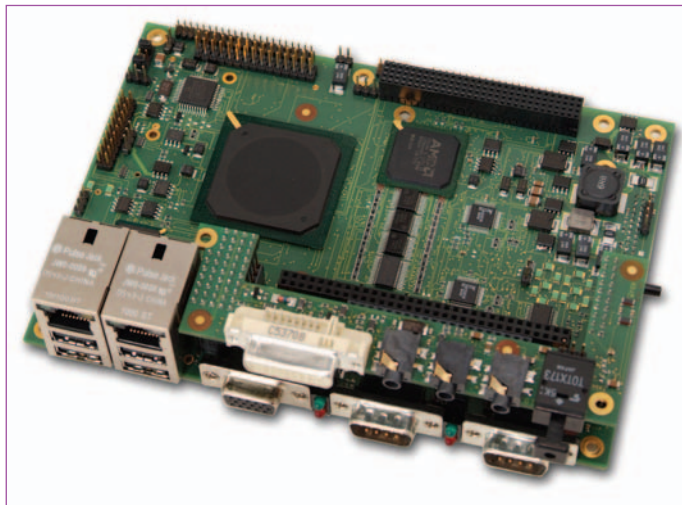


SBC with choice of Geode or Pentium M

With the MICROSPACE EPIC 800/855 board (MSEP800/855), Digital-Logic is providing an embedded computer platform based on the open EPIC (embedded platform for industrial computing) standard of the PC/104 consortium.

The compact computer board uses a fan-less Geode LX800 processor with 500MHz or an Intel Celeron M processor or rather a Pentium M processor with 800MHz. The main memory can be equipped with DDR SDRAMs from 128MB up to 1GB. A panel of converters provides all standard PC interfaces such as four USB V2.0 ports, two serial V24/RS232 interfaces, dual LAN with 100/10Base-T-Ethernet and 1 Gbit Ethernet, and VGA. Inside of the board, there are connections for one floppy disk and for up to two P-ATA hard disks.

An optional interface module is provided by the opto-isolated COM3 as RS232/RS422 and COM4 as RS232/RS485 and LPT1. For assembly with solid-state memory cards instead of the hard disk serves a slot IDE



CompactFlash type I/II. For display, this EPIC board uses the UMA graphic controller of the Geode LX with up to 16MB (MSEP800 - pictured above) for VGA and 18/24-bit LCD, or the 'extreme graphic' video controller that is integrated within the i855GME chip set and offers a video memory of up to 64MB (MSEP855). This controller has two separate video outputs (VGA and 18-bit LVDS), which may be connected simultane-

ously to display the same image twice or two images separately.

With the optional multimedia module MSEP800, an AC97-compatible stereo or 5.1 sound (SPDif only at the MSEP855) and DVI-D are available.

The option of using a PC/104-Plus socket and a MiniPCI socket to integrate individual features, make the MSEP800/855 an ideal computer platform for industrial and commercial applications.

For evaluation purposes the MICROSPACE PCV800/855 system is available and contains a hard disk and power supply.

The MSEP800/855 is compatible with standard Pentium PC and runs all common operating systems, such as Windows XP, QNX, Linux, etc. The embedded computer board measures 165mm x 115mm x 25mm (W x L x H) and weighs 0.2kg or 0.4kg respectively. The integrated long-range power supply provides a voltage feed of 10V to 30V.

Designed for low power consumption (typically 10W or 18W), this board operates within the standard temperature range of 0°C to +50°C.

The MSEP800/855 is available in a basic model and with extension modules especially for multimedia and industrial applications. It is ideally suited for military, telecommunications, medical, security technology and image processing applications.

Digital-Logic
www.digitallogic.ch

32-bit MCU with Flash for automotive use

Fujitsu Microelectronics Europe (FME) has released the first flash device of its new MB91460 series, specifically designed for next-generation automotive applications. The MB91F467D is a 0.18µm successor to the MB91F362G dashboard microcontroller with higher speed, more memory and additional features.

The MB91F467D includes 1088kB of embedded flash technology that features protected read-out. On-chip pre-fetch and flexible cache ensure best possible performance from this memory, which is connected to both the I-bus and F-bus.

The MB91F467D offers 64kB of embedded RAM and the external bus interface (32-bit data, 26-bit addresses) can be used to connect external memory, e.g. SDRAM, burst-mode flash or an FME GDC for cluster graphics control.

Each of the 3 CAN interfaces

has its own set of 32 message buffers; 4 of the 5 LIN-UARTs are equipped with 16 Byte Rx and Tx FIFOs to speed up communication. 3 I2C modules complete the set of serial communication interfaces.

Compared to the MB91F362G, the variety of timers made available has also been enhanced. The MB91F467D implements 8 free-running timers as a time-base for 8 ICU and 4 OCU modules, 8 reload timers, 3 up/down counters and an real-time clock module, which can operate on the 4MHz main crystal, or on the 32kHz sub clock.

In addition to the 6 channels of stepping motor controller interfaces to control dashboard instruments, the set of pulse-generating modules contains 12 channels of 16-bit PPG, a sound generator and a PFM module. The on-chip PLL will create an internal operating

frequency of up to 96MHz and a proven clock modulator is implemented to improve EMC behaviour.

The MB91F467DA version also features the following analogue functions: 24 channels of a 10-bit ADC and 1 alarm comparator input. Other improvements are a choice of I/O drive strengths, 2mA, 5mA or SMC drivers of 30mA.

Various input levels are also included, such as automotive, CMOS Hysteresis and TTL. All inputs come with internal pull-up resistors, which allow unused pins to be left open.

The MB91F467D will be supported by the Accemic MDE (monitor debug environment). Two starter kits are also available, one of which includes MB91F467D and a FlexRay communication controller.

Fujitsu Microelectronics Europe
www.fujitsu.com/emea/

Service provides instant GPS information

U-blox is providing Assisted GPS ('A-GPS') services that supply instant location information, reducing GPS receivers' Time To First Fix ('TTFF') to just a few seconds. A-GPS uses mobile phone networks to access satellite location data transmitted to and collected by a global monitoring network of u-blox GPS receivers.

The collected data is stored at a u-blox aiding server which, in turn, makes the data available to users with mobile phone connectivity.

The A-GPS service is ideal for emergency call purposes, where a users' position must be established immediately, or in weak signal environments.

U-blox
www.u-blox.com