

fitlet2 is an affordable miniature Apollo Lake PC for demanding IoT applications

Yokneam, Israel 5-Nov-2017 - Compulab announces immediate availability of fitlet2. Based on Intel Atom® x7-E3950 Processor (Apollo-Lake) with up to 16 GB RAM and storage options ranging from eMMC to 2.5" SSD, fitlet2 is one of the most versatile miniature PCs for IoT. fitlet2 functionality can be further extended with Compulab 2nd generation **Function and Connectivity Extension T-Cards** (FACET Cards).

Like all other Compulab mini-PCs, fitlet2 is completely fanless, available at wide temperature range and is sold with 5 year warranty.

Miniature fanless design

fitlet2 measures only 112 mm by 84 mm, making it one of the smallest full-featured PCs on the market. An all-metal die-cast housing is used for fanless passive heat dissipation. There are several optional versions of the housing including low-profile 25mm and an industrial top cover for direct-mounting.

FACET Cards

"IoT gateways have to be small, affordable and reliable" said Irad Stavi, Chief Product Officer at Compulab. "Furthermore, each IoT application requires a slightly different set of features. The most effective way to meet this requirement is by integrating an application-specific module into the gateway. fitlet2 achieves this flexibility with FACET cards."

Compulab developed several FACET Cards for fitlet2, including:

- FC-LAN with two additional Gbit Ethernet cards (for a total of four).
- FC-PCIe and FC-CEM with support for both 4G cellular modem and WiFi that together with dual Gbit Ethernet makes a capable miniature IoT gateway.
- FC-USB adds 4 USB ports for a total of 8.

Additional FACET cards are under development, including FACET making fitlet2 a PoE powered device, a FACET for integrating 2.5" HDD/SSD and a FACET for optical LAN.

Compulab supports solution providers and 3rd parties in designing their own FACET cards. FACET specifications and reference designs are public.

Features

fitlet2 is based on Intel Apollo-Lake SoC. Off-the-shelf it is offered with E3950 / E3930 / J3455. Other CPU variants are available for volume orders. The CPU is supplemented by DDR3L-1866 SODIMM at capacity of up to 16 GB.

fitlet2 has broad selection of modular storage devices including M.2 SATA SSD, modular eMMC card or 2.5" HDD/SSD.

Wired networking is implemented by 2 to 4 Intel I211 Gbit Ethernet ports. Wireless networking includes modular WiFi adapter and 4G cellular modem adapter that can be installed together.

fitlet2 supports dual-head 4K displays. Other I/O includes 4 to 8 USB ports incl. 2x USB 3.0, audio line-out, line-in and S/PDIF, a serial port and micro-SD socket.

Designed for IoT

fitlet2 is designed from the ground-up to meet present and future IoT requirements. It features the following IoT related properties:

- 5 year warranty and 15 years availability
- Operation in full industrial temperature range of -40°C to 85°C
- Shock, vibration, dust and humidity resistance
- Input power tolerance of 8V to 36V DC
- Automatic boot on power resume (auto-on)
- BIOS settings are saved to flash memory. fitlet2 can work without an RTC battery
- Power button disable and remote power-button connector
- Optional TPM

fitlet2 has multiple mounting and deployment options, including VESA and DIN-rail mounting, direct mounting with thermal coupling and an SBC model. This flexibility together with the inherent small footprint simplifies integration of fitlet2 in nearly any scenario including automotive, transportation, utility, industrial, retail and supply-chain IoT applications.

Specifications

Features

CPU: Intel Atom x7-E3950 | Intel Atom x5-E3930 | Intel Celeron J3455

RAM: Up to 16 GB (1x SO-DIMM 204-pin DDR3L Non-ECC DDR3L-1866 (1.35V))

Storage:

- M.2 M-key 2260 | 2242 (SATA 3 6 Gbps) or
- eMMC (on a module) or
- 2.5" HDD | SSD

Display:

- mini DP 1.2 4K @ 60 Hz and
- HDMI 1.4 4K @ 30 Hz

Networking:

- Up to 4x Gbit Ethernet (Intel I211) - two on-board and additional two through FACET card
- Optional wireless LAN 802.11ac dual antenna + BT 4.2
- Optional 4G cellular modem

USB: Up to 8 ports: 2x USB 3.0 and up to 6x USB 2.0 - 4 USB ports through FACET card

Audio: Stereo line-out | Stereo line-in / mic | 7.1 S/PDIF out | HDMI & DP audio

Serial: RS232

Extensions:

- Function and Connectivity Extension T-Card (FACET Card) or
- M.2 E-key

Operating systems:

- Windows 10 IoT Enterprise LTSB
- Linux Mint
- Compatible with other operating systems

Operating conditions

Power:

- Input voltage range up to DC 9V – 36V
- Power consumption 5W – 15W

Temperature: Up to -40°C to 85°C

Relative humidity: 5% – 95% non-condensing

Mechanical specifications

Dimensions:

- Low power housing: 112 mm X 84 mm X 25 mm
- Performance housing: 112 mm X 84 mm X 34 mm
- Industrial housing: 112 mm X 112 mm X 25 mm

Weight: 350g

Housing:

- All metal housing
- Fanless convection cooling with no vents

Mounting: VESA | DIN rail

Price and availability

fitlet2 is available now from Compulab starting from \$153.

For more information

<https://fit-iot.com/web/products/fitlet2/>

Media kit: <https://fit-iot.com/web/products/fitlet2/gallery/>

Contact

Compulab sales: sales@fit-iot.com +972-4-8290168

Press contact: Irad Stavi irad@compulab.co.il +972-4-8290168