

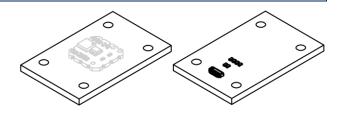
## **AMO-AMS-EA**

### **PRELIMINARY DATASHEET**

# AM0 adapter for the AMS accessories

#### **FEATURES**

- AMS module emulation
- Compatible with AMS accessories
- Rapid prototyping and proof-of-concept development



#### **ELECTRICAL DIAGRAMS**

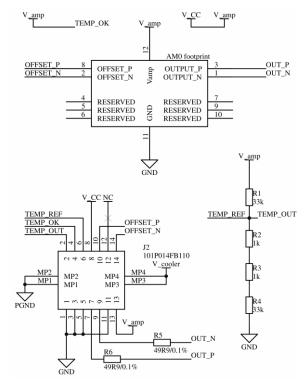


FIGURE 1. Schematic diagram of the AM0-AMS-EA.

#### **GENERAL DESCRIPTION**

The AMO-AMS-EA is an electrical adapter for the AMO modules. It provides compatibility with all electrical accessories for the AMS module series. It can be used for rapid development and proof-of-concept work. The full CAD project of the board is available on request.



#### CONNECTIVITY

The J2 socket is the standard interface of the AMS module. The main purpose of the AM0-AMS-EA is to imitate AMS module to allow use of standard AMS accessories. The R5/R6 output resistors are added for better compatibility. For more information about the signals please refer to the <u>datasheets of the AMS modules</u>.

Please note that the AM0 module is not part of this board and must be ordered separately.

#### COOLING SYSTEM EMULATOR

Unlike AMS modules, the AM0 module does not provide temperature stabilization. Therefore TEMP\_OUT signal is tied to TEMP\_REF signal while TEMP\_OK is set to logic one. This means that if any external logic is used to verify measured temperature of the detector, it will always assume that cooling subsystem is working properly and the temperature is stable.

#### MECHANICAL REQUIREMENTS

Warning! The J2 socket is very sensitive to mechanical stress. The AMO-AMS-EA must be fixed to the external board with screws and nuts. Caution is required when assembling the board stack. Proper distance between AMO-AMS-EA and the external board must be maintained. It is recommended to use SMT spacers, such as *Würth Elektronik 9774010943*.

#### MECHANICAL LAYOUT

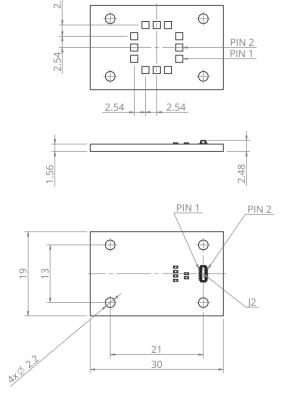


FIGURE 2. Dimensions of the AMO-AMS-EA (given in mm)