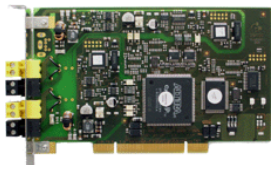
AS-i 3.0 Master PCI Board /
AS-i 3.0 Master Compact PCI Board

2 AS-i Master on 1 board

AS-i Master Board (BW1922, BW2087) for AT-PCs with PCI slots

AS-i 3.0 Master Board (BW1911) for AT-PCs with Compact PCI slots

BW1922

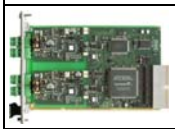


BW2087

BW1911

Advanced AS-i diagnostics (BW1922):

- **duplicate address recognition**
- **AS-i earth fault detector integrated**
- **AS-i noise detector integrated**
- **RS 232 diagnostic interface**

Figure	Type	Number of AS-i networks, number of AS-i Master (1)	Diagnostic and configuration interface (2)	Recognition of duplicate AS-i addresses (3)	AS-i fault detector (4)	Article No.
	PCI board	2 AS-i networks, 2 AS-i Masters	RS 232	yes	yes	**BW1922**
	PCI board	2 AS-i networks, 2 AS-i Masters	–	no	no	**BW2087**
	Compact-PCI	2 AS-i networks, 2 AS-i Masters	–	no	no	**BW1911**

(1) **Number of AS-i networks, number of AS-i Master**
"Double Master": 2 AS-i networks, 2 AS-i Masters.

(2) **Diagnostic and configuration interface**
"RS 232": Access to AS-i Master and Safety Monitor with Bihl+Wiedemann software by using an adapter cable via RS 232 interface.

(3) **Recognition of duplicate AS-i addresses**
Detects whether the same address has been assigned to two AS-i slaves. Frequent error when using a handheld addressing device.

(4) **AS-i fault detector**
Checks the AS-i line for interference effects such as noise, external voltages, ...

AS-i 3.0 Master PCI Board / AS-i 3.0 Master Compact PCI Board

The AS-i Master PCI Board realizes the functionality of two complete AS-i Masters on a PCI Board.

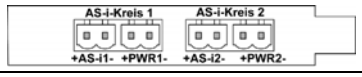
n addition to that an implemented AS-i control unit performs as a PLC to preprocess the AS-i data on the board (**BW1922**). Another additional function is the integrated watchdog function. The use of the AS-i Control functions is requiring an activation at an extra charge.

Advanced AS-i diagnostic function for the localization of occasionally occurring configuration errors as well as for the qualitative diagnosis of the AS-i communication are also implemented.

For normal operation there is no need for an PC interrupt, but the AS-i PCI Board is capable to generate interrupts cyclically with every AS-i cycle or leaded by configuration errors or changes in input data.

The DPRAM interface provides an easy integration of the AS-i PCI Board in any operating system (special drivers). The address of the AS-i PCI Board does not have to be adjusted. The AS-i PCI Board works with "Plug and Play". Up to 4 AS-i PCI Masters can be used simultaneously in one PC.

The AS-i PCI Board serves the requirements of industrial use.

Article no.	**BW1922**	**BW2087**	**BW1911**
General information			
Type	**PCI Board**		**Compact PCI Board**
Duplicate address‘ recognition	yes	–	
AS-i earth fault detector integrated	yes		–
AS-i noise detector integrated	yes		–
RS 232 diagnostic interface	yes	–	
Interface			
Interface	32 bit PCI Bus interface, 3,3 V/5 V galvanic isolation to AS-i AS-i circuit 1, AS-i circuit 2		
Serial interface	RS 232	–	
Program memory (EEPROM)	16 KB	–	
AS-i			
Cycle time per AS-i circuit	150 µs * (number of slaves + 2)		
Master profile	M4		
AS-i specification	3.0		
Operating voltage	3,3 V/5 V DC and AS-i voltage		
Operating current	approx. 300 mA out of 5 V power supply approx. 100 mA out of 3,3 V power supply approx. 70 mA out of AS-i per AS-i circuit		
Environment			
Applied standards	EN 61000-6-2 EN 61000-6-4		
Ambient operating temperature	0°C … +55°C		
Storage temperature	-25°C … +70°C		
Voltage of insulation	≥500 V		
System requirements			
Hardware	IBM compatible PC 80 486, PCI		
Software	• DLL drivers (Windows 2000 or higher, incl. Windows 8.1) • Linux driver		
Connections			

Accessories:

- **AS-i Control Tools (Windows) (art. no. BW1602)**
- **AS-i power supply 4 A (art. no. BW1649)**
- **AS-i power supply decoupling unit for 2 AS-i circuits (art. no. BWU1943)**