

# **Cooling Unit for MicroTCA**



## **Key Features**

- Cooling unit EMMC with IPMI support
- Monitor fans speeds
- Control fan speed by PWM signal or variable voltage
- On-board temperature sensors
- Delivered as complete product or as preprogrammed microcontroller

### **Description:**

Custom Cooling Units according to the MicroTCA(uTCA/MTCA) specification. They provide support for hot swap button, hot swap LED, LED1, and have redundant IPMB buses to interface with the MCH.

The cooling unit monitors and controls up to 8 fans. The speed is controlled via PWM signal or by variable voltage output.

The form factor of the cooling unit can be changed according to the customer needs.

#### **List of supported commands**

IPM Device "Global" Commands	NetFn	CMD
Get Device ID	Арр	01h
Broadcast "Get Device ID"	Арр	01h
Event Commands		
Set Event Receiver	S/E	00h



Get Event Receiver	S/E	01h
Platform Event	S/E	02h
Sensor Device Commands		
Get Device SDR Info	S/E	20h
Get Device SDR	S/E	21h
Reserve Device SDR Repository	S/E	22h
Set Sensor Hysteresis	S/E	24h
Get Sensor Hysteresis	S/E	25h
Set Sensor Threshold	S/E	26h
Get Sensor Threshold	S/E	27h
Set Sensor Event Enable	S/E	28h
Get Sensor Event Enable	S/E	29h
Get Sensor Reading	S/E	2Dh
FRU Device Commands		
Get FRU Inventory Area Info	Storage	10h
Read FRU Data	Storage	11h
Write FRU Data	Storage	12h

AdvancedTCA Commands	NetFn	CMD
Get PICMG Properties	PICMG	00h
Get Address Info	PICMG	01h
FRU Control	PICMG	04h
Get FRU LED Properties	PICMG	05h
Get LED Color Capabilities	PICMG	06h
Set FRU LED State	PICMG	07h
Get FRU LED State	PICMG	08h
Set IPMB State	PICMG	09h
Get Device Locator Record ID	PICMG	0Dh
Get Fan Speed Properties	PICMG	14h
Set Fan Level	PICMG	15h
Get Fan Level	PICMG	16h
FRU Control Capabilities	PICMG	1Eh

## **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.