# Fanless MXM /GPGPU Graphics Expansion for Rugged Embedded Computer

With the newest development "GRIP", MPL opens the world of high performance graphics to the PIP Family. The new expansion product called GRIP acts as an interposer for MXM graphics cards with state-of-the-art GPUs from NVIDIA or AMD, as well as others.

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The GRIP uses the PCI/104- Express (x16) interface to support the maximum interface speed available from the host board. Additional to the graphic expansion are up to 4 mPCIe sockets and up to 4 Mini-SIM modules. The GRIP allows to configure your system according your needs.

### Key features of the GRIP are:

- MXM3.1 Type a/b graphic / GPGPU cards
- Up to 4 DVI single link connections
- One with CRT support
- · Over temperature shutdown to protect graphic card
- Up to 4 Full-Mini Card PCI Express sockets
- All mPCIe sockets with USB2.0 support
- Up to 4 Mini-SIM modules supported
- 1.5V mPCIe socket supply voltage
- Environment temperature -40°C up to +75°C

The GRIP has been designed to withstand harsh environments and extreme temperature conditions without the need of a fan. The special rugged design, combined with the best industrial-grade components, offer high reliability and long-term performance.

As all other MPL products the new solution can be integrated in the fanless open frame, DIN-Rail, Flange, 19" rack or MIL case. The total solution depending of the selected case

- is shock and vibration proof
- is of the lowest possible power consumption
- is rugged
- is long-term available.



PIP38 i7 DualCore with MXM module, including 4x DVI and 4 mPCIe slots

The perfect expansion for a system to be used in rugged environments with high graphic performance and/or calculation requirement. You may have a look at all the other expansion possibilities for the PIP <u>www.mpl.ch/t2b00.html</u>. Feel free to downloads the new <u>PIP Option datasheet</u>.

All MPL products are 100% designed and manufactured by MPL AG in Switzerland. This guarantees high quality, long-term availability and repair, and gives you security you can trust.

Further information regarding MPL's Grapic Expansion option can also be found on their website <a href="https://www.mpl.ch//t2bl0.html">www.mpl.ch//t2bl0.html</a>

### About the Company

MPL AG is located in Switzerland and was founded in 1985. Since the beginning, MPL stands for robust designs, long-term availability, low power consumption, and fanless concepts. The products are designed from scratch to succeed in extended temperature and meeting the high demands of rugged environments.

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