

Fitlet RM iA10

Ultimate mini rugged PC (Wireless Version)

Product Specification v.1.7



With an all-metal (aluminium & zinc) housing designed to maximise heat-dissipation in the smallest possible footprint, fitlet-RM is the ultimate rugged industrial PC, built for extreme environments:

Shock & vibration: Fitlet-RM has been thoroughly and successfully tested for vibration, stress and shocks: it has been driven over by a car and still booted up just fine.

Temperature: With no moving parts, passive cooling and SSD storage, Fitlet's reliability and thermal performance are not reduced over time and can operate continually at a wide temperature range of between -40°C to +70°C.

Dusty, humid or polluted air: Heat dissipation is by conduction to the housing so there is no air circulation on internal components – making it easy to integrate Fitlet RM in clean-rooms and sterilised environments but also removing the threat of failure due to fan malfunction or dust accumulation.

For Automation, Transportation, Telemetry, M2M

Not only is Fitlet RM iA10 fearlessly rugged but it offers great wireless connectivity with WIFI communication (antennas) or 3G data communication via on-board micro SIM socket and mini PCIe slot.

A second model is available for communications via Ethernet ports (Fitlet RM xA10).

Key Features

- Quad Core AMD A10 Micro-6700T 64 bit up to 2.2Ghz
- AMD Radeon™ R6 Graphics
- Up to 16 GB DDR3L-1333
- 1x micro SIM slot
- Ultra-connectivity
- Auto On
- Dual Display mode
- Low Power Consumption

Product Specifications

Model	fitlet-RM-iA10 Barebone
Name	FITLRM-IA10
Current HW Revision	1.4
Long Term Availability	2024
Processor	
Type	AMD A10 Micro-6700T SoC
Cores	64-bit quad core
Clock speed	1.2GHz (boost up to 2.2GHz)
TDP	4.5W
Chipset	SoC (CPU and Chipset on the same die)
Memory	
Supported	1x SO-DIMM 204-pin DDR3L SDRAM memory slot Up to 8GB Non-ECC DDR3L-1333 (1.35V)
Installed	Barebone as default. Options are: 2GB / 4GB / 8GB / 16GB – DDR3L-1600MT/s Non-ECC
Storage	
Supported	1x mSATA slot up to 6 Gbps (SATA 3.0) 1x eSATAp (powered & USB combo) up to 6 Gbps (SATA 3.0)
Installed	Barebone as default. Options are: mSATA SATA 3.0: 120GB / 256GB
Graphics	
GPU	AMD Radeon R6 Graphics Dual display mode supported
Display Interface 1	HDMI 1.4a up to 1920 x 1200 @ 60Hz
Display Interface 2	HDMI 1.4a up to 1920 x 1200 @ 60Hz
Audio	
Codec	Realtek ALC886 HD audio codec
Audio Output	Analog stereo output Digital 7.1+2 channels S/PDIF output 3.5mm jack

Audio Input	Analog stereo Microphone input Digital S/PDIF input 3.5mm jack
Networking	
LAN	2x GbE LAN ports (RJ-45) LAN1: Intel I211 GbE controller LAN2: Intel I211 GbE controller
Wireless	WLAN 802.11ac (2.4/5GHz dual band Intel 7260HMW) Bluetooth 4.0
Connectivity	
USB	2x USB 3.0, 3x USB 2.0, 1x USB 2.0 (powered & eSATAp combo)
Serial	1x 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	1x micro SIM slot (6 pins) for use with mini PCIe Cellular Modem.
Expansion	1x Full-size mSATA socket (low profile) – used for storage 1x Half/Full-size mini-PCIe socket (high profile) – used by the WiFi module by
Advanced Technologies	
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
Bootloader	
Vendor	American Megatrends Inc.
Features	TBA
Operating System	
Supported	Windows 7/8/10, 32-bit and 64-bit Linux (Mint/Ubuntu) 32-bit and 64-bit Embedded OS
Official Linux	Linux Mint 18 Cinnamon (64-bit)

Installed	No OS installed as default. Options are: Windows 10 Pro 64 bit Win 10 IoT Enterprise LTSB Value Linux (Mint / Ubuntu) 64-bit
Operating Conditions	
Input Voltage	Unregulated 10 – 15VDC input Nominal input voltage: 12V
Power Consumption	4.5W-10.5W
Operating Temperature	Standard: 0°C to +40°C Following options available: Optional - Extended (TE): -20°C to +70°C Optional - Industrial (TI): -40°C to +70°C
Relative Humidity	10% to 90% (operation) 5% to 95% (storage)
MTTF	> 100,000 hours*
Certifications	CE, FCC, EMC and Safety
Enclosure	
Material	Aluminium & zinc (all-metal housing)
Cooling	Passive Cooling Fanless Design
Dimensions	10.8cm x 8.3cm x 2.4cm
Weight	420gr
Warranty	
PC	5 years*
Consumable	1 year

