

# 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

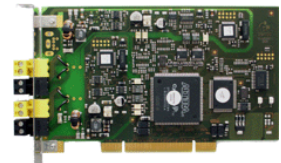
**AS-i 3.0 Master Board (BW1911)**  
for AT-PCs with Compact PCI slots

**Advanced AS-i diagnostics (BW1922):**

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



BW1922



BW2087



BW1911



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

(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.


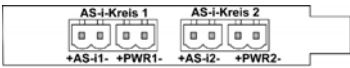
In addition to that an implemented AS-i control unit performs as a PLC to preprocess the AS-i data on the board (**BW1922**). Another additional function is the integrated watchdog function. The use of the AS-i Control functions is requiring an activation at an extra charge.

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
<b>General information</b>			
<b>Type</b>	<b>PCI Board</b>		<b>Compact PCI Board</b>
Duplicate address' recognition	yes		–
AS-i earth fault detector integrated		yes	–
AS-i noise detector integrated		yes	–
RS 232 diagnostic interface	yes		–
<b>Interface</b>			
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		–
<b>AS-i</b>			
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		
<b>Environment</b>			
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		
<b>System requirements</b>			
Hardware	IBM compatible PC 80 486, PCI		
Software	<ul style="list-style-type: none"> <li>• DLL drivers (Windows 2000 or higher, incl. Windows 10)</li> <li>• Linux driver</li> </ul>		
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)