

# fitlet-RM



## specifications

## fitlet-RM – Rugged and Robust

fitlet-RM is a ruggedized miniature fanless PC housed in an all-metal housing. It provides excellent durability at extreme temperatures and under conditions of shock, vibration and dust.

### fitlet-RM is Built to Last

The fitlet-RM's metal housing has interlocking parts to ensure structural strength, it is fanless and has no moving parts thanks to passive cooling and SSD storage. This means that reliability and thermal performance are not reduced over time and it is not subject to sudden failure due to a fan malfunction. As a result, fitlet-RM is also perfectly silent.

### Wide Temperature Range

The embedded-grade motherboard is passively-cooled, allowing the fitlet-RM to operate at an unusually wide temperature range of -40 °C to 70 °C. This means that fitlet-RM can be installed in any weather condition, in any type of cabinet or vehicle without a complicated cooling design.

### Dust and Humidity Resistance

fitlet-RM has no vents. Heat dissipation is done by conduction to the housing which means no air circulation on the internal components. As a result, fitlet-RM is not sensitive to dust, humidity or polluted air. It is also easy to integrate in clean-rooms and sterilized environments.

### Versatility at Its Best

fitlet-RM is tough, tiny, versatile and scalable. Accessing RAM and storage is easy and installing custom FACET card modules further extends the fitlet-RM's rich functionality. fitlet-RM offers high scalability, from deeply embedded applications integrating only the miniature single-board-computer SBC-FLT, to the more powerful fitlet-H and fitlet-T that share the same architecture of fitlet-RM and provide more performance, memory and storage capacity. fitlet-RM can be mounted using a VESA or DIN-rail mounting bracket.

### The Smallest PC for Extreme Conditions

In many independent benchmarks fitlet-RM achieves higher scores than PCs based on Intel® Atom™. It effectively doubles the performance of the original fitlet-i by incorporating the quad-core AMD A10 Micro-6700T APU in an all-metal housing designed to maximize heat-dissipation in the smallest possible footprint.

## Specifications

Processor	fitlet-RM-IA10 Barebone	C fitlet-RM-XA10-LAN Barebone
Type	AMD A10 Micro-6700T SoC	
Cores	64-bit quad core	
Clock Speed	1.2 GHz (boost up to 2.2 GHz)	
TDP	4.5 W	
Chipset	SoC (CPU and Chipset on the same die)	

Memory	fitlet-RM-IA10 Barebone	fitlet-RM-XA10-LAN Barebone
Supported	1 x SO-DIMM 204-pin DDR3L SDRAM memory slot Up to 8 GB Non-ECC DDR3L-1333 (1.35 V)	
Installed	Not installed	

Storage	fitlet-RM-IA10 Barebone	fitlet-RM-XA10-LAN Barebone
Supported	1 x mSATA slot up to 6 Gbps (SATA 3.0) 1 x eSATAp (powered & USB combo) up to 6 Gbps (SATA 3.0)	1 x mSATA slot up to 6 Gbps (SATA 3.0)
Installed	Not installed	

Graphics	fitlet-RM-IA10 Barebone	fitlet-RM-XA10-LAN Barebone
GPU	AMD Radeon R6 Graphics Dual display mode supported	
Display Interface 1, 2	HDMI 1.4a up to 1920 x 1200 @ 60Hz	
Display Interface 3	N/A	
Discrete Graphics	N/A	

Audio	fitlet-RM-IA10 Barebone	fitlet-RM-XA10-LAN Barebone
Codec	Realtek ALC886 HD audio codec	
Audio Output	Analog stereo output Digital 7.1 + 2 channels S / PDIF output 3.5 mm jack	

Audio	fitlet-RM-IA10 Barebone	fitlet-RM-XA10-LAN Barebone
Audio Input	Analog stereo Microphone input Digital S/PDIF input 3.5 mm jack	

Networking	fitlet-RM-IA10 Barebone	fitlet-RM-XA10-LAN Barebone
LAN	2 x GbE LAN ports (RJ-45) LAN1: Intel I211 GbE controller LAN2: Intel I211 GbE controller	4 x GbE LAN ports (RJ-45) LAN1: Intel I211 GbE controller LAN2: Intel I211 GbE controller LAN3: Intel I211 GbE controller LAN4: Intel I211 GbE controller
Wireless	WLAN 802.11ac (2.4 / 5 GHz dual band Intel 7260 HMW) Bluetooth 4.0	WLAN 802.11b/g/n Wifi module

Connectivity	fitlet-RM-IA10 Barebone	fitlet-RM-XA10-LAN Barebone
USB	2 x USB 3.0 4 x USB 2.0	2 x USB 3.0 3 x USB 2.0
Serial	1 x Serial communication port COM1: RS232 via mini serial connector	
SD	Micro-SD slot support SD / SDHC cards Transfer rates up to 25 MB / s	
Special I/O	1 x micro SIM slot (6 pins) <sup>2</sup>	
Expansion	1 x Full-size mSATA socket (low profile) 1 x Half / Full-size mini-PCIe socket (high profile)	1 x Full-size mSATA socket (low profile) 1 x Half / Full-size mini-PCIe socket (high profile) 1 x FACET card interface Custom connectivity 3 PCIe lanes, adapter half-to-full size required

Advanced Technologies	fitlet-RM-IA10 Barebone	fitlet-RM-XA10-LAN Barebone
vPRO	No	
AMT	No	
CPU Virtualization	Yes	
AES	Yes	
Special Functionality	Auto-On Wake-on-LAN Wake-on-Timer PXE Boot Watchdog Remote power button	

Operating System	fitlet-RM-iA10 Barebone	fitlet-RM-XA10-LAN Barebone
Supported	Windows 7 / 8 / 10, 32-bit and 64-bit Linux 32-bit and 64-bit Embedded OS	
Official Linux	Linux Mint 18 Cinnamon (64-bit)	
Installed	Not installed	

Operating Conditions	fitlet-RM-iA10 Barebone	fitlet-RM-XA10-LAN Barebone
Input Voltage	Unregulated 10 – 15 VDC input <sup>1</sup>	
Power Consumption	4.5 W - 10.5 W	
Operating Temperature	1. Commercial (SSD inside): 0 °C to 70 °C 2. Extended (TE), (SSD inside): -20 °C to 70 °C 3. Industrial (TI), (SSD inside): -40 °C to 70 °C	
Relative Humidity	Operating: 10 % to 90 % Storage: 5 % to 95 %	
MTTF	> 100,000 hours*	

Enclosure	fitlet-RM-iA10 Barebone	fitlet-RM-XA10-LAN Barebone
Material	Aluminum & zinc (all-metal housing)	
Cooling	Passive Cooling Fanless Design	
Dimensions	10.8 cm x 8.3 cm x 2.4 cm	
Weight	220 g	250 g

Package	fitlet-RM-iA10 Barebone	fitlet-RM-XA10-LAN Barebone
In the Box	1. fitlet computer	
	2. Power supply: input 100 – 240 VAC 50 /60 Hz, 36 W output 12 VDC 3A, DC plug lock, attachable NA and EU plugs	
	3. HDMI to DVI adapter	
	4. Audio 3.5 mm to RCA cable	
	5. WiFi 2.4 GHz / 5 GHz band 2 antennas (in some models)	802.11n Wifi module
	6. Mini-serial to DB9-male adapter cable	

Package	fitlet-RM-iA10 Barebone	fitlet-RM-XA10-LAN Barebone
	7.	mSATA heatsink
Warranty	5 years	
Notes	1. Nominal input voltage: 12 V 2. For use with cellular modem kit	