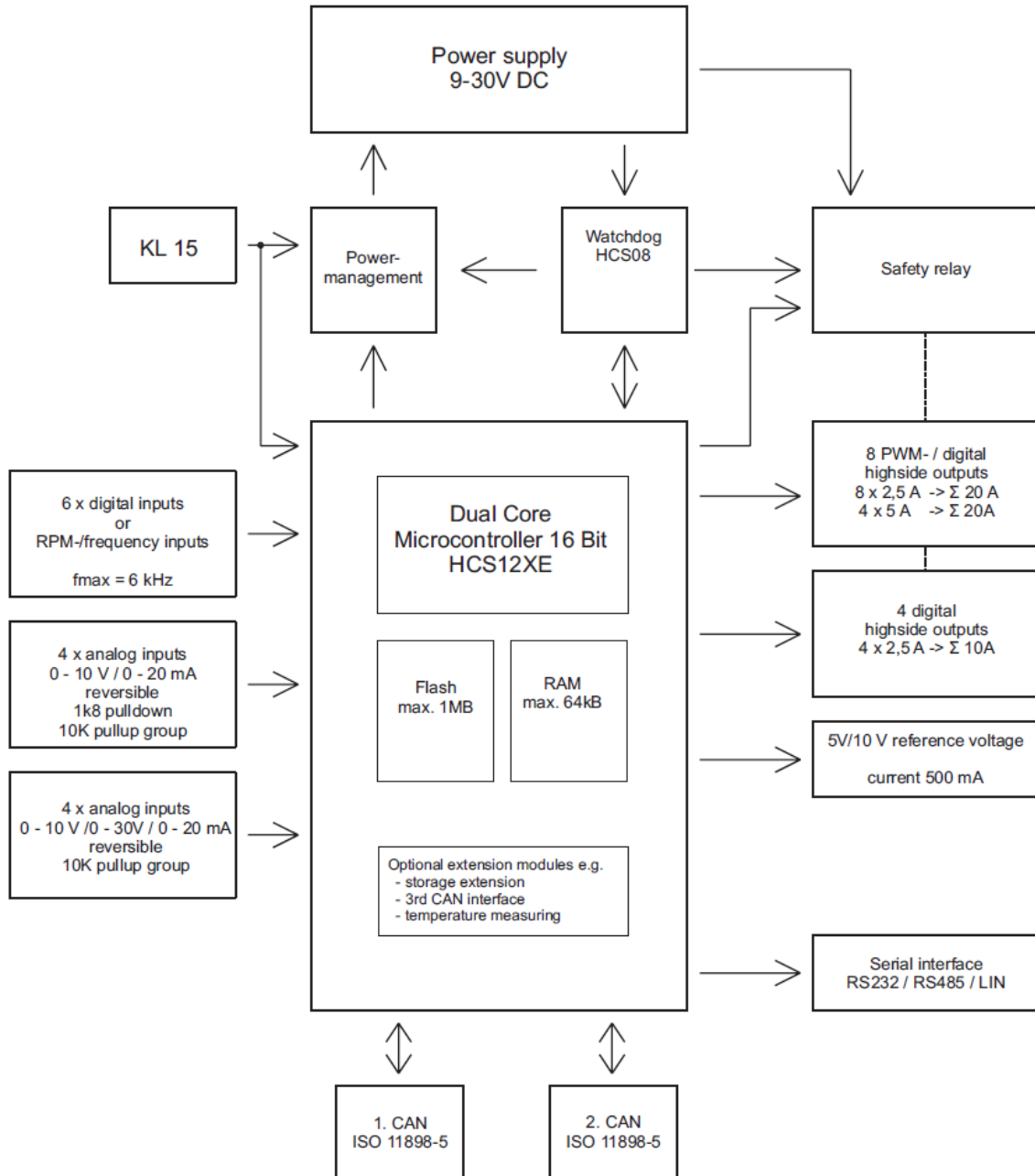
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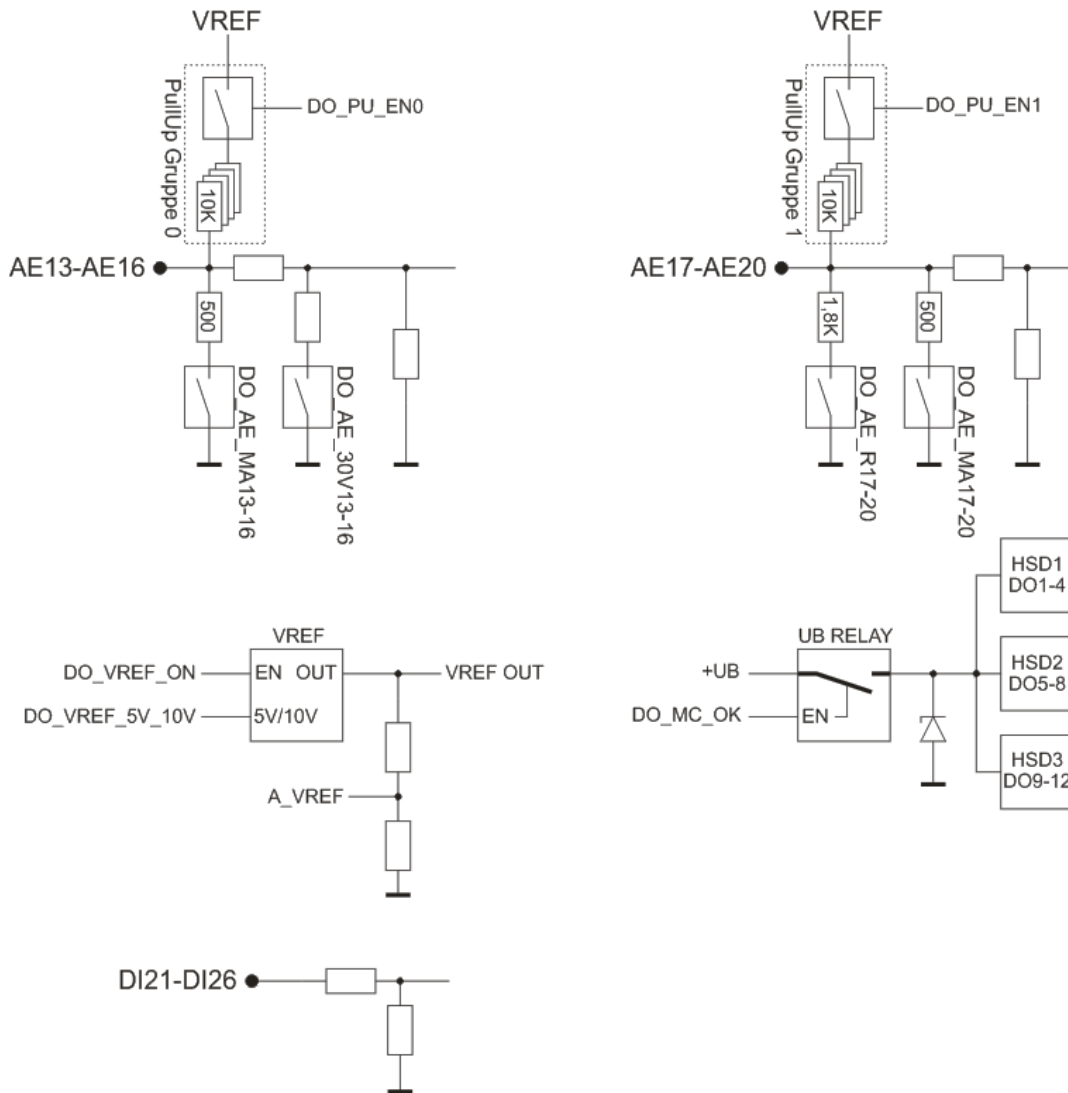


