



M2600 ECO CAN PLC





Technical data

Construction	V2A half shell
Connector	42 pin Tyco JPT
Housing dimensions	150 x 110 x 45 mm
Weight	
Ambient temperature	-40°C up to 85°C
Storage temperature	-40°C up to 85°C
Protection class	IP65
Operating voltage U_B	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	< 100 mA
Protection	ca. 30 A
Quiescent current	< 50 μ A (12 V)

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
Baudrate	20 kBit/s – 1000 kBit/s Default 125 kBit/s

RS232 & RS485

Baudrate	4,8 kBit/s – 115,2 kBit/s
After assembly, the bus option RS232 or RS485 can't be changed.	

Technical examination

EMV:	2014/30/EU
E1 approval number:	06 7279



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_B
Start-up level	$U_B / 3$
Start-off level	$U_B / 3 - U_{\text{hysteresis}}$
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.

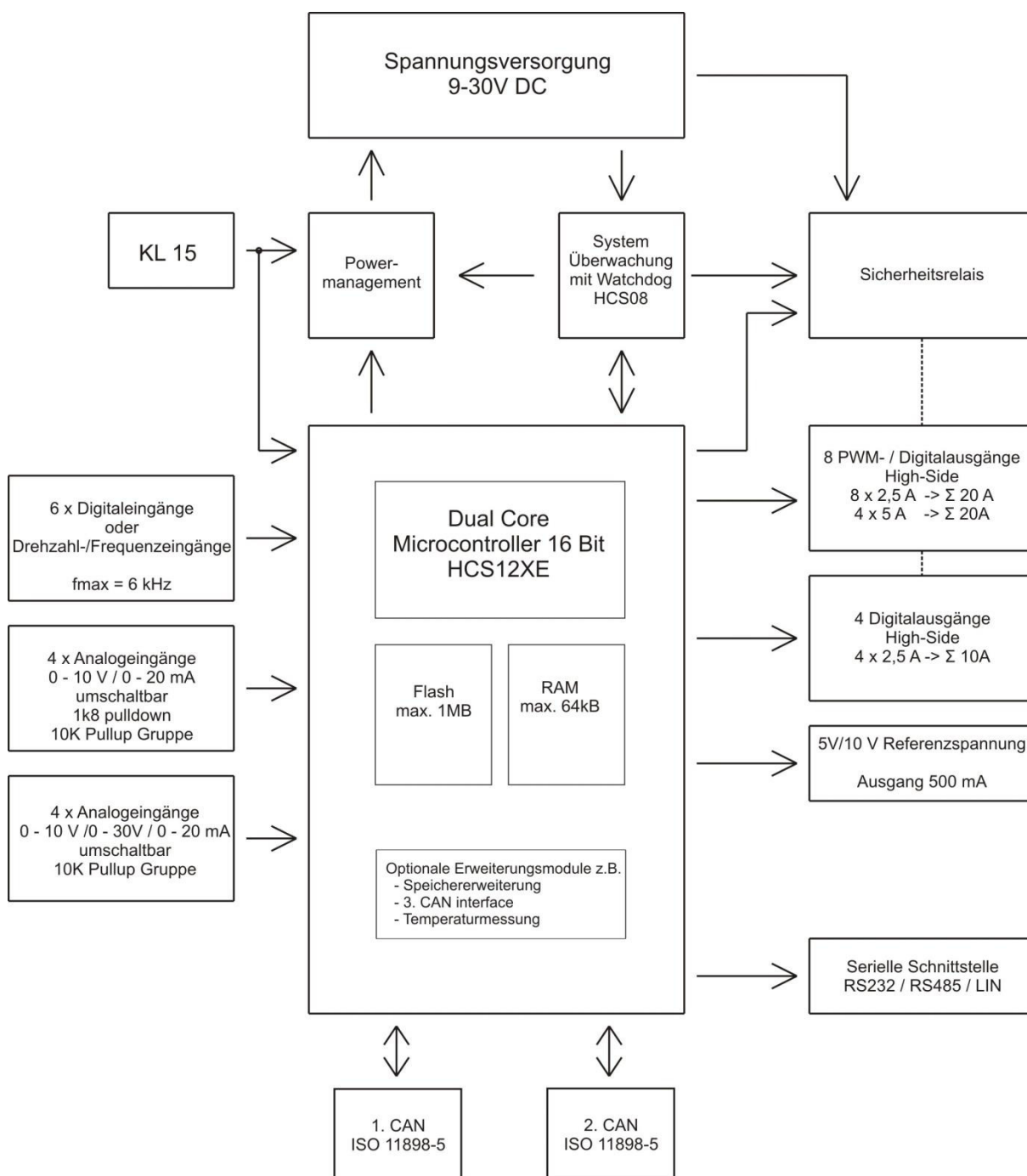
For extended storage capacity from 32k you need the Codewarrior license. Download the paid license easily and securely from NXP.

