

AmbiComp

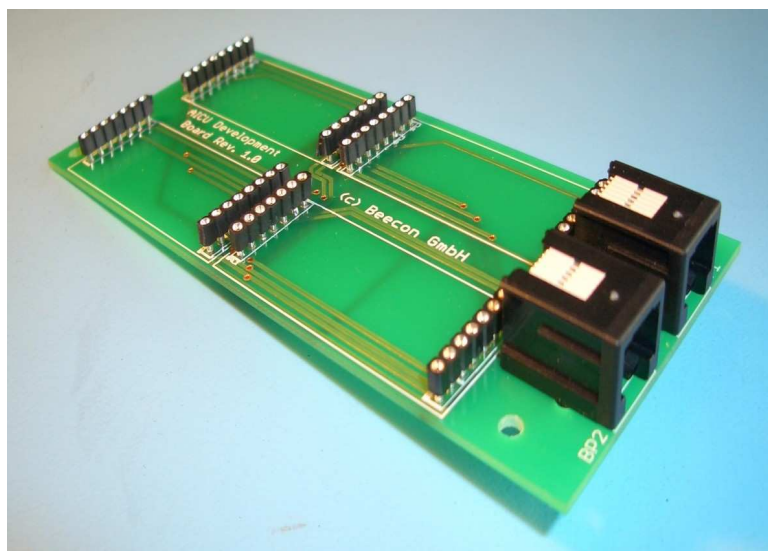
HW Development Tools



For development and debugging, two passive boards are provided.

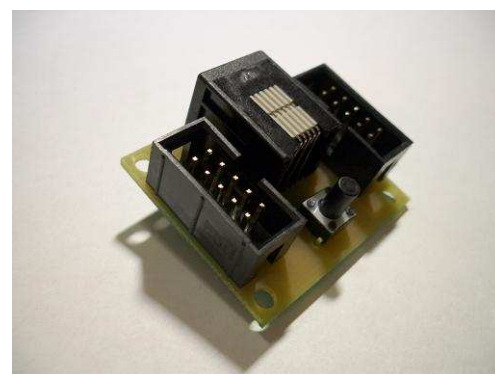
The **DevBoard** is able to host up to four sandwich modules, provides for the interconnection between them, and allows access to the AICU bus via two RJ12 connectors.

The **AICU Interface** is a simple adapter for the AICU bus between the RJ12 connector as used in the AmbiComp system and 10-pin connector assemblies as used, e.g., in commercial I2C* USB adapters (Aardvark, Beagle**). In addition the module carries a push-button for reset, which allows the system to be restarted.



Features

- Passive boards for development and debugging
- Access to AICU bus via RJ12 connector
- DevBoard contains four slots for sandwich modules
- AICU Interface provides the AICU bus on 10-pin connector assemblies
- AICU Interface carries a Reset push-button for manual reset



* I2C is a registered trademark of NXP Semiconductors, Netherlands B.V.

** Aardvark and Beagle are products by Total Phase, Inc. Sunnyvale, California

Specification

DevBoard:

