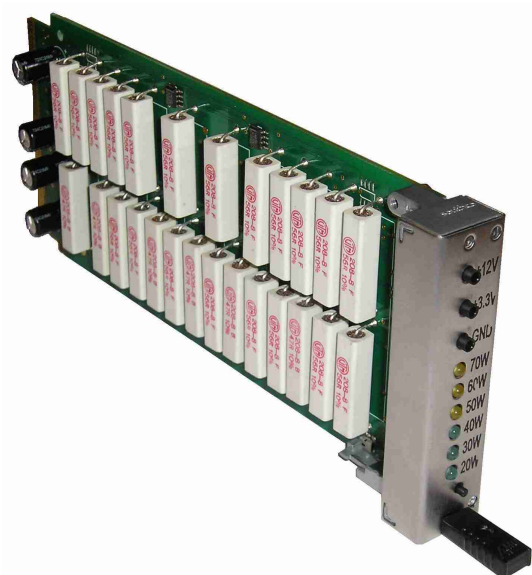


# AMC Load Board for MicroTCA



## Key Features:

- AMC load board with IPMI support
- AMC single module full size
- Configurable load 0-70W in 7 steps
- The load is changed by pressing a push button on the front panel or via IPMI commands
- Dynamic load possible
- On-board temperature sensors
- Test jacks on front panel for voltage measurements

## Description:

AMC full-size (single width, full height) load board dedicated for testing the cooling and power of uTCA systems. The board is hot swap pluggable and has IPMI support.

The load is configurable in 7 steps 0W, 20W, 30W, 40W, 50W, 60W and 70W. On the front panel there are six LEDs each one showing which power level is activated. All LEDs off corresponds to 0W. There are two possibilities to change the power level:

- The power is changed by repeatedly pressing a push button mounted on the front panel. In this way it is possible to cycle-run through all power levels.
- The power is controlled using IPMI commands `Set_FRU_LED_State` / `Get_FRU_LED_State`. In this way each level could be controlled independently. The blink mode is also supported, allowing to set a dynamic load. Whenever the push button on the front panel is pressed the local control mode is activated and all previous load settings are lost.

The load board has 3 temperature sensors: one on bottom and two on top. The sensors are implemented as IPMI temperature sensors and could be read through the MCH. By default the upper non-recoverable temperature threshold is set at 80 degrees C. When a sensor reach this threshold the board turn off the payload power to self protect from over-heating. To reactivate the board the hot swap handle must be opened and closed. The temperature sensors thresholds could be changed with "Set Sensor Threshold" command.

## List of supported commands

IPM Device "Global" Commands	IPMI spec section	NetFn	CMD
Get Device ID	17.1	App	01h
Broadcast "Get Device ID"	17.9	App	01h
<b>Event Commands</b>			
Set Event Receiver	23.1	S/E	00h

Platform Event	23.3	S/E	02h
<b>Sensor Device Commands</b>			
Get Device SDR Info	29.2	S/E	20h
Get Device SDR	29.3	S/E	21h
Reserve Device SDR Repository	29.4	S/E	22h
Set Sensor Hysteresis	29.6	S/E	24h
Get Sensor Hysteresis	29.7	S/E	25h
Set Sensor Threshold	29.8	S/E	26h
Get Sensor Threshold	29.9	S/E	27h
Set Sensor Event Enable	29.10	S/E	28h
Get Sensor Event Enable	29.11	S/E	29h
Get Sensor Reading	29.14	S/E	2Dh
<b>FRU Device Commands</b>			
Get FRU Inventory Area Info	28.1	Storage	10h
Read FRU Data	28.2	Storage	11h
Write FRU Data	28.3	Storage	12h

<b>AdvancedTCA Commands</b>	<b>PICMG 3.0 Table</b>	<b>NetFn</b>	<b>CMD</b>
Get PICMG Properties	3-10	PICMG	00h
Get Address Info	3-9	PICMG	01h
FRU Control	3-25	PICMG	04h
Get FRU LED Properties	3-27	PICMG	05h
Get LED Color Capabilities	3-28	PICMG	06h
Set FRU LED State	3-29	PICMG	07h
Get FRU LED State	3-30	PICMG	08h
Get Device Locator Record ID	3-35	PICMG	0Dh

### Specifications

- PICMG MTCA.0: MicroTCA Specification R1.0.
- PICMG AMC.0: Advanced Mezzanine Card Specification R2.0.
- IPMI Intelligent Platform Management Interface Specification V1.5.

### Environment and mechanics

- AMC full-size (single width, full height)
- Operating temperature -10°C to 80°C.
- Storage temperature -40°C to 105°C.

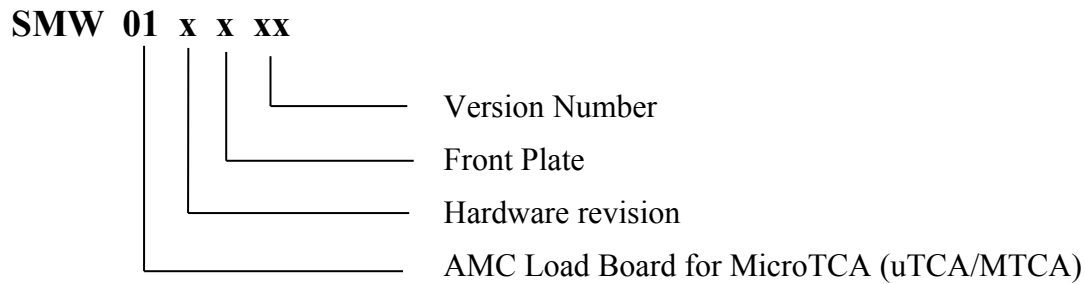
### Options

- Compact, mid-size or full-size assembly possible
- Single or double module available
- Different load configuration possible

## Ordering info

### Ordering Formula

For ordering you should use the following ordering formula:



### Order Codes

Part Number	Hardware Rev.	FormFactor	Version No.	Description
SMW01D400	D	4	0	AMC Load Board for MicroTCA (uTCA/MTCA) with 4HP Front Plate: → Mid size Single module AMC
SMW01D600	D	6	0	AMC Load Board for MicroTCA (uTCA/MTCA) with 6HP Front Plate: → Full size Single module AMC