6	DO/PWM04	Digital output / PWM-output
7	DO/PWM03	Digital output / PWM-output
8	DO/PWM02	Digital output / PWM-output
9	DO/PWM01	Digital output / PWM-output
10	DO/PWM08	Digital output / PWM-output
11	DO/PWM07	Digital output / PWM-output
12	DO/PWM06	Digital output / PWM-output
13	DO/PWM05	Digital output / PWM-output
14	+UB	Supply output
15	GND	Mass
16	KL15	Ignition
17	CAN1L	CAN-bus
18	RS232 TXD	RS232 send (Option) (CAN3H)
19	Ident-Pin	Ident-pin
20	DIN21	Digital input
21	DIN22	Digital input
22	DIN23	Digital input
23	CAN2H	CAN-bus
24	AE13	Analog input
25	AE14	Analog input
26	AE15	Analog input
27	AE16	Analog input
28	+UB	Supply output
29	LGND	Mass low side
30	+Ue	Supply electronic
31	CAN1H	CAN-bus
32	+5V/10Vref	Reference voltage
33	RS232 RXD	RS232 receipt (Option) (CAN3L)
34	DIN24	Digital input
35	DIN25	Digital input
36	DIN26	Digital input
37	CAN2L	CAN-bus
38	AE17	Analog input
39	AE18	Analog input
40	AE19	Analog input
41	AE20	Analog input
42	+UB	Supply output



**Block diagram**





### Order information

Designation	Execution	Order Number
M2600 CAN PLC	2 x CAN-high speed, RS232	1.260.300.00

### Accessories

Designation	Order Number
Software Tool MRS Developers Studio	1.100.100.09
Cable Set for M2600 CAN PLC	108890
Connector Package	108888
PCAN-USB Interface	105358