



Strategic Cooperation Between JUMPtec AG® and ZF Micro Devices Leads to MOPSIcdMZ, an Indestructible Embedded PC/104-CPU with ZFx86™ Processor

Combining ZF Micro Devices FailSafe™ single-chip PC silicon expertise and JUMPtec AG® best of class Embedded Computer Technology (ECT) expertise optimizes system architecture to reduce cost and accelerate time-to-market

Rungis (France), December 18, 2001 - ZF Micro Devices, developer of the first crash-immune high performance, sub-1watt, x86 compatible embedded microcontrollers and German company JUMPtec AG®, the first European supplier of miniaturized computer boards today announced the availability of the MOPSIcdMZ, the newest PC/104 design, based on the ZF Micro Device ZFx86™.

"Equipped with a 64MHz front-side bus and the 128MHz ZFx86™ processor, this new PC/104 single board computer (SBC) provides high performance while maintaining low power requirements. Less than 900mA is needed to run this newest design which is fully functional with passive cooling, making it completely free of moving or rotating parts. Neither plug-in BIOS nor batteries jeopardize systems reliability. Vibration-proof operation is further enhanced with soldered-on SDRAM (16MB or 32MB available) and support for up to a 192MB chipDISK flash IDE drive that is easily mounted and lockable on PC/104 SBCs such as the MOPSIcdMZ", describes Mr Martin Bodenschatz, PC/104 & Single Board Computer, Marketing Manager, JUMPtec AG®. "This makes the MOPSIcdMZ an ideal PC/104 form factor embedded SBC, especially suitable for even the roughest industrial applications", adds Mr Bodenschatz.

"Our relationship with a recognized industry leader in the Embedded Computers market will provide customers additional access to key technologies for all sectors of industry", states

Patricia Blain, Marketing Manager Europe, ZF Micro Devices. As OEM manufacturers increasingly focus on their core competencies, they seek to sources intelligent technologies from suppliers they can rely on in long term", adds Mrs Blain.

Other features onboard the MOPSIcdMZ include an EIDE interface (Enhanced-IDE) for up to two hard disk drives, a 10/100 Base-T Ethernet connection, 2x USB, PS/2 mouse and standard MOPS features such as LPT interface, 2x COM, IDE and keyboard. For visualization tasks, the board is optionally equipped with a PCI graphic controller with 2 Mbytes DRAM and a JIPA-Interface (JUMPtec Intelligent Panel Adaptation) for trouble-free adaptation to all common LCD panels. Samples will be available during the first quarter of 2002.

MOPS PC/104 is the "Proven PC-Platform for Instant Solutions". All MOPS modules are configured with the same pinout for keyboard, COM1 and COM2, as well as 44-pin IDE and LPT. These standard features simplify a system upgrade within the JUMPtec® PC/104 product family.

About ZF Micro Devices

ZF Micro Devices pioneered FailSafe™ systems in 1995 and has enabled its customers to bring innovative, crash-immune systems to market faster than their competitors, by delivering ultra-low power PC systems at a chip size and price. Headquarters are located at 1052 Elwell Court, Palo Alto, CA 94303 USA; Tel: 650-965-3800; Fax: 650-965-4050; e-mail: info@zfmicro.com; web: www.zfmicro.com. In Europe, ZF Micro Devices can be reached at +33-(0) 1-41-80-04-10. In South America, call +54-11-4543-0049.

About JUMPtec Industrielle Computertechnik AG

JUMPtec is the world market leader in embedded computer technology. The Deggendorf-based company develops and markets so-called binary brains for the global market.

These miniaturized computer boards control devices such as ATMs, medical equipment and video phones. In fiscal 2000, the company generated sales of DM 118.7 million (1999: DM 37.1 million) and earnings before interest, taxes, depreciation and amortization (EBITDA) of DM 12.3 million (1999: DM 5.1 million). For further information, visit www.jumptec.de.