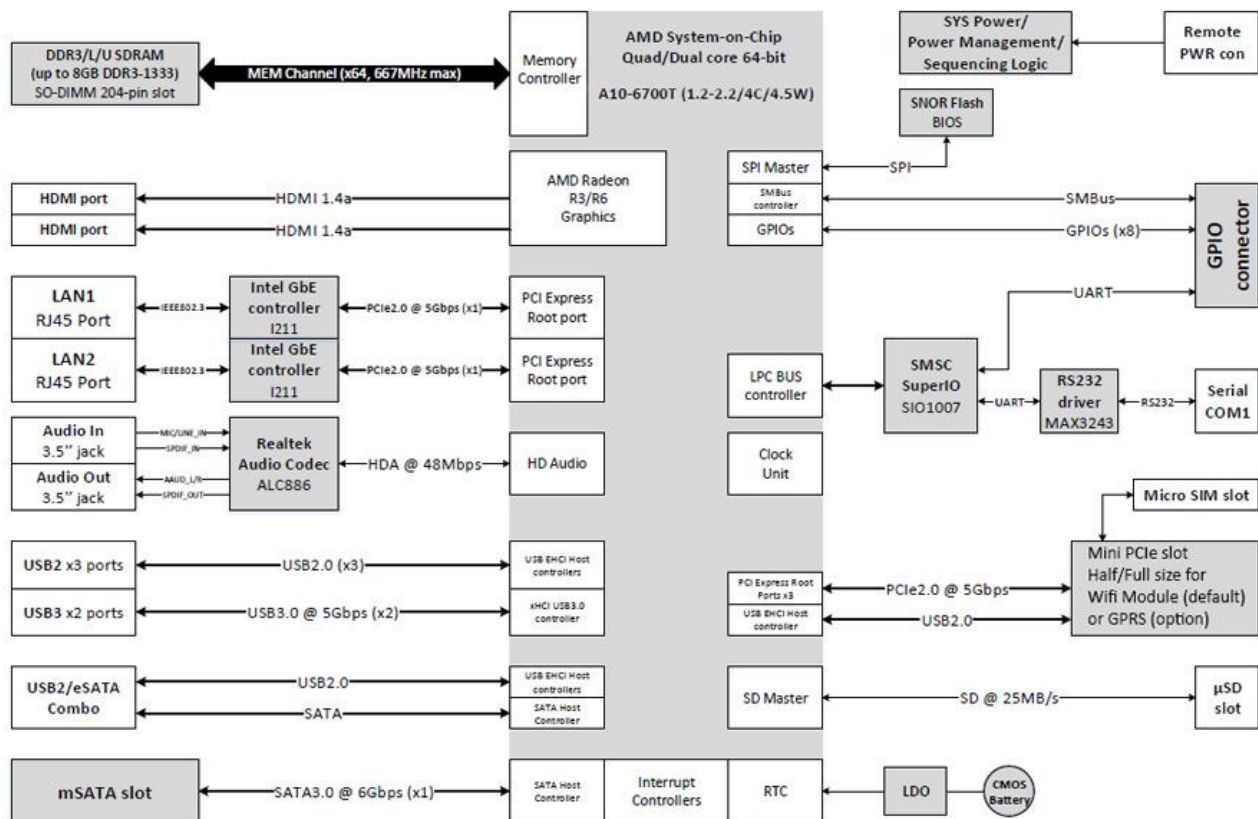
*Supplied by Tiny Green PC, trading division of Anders Electronics plc. Manufactured by CompuLab.

Package Content

Item	Specifications
1	Fitlet-RM iA10 Computer
2	Power Supply: input 100-240VAC 50/60Hz, 36W output 12VDC 3A, DC plug lock, attachable NA and EU plugs
3	Video HDMI to DVI adapter
4	Audio 3.5mm to RCA Cable
5	WiFi 2.4GHz/5GHz band 2 antennas
6	Mini-serial to DB9-male adapter cable
7	mSATA Heatsink
8	User Manual

Block Diagram

Fitlet RM iA10 - Top Level Block Diagram



Port Diagram



Contact and Support

For information and quotations, please contact info@tinygreenpc.com

For all technical support (questions, FAQ, troubleshooting, RMA...), please consult <http://www.tinygreenpc.com/support>