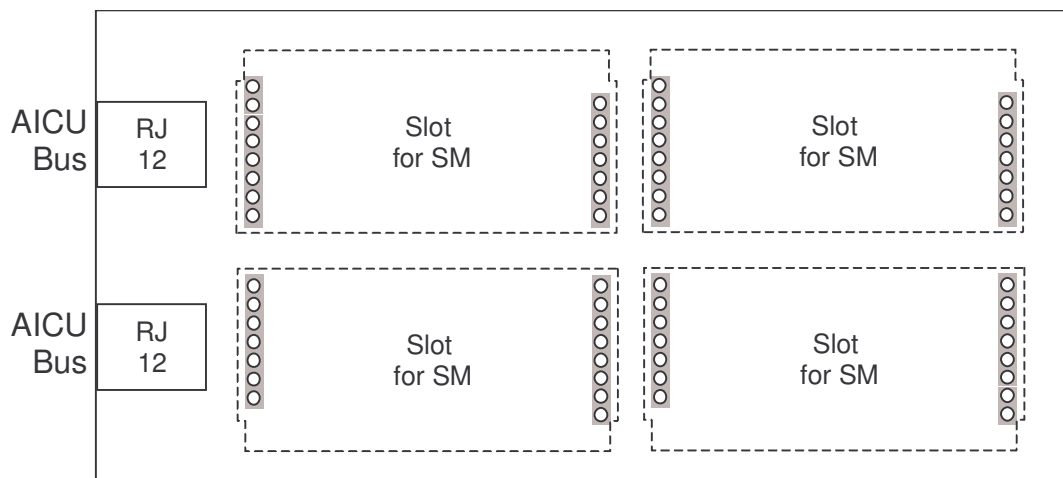
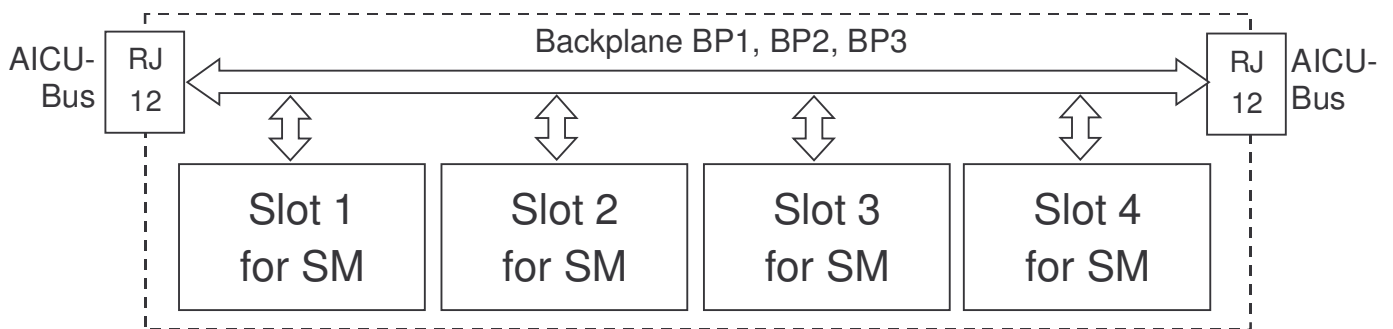
The DevBoard contains four slots for sandwich modules. The back-plane connectors BP1 to BP3 are interconnected between all four slots. Thus, there are no dedicated slots.

Access to the signals of the AICU bus is possible via two RJ12 connector.

RJ12 Pin	Function
1	I2C_SDA
2	GND
3	I2C_SCL
4	/I2C_INT
5	/RESET
6	AICU

The signal "AICU" (Pin 6 on the RJ12 connector) is just a connection between the two connectors.

The DevBoard is passive; therefore, no power supply is integrated. In order to supply the sandwich modules with power, a Power Supply SM (e.g., BPPRISM) is necessary. This can be plugged into any of the slots like any other SM.



AICU Interface

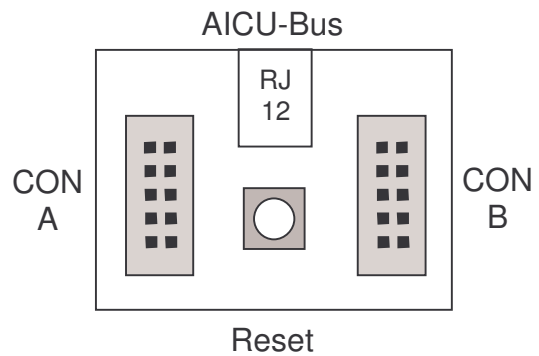
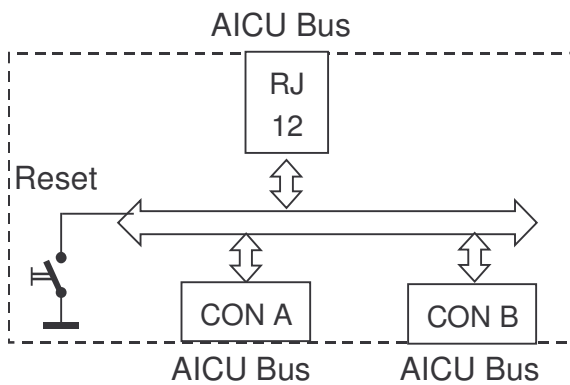
The AICU Interface is a simple adapter for the AICU bus between the RJ12 connector as used in the AmbiComp system and 10-pin connector assemblies (male) as used by I2C USB adapters (Aardvark or Beagle).

Pin	Function
1	I2C SCL
2	GND
3	I2C SDA
4	NC
5	NC
6	NC
7	/I2C INT
8	AICU
9	/RESET
10	GND

The signal "AICU" (Pin 6 on the RJ12 connector) is just a connection between the two connectors and pulled down to GND by a resistor.

A push-button allows triggering a manual reset to restart the system.

A power supply is not available, but is not necessary, either.



Mechanical Data

The DevBoard measures 128 mm x 55 mm. The height is 15 mm.

The AICU Interface measures 36 mm x 31 mm. The height is 15 mm.

Environmental Conditions

Both modules are designed for indoor use. The operating temperature range is -10 to +70°C.

The storage temperature range is -40 to +85°C.

The modules conform to the RoHS requirements.

Order Codes

DevBoard:

200 000 06

AICU Interface:

201 000 00