Ixxat®
BY HMS NETWORKS

CAN-IB200/PCIe

Active CAN Interface for PCI Express

1-4 x CAN (High-/Low-Speed), LIN

With the CAN-IB200/PCIe HMS offers an interface board based on a modern and highly modular concept. The board covers the entire range of field buses, such as CAN (ISO 11898-2), fault tolerant CAN (ISO 11898-3) and LIN, and is available with a standard or a low-profile slot bracket.

FEATURES AND BENEFITS

- Active card with 32 bit microcontroller
- Easy expandable via field bus expansion and expansion board
- Up to four CAN channels (High-/Low-Speed optional switchable)
- LIN optional
- Available as standard and low-profile version
- Optional galvanic isolation of the CAN interface
- Uniform driver packages support all IXXAT CAN and CAN-FD interfaces and allow easy change of the PC interface type
- Powerful programming interface for Windows "VCI" as well "ECI" for Linux, QNX, RTX, INtime and VxWorks

VERSIONS

The CAN-IB200/PCIe is available with up to four CAN channels and can be delivered with galvanic isolated interfaces. For use in the automotive field the high-speed CAN channels can optionally be switched to low-speed CAN via software. In addition, the card can be equipped with up to four LIN interfaces. Furthermore, the modular architecture of the interface card enables the easy extension with customer specific interfaces via piggyback modules.

Due to the high number of interfaces, the board is also suitable for demanding applications - such as

- test benches,
- handling systems or
- manufacturing plants.

If necessary, the number of interface channels can be extended by using multiple cards within one PC.

The board is supported by the IXXAT driver packages and higher layer protocol APIs as well as by the IXXAT tool suite.

TECHNICAL SPECIFICATIONS

PC bus interface	PCI express (V1.1)
PC address range	Plug & Play
Interrupts	Plug & Play
Microcontroller	32 bit microcontroller
CAN interface	1, 2 or 4 CAN interfaces; CAN 2.0 A/B; Sub-D9 plug according to CiA 303-1 **Optional**: CAN Low-Speed (switchable via software between CAN High-Speed and Low-Speed) **Optional**: Galvanic isolation (1 kV, 1 sec.)
LIN interface	**Optional:** up to 4 LIN (ISO 9141) interfaces; Sub-D9 plug
Power supply	3.3 V DC, 390 mA typ.
Temperature range	0 ºC ... +70 ºC
Certification	CE, FCC
Size	Approx. 65 x 105 mm (available as standard and low-profile version)

CONTENTS OF DELIVERY

- PC/CAN interface card, manual
- CAN driver VCI for Windows 10 (32/64) / Windows 8 (32/64) / Windows 7 (32/64) / Windows XP SP2 (older versions on request)
- Simple CAN monitor "canAnalyser Mini"

Order numbers

Standard Slot Bracket Version

CAN ports	Galv. iso.	Order numbers	Optional expansions	Additional information
1	-	**1.01.0233.11000**		
1	X	**1.01.0233.12001**	**1 x Fieldbus Expansion** For variants and order numbers see table below	
2	-	**1.01.0233.21000 ***		
2	X	**1.01.0233.22001**	**1-2 x Fieldbus Expansion** For variants and order numbers see table below	
4	X	**1.01.0233.22001** **+ 1.01.0242.22000** Multi CAN Expansion		Two CAN ports on each SUB-D9 plug
4	X	**1.01.0233.22001** **+ 1.01.0240.22103** CAN Expansion Board	**1-4 x Fieldbus Expansion** For variants and order numbers see table below	Two slot bracket ports required

Low Profile Slot Bracket Version

CAN ports	Galv. iso.	Order numbers	Optional expansions	Additional information
1	X	**1.01.0234.12001 ***	**1 x Fieldbus Expansion** For variants and order numbers see table below	
2	X	**1.01.0234.22001 ***	**1-2 x Fieldbus Expansion** For variants and order numbers see table below	Two slot bracket ports required
4	X	**1.01.0234.22001 *** **+ 1.01.0242.00001** Multi CAN Expansion		Two CAN ports on each SUB-D9 plug Two slot bracket ports required
4	X	**1.01.0234.22001 *** **+ 1.01.0240.22203** CAN Expansion Board	**1-4 x Fieldbus Expansion** For variants and order numbers see table below	Four slot bracket ports required

* this product variant is not recommended for new developments

Fieldbus Expansions
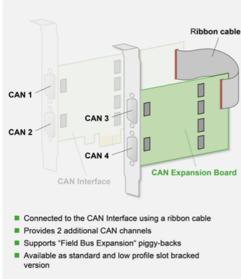
Type	Galv. iso.	Order numbers
CAN Low-Speed (ISO 11898-3)	X	**1.01.0241.20001**
LIN (ISO 9141), V Bat 8-48 V DC extern	X	**1.01.0241.20014**
CAN Low-Speed (ISO 11898-3) + LIN (ISO 9141)	X	**1.01.0241.20100**

Expansions

(click to enlarge)

CAN Expansion Board

CAN 1
CAN 2
CAN 3
CAN 4

Ribbon cable

CAN Interface

CAN Expansion Board

- Connected to the CAN Interface using a ribbon cable
- Provides 2 additional CAN channels
- Supports "Field Bus Expansion" piggy-backs
- Available as standard and low profile slot bracked version

Fieldbus Expansion

Fieldbus Expansion
Fieldbus Expansion

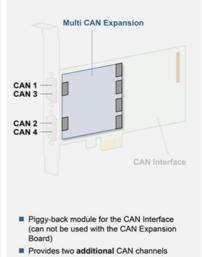e.g. CAN Low Speed or LIN

e.g. CAN Low Speed or LIN

CAN Interface

CAN Expansion Board

- Piggy-back module for the CAN Interface and CAN Expansion Board
- 1 or 2 Fieldbus Expansions can be used per CAN Interface or CAN Expansion Board
- **Expands** the existing CAN High Speed channel by a switchable CAN Low Speed channel or a LIN channel

Multi CAN Expansion

Multi CAN Expansion

CAN 1
CAN 3

CAN 2
CAN 4

CAN Interface

- Piggy-back module for the CAN Interface (can not be used with the CAN Expansion Board)
- Provides two **additional** CAN channels