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## Pentium-M solution with ECC RAM for secure relevant applications

### Higher MTBF values with ECC RAM

The PIP10 of MPL AG comes not only as a fanless, robust, high quality industrial embedded PC with long-term availability. The highly reliable x86 Packaged embedded Industrial PC (PIP) features in addition, on-board soldered ECC DDR 333 SDRAM to increase the MTBF value.



**ECC (Error Correcting Code)** detects memory transfer errors as well as bad memory cells. The solution can even fix single bit errors, hence allowing the system to keep working.

The ECC technology has been proved it needs since years on microprocessor boards but rarely on x86 boards as these designs are driven by the Home PC industry in application that are generally non-critically. The reason to use ECC RAM on an industrial solution is to increase the reliability with the result of a better system up time (higher MTBF value). Due to the higher MTBF ECC RAM are used since many years in servers and other secure applications. As the required RAM size in the systems gets bigger, ECC RAM in mission critical application is not luxury anymore solely a logic improvement for a reliable solution.

The shock and vibration resistant PIP solution is available for 0°C up to +60°C as well as in extended temperature range from -40°C up to + 75°C at full load without throttling the CPU frequency.

The PIP concept is also available as PANEL-PIP solution, an "All-in-One" PANEL-PC concept, offered with 12.1" up to 19" LCD's optionally with Touch and the housing is either in Aluminum or in Stainless Steel with a depth of less than 90 mm. The MPL "All-in-One" Panel PC's are fanless and completely sealed (front, side and back are IP65).

Further Information about the PIP10, its feature and expandability you will find under [www.mpl.ch](http://www.mpl.ch) or send an email to [info@mpl.ch](mailto:info@mpl.ch)