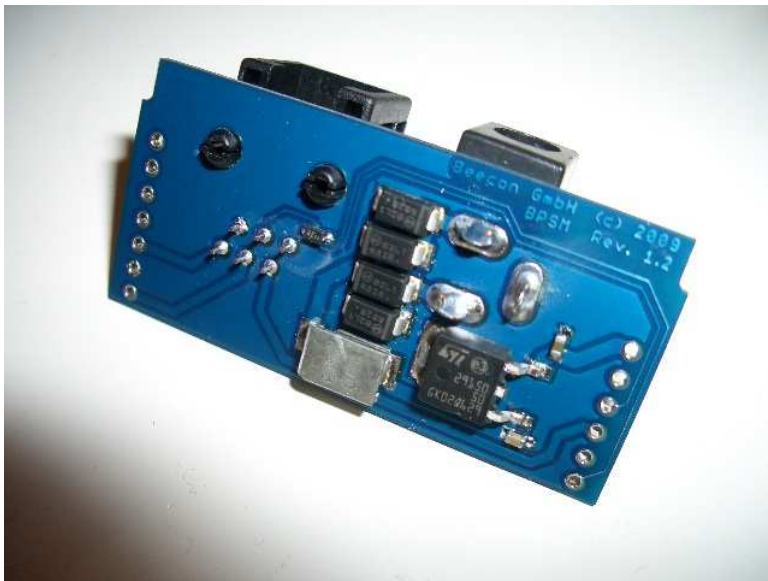


# AmbiComp

## Backplane Secondary Supply Sandwich Module



The Backplane Secondary Supply Sandwich Module provides a regulated voltage of 5 V. Either an external wall-plug power supply with DC output or a battery can be used as a power source. A subsequent power supply module (e.g., PoESM) provides the voltages necessary for the AmbiComp system. In addition, this module provides access to the AICU bus for debugging purposes (on a RJ12 connector).



### Features

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- Regulated 5.0 Volt, with a maximum of 0.85 A
- Full bridge rectifier prohibits polarization error
- Resettable fuse as short circuit protection
- AICU bus termination and access to AICU bus via RJ12 connector

## Specification

The *Backplane Secondary Supply Sandwich Module* forms part of the power supply for the other AmbiCom modules within an AmbiComp system.

Usually, a wall-plug power supply delivering 6.0 to 7.5 V DC is used as primary source, but a battery may also be used.

After passing a bridge rectifier, which provides protection from polarization errors, and a re-settable fuse (PTC resistor), a first voltage regulator provides 5 V. A low-drop regulator is used. The

maximum current depends on the input voltage:

Input Voltage	max. allowed current
6 V	0.8 A
7.5 V	0.5 A

The voltage is placed on the bus interface BP1 from which other modules are supplied.

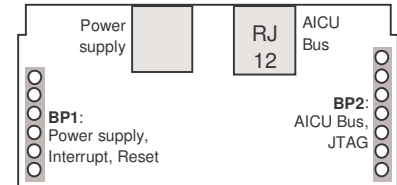
### Additional Functions:

The module provides access to the AICU bus via a RJ12 connector for debugging purposes.

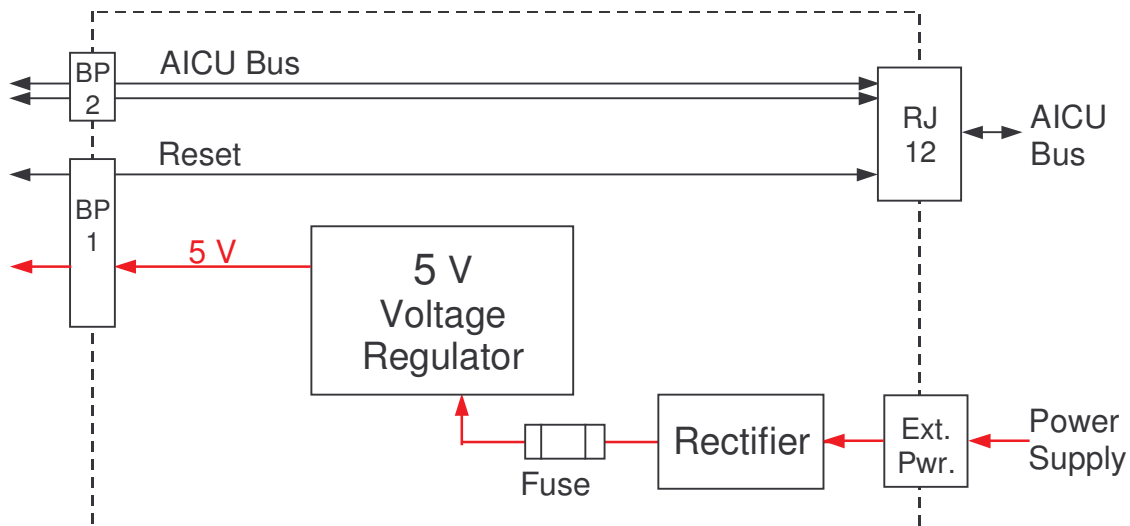
The signal "AICU" (Pin 6 on the RJ12 connector) is supplied by 3.3 V via a protection diode.

### Backplane:

Via an AmbiComp-specific inter-connection scheme ("backplane"), the *Backplane Secondary Supply Sandwich Module* can be connected with other AmbiComp modules.



Detailed dimensioning and pin layout are contained in the data sheet "Sandwich Modules - General Information".



## Power Supply

External wall-plug power supply providing 6.0 to 7.5 V DC. Quiescent current is about 2.25 mA..

The current consumption depends on the consumers connected.

## Mechanical Data

The module measures 49.8 mm x 24 mm. The height is 17 mm.

## Environmental Conditions

The *Backplane Primary Supply Sandwich Module* is designed for indoor use. The operating temperature range is -10 to +70°C.

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

The module conforms to the RoHS requirements.

## Order Code

102 000 10