

## Complete Rugged Fanless Computer Solution with Intel® 9<sup>th</sup> Generation CPUs

Within this rugged 9th Generation Computer Solution, MPL's engineering team focused attention on the size of the PCB. The board size has been optimized and reduced to 218mm x 154mm x 33mm.

**Dättwil Switzerland, March 2020**

With the PIP4x Family, MPL presents a new fanless embedded computer family based on the 9th Generation Intel processors (Celeron, i3, i7 and Xeon) out of the IOTG road-map with long-term availability. Decades of experience (since 1985) in developing and producing extremely robust embedded solutions have made the PIP40 Family possible. With the size optimized board "SWaP-C" can be achieved.

In the solution shown (open frame and MIL version) the PIP46S with the i7-9850HE embedded CPU has been used. The open frame version of the PIP46S is available with headers or standard connectors. The header version is best suited for an installation in an existing housing. The open frame solution is being supplied with a conduction cooling plate. If preferred, MPL can supply the solution in a fully approved MIL housing and with 38999 connectors.

Customization is MPL's strength! Several different CPUs of the PIP40 Family can be chosen from and can be found on MPL's homepage [www.mpl.ch](http://www.mpl.ch).



Fit, Form and Function (FFF) of the PIP solutions and the unmatched reliability are key arguments. Shock and vibration, extended temperatures complete the rugged and long-term available PIP40 Family and are further arguments to look at.

The basic PIP4x is equipped with interfaces such as display port, DVI-D, USB 3.1, serial lines, and LAN ports. Further expansions can be done over the internal expansion interfaces such as m.2 and PCIe/104, hence WLAN, LTE, GPIOs, CAN... can easy and trouble free be integrated into the systems. This makes the PIP4x solution flexible and cost efficient customizable. As mass storage, SATA, mSATA, and m.2 can be chosen.

All MPL products are designed for long-term availability and the PIP4x Family will be available for at least 10 years. MPL's own component stock guarantees repairs for up to 20 years. Extended temperature ranges can be fulfilled and are tested in MPL's own climatic chambers according customer's request.

The PIP4x Family is 100% engineered & manufactured by MPL AG in Switzerland. The solution meets or exceeds the most common standards. Particular references are: EN 55022, EN 55024, EN 61000, MIL-STD-461E, EN 60068, EN 50155, MIL-STD-810G, EN 60601, EN 60950, CE, IEC 60945, IACS and E10.

For more specific information, please visit [www.mpl.ch/t24g0.html](http://www.mpl.ch/t24g0.html) or contact MPL AG directly.

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