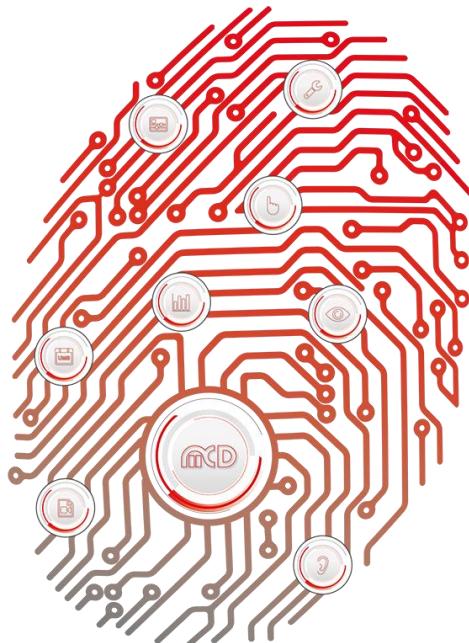


Manual

Screening Box



GET IN touch
WITH SENSITIVE TESTING

Softline —

Modline —

Conline —

Boardline —

Avidline —

Pixline —

Application —

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1. General

When operating EOL -, FCT -, RunIn - and Screening test systems, it is often to examine many similar devices. The samples are addressed and stimulated simultaneously through CAN, LIN, RS232 or I²C. Usually, appropriate hardware is very complex and expensive but due to MCD's flexible system that can be changed now.

The Screening Box is configured via Ethernet and, if necessary, controlled. Via the hat - rail module, several Screening Boxes can be connected to each other, controlled and supplied without further wiring effort.

Order number: #122640

2. Extent of Delivery

- 1 x Screening Box
- 1 x Top - DIN rail module
- 6 x Connectors for front panel
- 1 x Connector for top - DIN rail module
- Coding element for connectors

