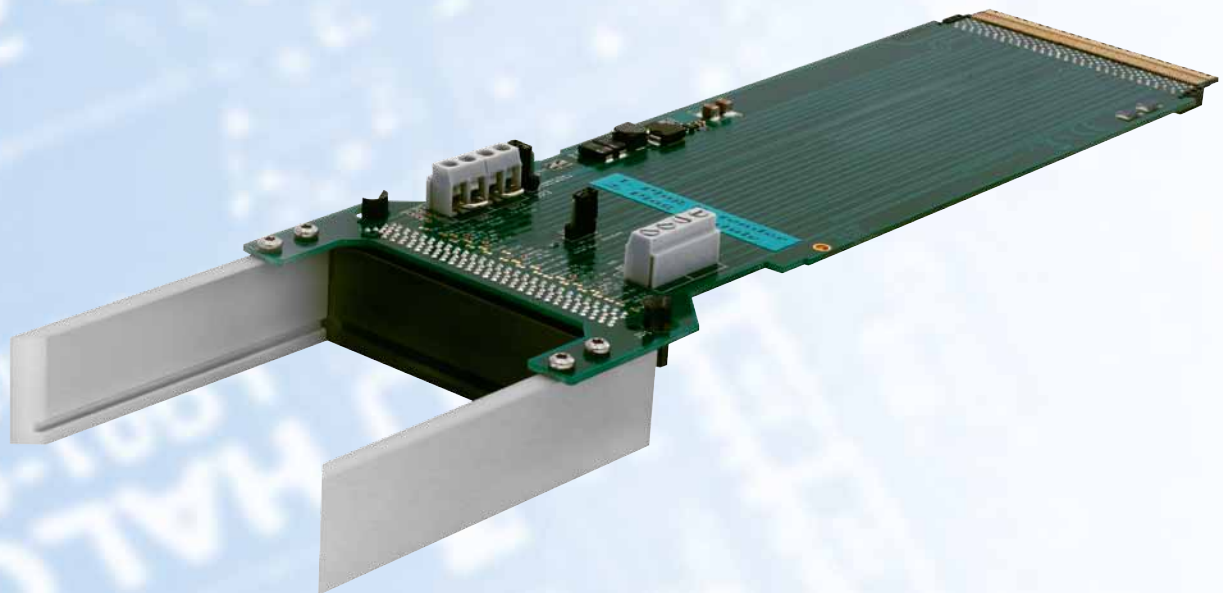


# NAMC-EXT and NAMC-EXT-PS



The **NAMC-EXT** and the **NAMC-EXT-PS** are passive extenders in single width format based on Advanced Mezzanine Card (AMC) form factor intended for debugging systems based on Advanced Telecommunication Computing Architecture (ATCA) or MicroTCA.

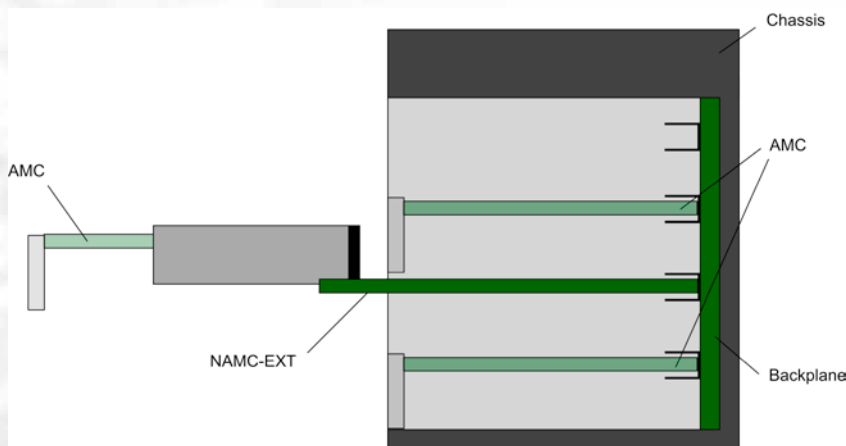
The **NAMC-EXT** and the **NAMC-EXT-PS** enable users to access AMC modules from both sides in a running system. The extenders support all fabric connectors as specified by the AMC.x and the MicroTCA specifications.

They allow access to the respective power planes for voltage and current measurements. The modules are ideally suited for ATCA or MicroTCA systems used to test and debug AMC module technology.

## Key features:

- Easy signal access to the front and rear side of an AMC module from outside of the chassis
- Voltage and current measurement of management and payload power
- Test points for soldering additional cables to measure all AMC signals
- Test points for JTAG interface
- **NAMC-EXT-PS**: additional 3.3V on-board power supply (PS) allows standalone mode of an AMC module (only 12V required)

## NAMC-EXT and NAMC-EXT-PS



### Overview and Purpose

The **NAMC-EXT** and **NAMC-EXT-PS** are passive extenders supporting all fabric connectors as defined in the AMC.x and MicroTCA specifications.

The extenders fit into any AMC slot like a regular AMC module. The AMCs could be plugged into the extenders, either the NAMC-EXT or/and the NAMC-EXT-PS, under test conditions occupying just the space of a single AMC module.

Both extender modules provide access to the tracks of payload power and management power voltage. This enables users to easily check these voltages as well as to measure the power consumption of the AMC under test.

### Test points

The differential signals with up to 6.25 GHz frequency are provided as small SMD test points. Other signals such as geographical address, IPMB signals are routed to standard test points allowing

assembling with standard 100 mil header connectors. All test points are available on the extenders and all AMC signal identifiers are printed on the silkscreen. Using the **NAMC-EXT** and the **NAMC-EXT-PS** all test points on both sides of the AMC module (soldering and assembly side) are accessible under testing conditions.

### JTAG

Test points for JTAG signals can be assembled with 100 mil header connector.

### NAMC-EXT-PS

The **NAMC-EXT-PS** offers an additional on-board 3.3V power supply requiring only 12V for stand-alone usage of the AMC module.

## Technical Data

### AMC Interface

All fabrics are connected through (from AMC rear to front connector)

### Power Consumption

Due to absence of components the NAMC-EXT and NAMC-EXT-PS draw almost no power from the carrier's power supply

### Environmental Conditions

- Operating temperature: -40°C to +85°C with forced cooling
- Storage temperature: -40°C to +85°C
- Relative humidity: 5% to 90% rh non-condensing

### Standard Compliance

- AMC.0 R2.0
- AMC.1 R2.0
- AMC.2 R1.0
- AMC.3
- AMC.4