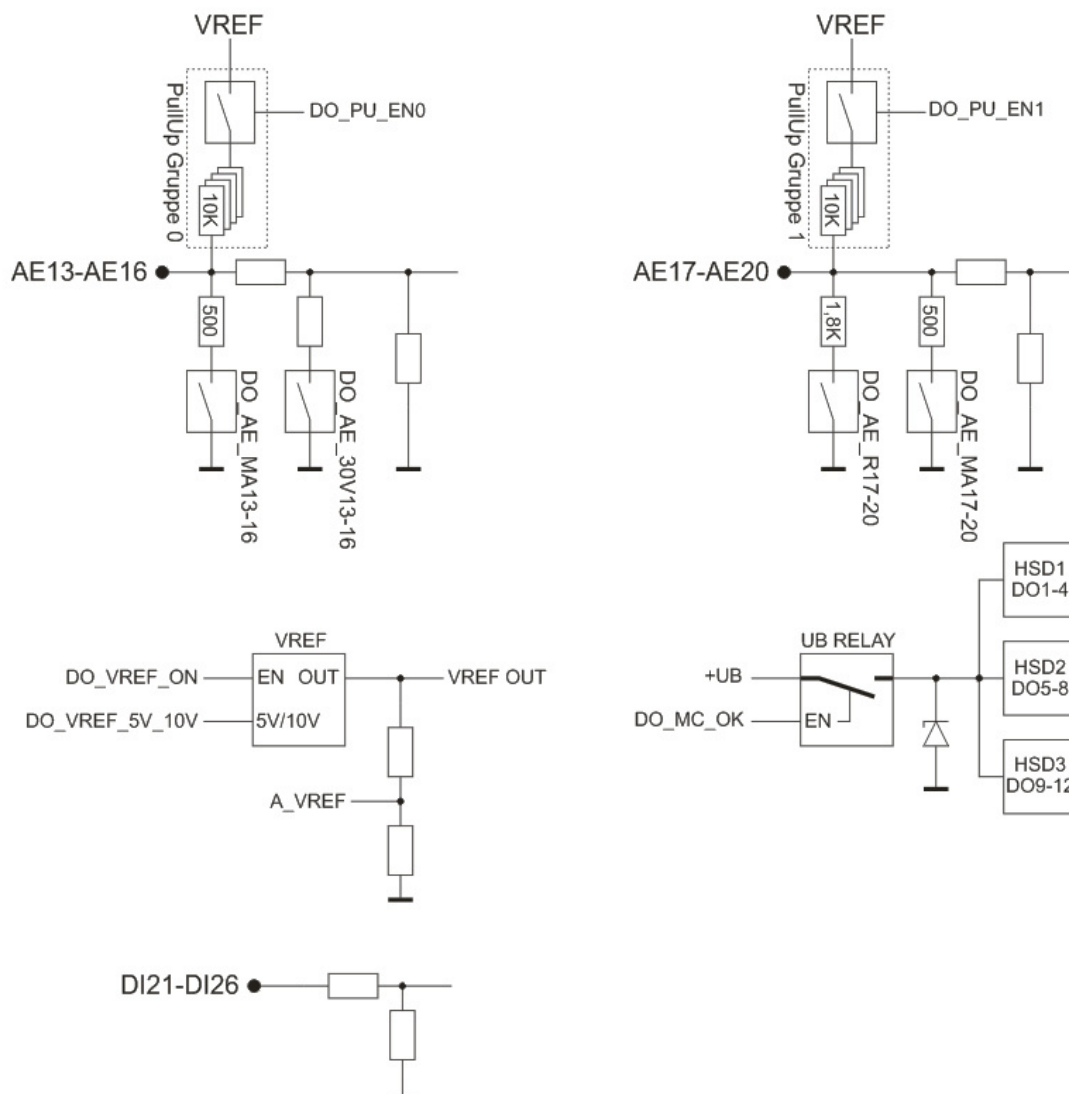


Connection assignment

Pin	Signal	Pin description
1	GND	mass
2	DO12	digital output
3	DO11	digital output
4	DO10	digital output
5	DO09	digital output
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	n.c.	not connected
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





Ordering information

Designation	Execution	Order-No.
M2600 ECO CAN PLC	2 x CAN high speed, RS232	1.261.300.00
M2600 ECO CAN PLC	3 x CAN high speed	1.261.303.00

Accessoires:

Designation	Order-No.
Softwaretool MRS Developers Studio	1.100.100.09
Cable set for M2600 CAN PLC	108890
Connector package	108888
PCAN-USB Interface	105358