3. Block Diagram

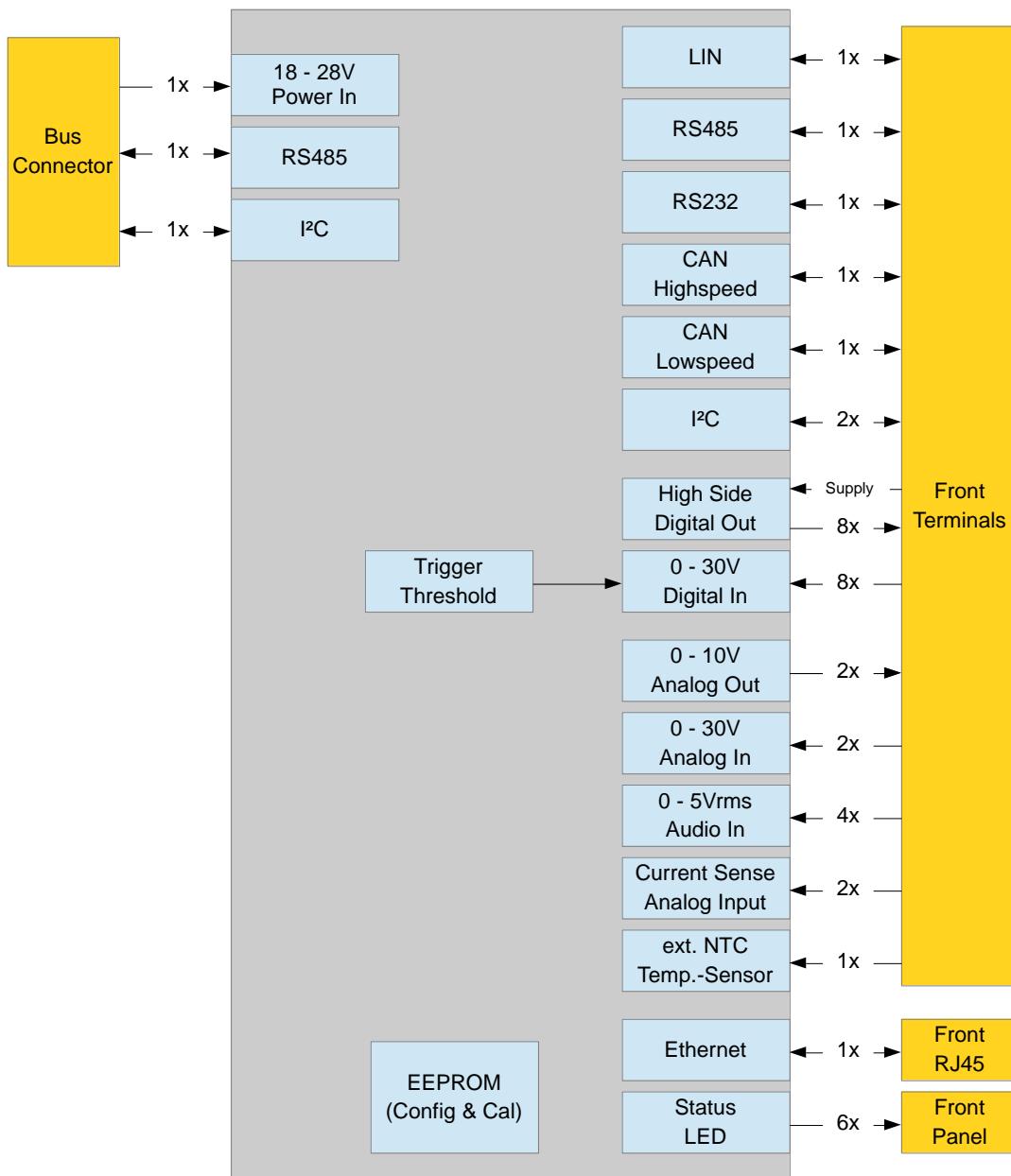


Figure 1: Block Diagram Screening Box

4. Pin Assignment

Front Terminals

Digital Out	1	DO1	DO2	2	
	3	DO3	DO4	4	
	5	GO5	DO6	6	
	7	DO7	DO8	8	
	9	GND	GND	10	
	11	GND	GND	12	
	13	VDO	UB	14	
Digital In	15	DI1	DI2	16	
	17	DI3	DI4	18	
	19	DI5	DI6	20	
	21	DI7	DI8	22	
	23	GND	GND	24	
	25	GND	GND	26	
	27	UB	UB	28	
Analog In	29	AI1+	AI1-	30	
	31	AI2+	AI2-	32	
	33	GND	GND	34	
Analog Out	35	AO1	GND	36	
	37	AO2	GND	38	
Audio In	39	Au1+	Au1-	40	
	41	Au2+	Au2-	42	
	43	Au3+	Au3-	44	
	45	Au4+	Au4-	46	
	47	GND	GND	48	
Temperature Sensor	49	K1	K2	50	
Current sensing	51	I1+	I1-	52	
	53	I2+	I2-	54	
CAN HS	55	C1+	C1-	56	
CAN LS	57	C2+	C2-	58	
LIN	59	Line	GND	60	
RS232 (test item)	61	TX	RX	62	
	63	RTS	CTS	64	
	65	GND	GND	66	
RS485 (test item)	67	D+	D-	68	
I ² C	69	SDA1	SCL1	70	
	71	SDA2	SCL2	72	



Bus Connector

Backbus	1	GND
	2	RS485 +
	3	RS485 -
Power	4	GND
	5	VCC
	6	VCC
	7	Reserved
	8	Reserved
HMI I ² C	9	SDA
	10	SCL

5. Technical Data

Analog Input (General Purpose)		
Amount of channels	2	
Input architecture	Differential	
Input range	0...30 V	
Resolution	12 Bit	
Analog Input (Audio)		
Amount of channels	4	
Input architecture	Differential	
Input range	0...5 Vrms	
Resolution	12 Bit	
Analog Input (Strom Sense)		
Amount of channels	2	
Input architecture	Differential	
Input range	0...30 mV / 60 mV / 120 mV / 150 mV	
Resolution	12 Bit	
Common mode voltage	2,9...70 V	
Input current	Typ. 11 µA max. 16 µA	
Analog Output		
Amount of channels	2	
Output architecture	Single ended	
Output range	0...10 V	
Output current	Max. 10 mA	
Resolution	12 Bit	
Digital Input		
Amount of channels	8	
Switching threshold	0,2...30 V adjustable	
Maximum input voltage	30 V	Short term up to 50 V

Digital Output		
Amount of channels	8	
Output architecture	High Side	
Output voltage	0...45 V	Depending on external supply
Output current per channel	Max. 1 A	
Output current total	Tbd	
Input temperature sensor		
Amount of channels	1	
Sensor type	NTC 20 k	
Meaurement range	-20°C...110°C	
Resolution	1 Kelvin	
Measurement type	2 - wire measuring	
I²C Interface		
Amount of channels	2	
Clock rate	100 kHz	
Pull up voltage	3,3 V or 5 V	Intern switchable
LIN		
Amount of channels	1	
Baud rate	Up to 20 kBaud	
Transceiver	TJA1027	
Internal Pull up	Optionally switchable	
CAN Low Speed		
Amount of channels	1	
Baud rate	Up to 125 kBaud	
Transceiver	TJA1055	
CAN High Speed		
Amount of channels	1	
Baud rate	Up to 1 MBaud	
Transceiver	MCP2562	
Closing termination	Optionally switchable	

RS232		
Amount of channels	1	
Baud rate	9600 ... 115200 Baud	
Hardware handshake	Optional with RTS and CTS	
RS485		
Amount of channels	1	
Baud rate	9600 ... 115200 Baud	
Closing termination	Optionally switchable	
Bias supply	5 V / 2 x 560 R optionally switchable	
Supply		
Voltage	24 V (18...28 V)	
Current consumption	Typ. 0,4 A	
Supply connection	At the front side or via top - DIN rail	
Control Port		
Interface type	Ethernet 10Mbit / 100MBit	
Connection	RJ45 on the front side	