Fabema GmbH
Hähn 10a
51515 Kürten-Biesfeld
(Germany)
The company is a market leader of mobile traffic systems and traffic safety products. Headquartered in ?? (Germany), the company develops and produces especially mobile traffic lights systems, as well as further traffic safety products for construction-site safety.

Janz Tec AG
Im Dörener Feld 8
33100 Paderborn
(Germany)
The company located in Paderborn (Germany), a long-time CiA member, manufactures board-level products and Industrial PCs with CAN and CANopen interfaces among other controllers.

Links
www.janztec.com
www.fabema.com

Abstract
Janz Tec supplies Fabema with compact Panel PCs for its mobile traffic light systems. The ARM-based device runs Windows CE operating systems. The device manufacturer also provides hardware and software modifications, so that the mobile traffic light systems can be adapted to the customers' demands.

Panel PC with up to four CANopen interfaces controls traffic lights

The heart of the mobile signal system is a multifunctional controller for the mobile unit and the light-signal system fixtures. The control display in this system is the emVIEW-6T, which is used for the demonstration and simulation of the real traffic layout. All necessary traffic- related documents have to be produced fast and without any problems with this system: they are constructed in only one operating procedure with the program software provided.

The touchscreen display with a resolution of 640 x 480 pixel and a 24-bit color-depth offers the necessary easy of use, too. The demonstration and simulation of the real layouts with signals are incorporated in the control system.

Recording, documentation and printout of the data flow signal situation can be established in real-time. Also, all non-security-relevant construction parameters can be changed during operations. In addition, the configuration provides the possibility to use different construction phases in the control system, so complex reprogramming lo-

cally is no longer necessary. Neighboring signal systems or host systems can be coordinated with cables or by a DCF-synchronized time signal. Speeding up public transport and rescue vehicles is a standard feature of the control system.

With help of the Panel PC, all parameters can be entered locally or via remote-access maintenance, consequently reducing service costs – normally of local authorities or private road construction companies.

Furthermore, with the additional UMTS/HSPA modem the following functions can be accommodated:

- Implementation of UMTS / HSDPA / HSUPA / GPRS / EDGE to 10/100 MBit/s Ethernet
- IP at both interfaces (UMTS, Ethernet)
- Router, VPN functionality, firewall functions
- Web interface for the calibration of UMTS-, input and
- router parameters
- Update capability of overall control
- GPS support

Peter Tesch, managing director of Fabema, said:

„With Janz Tec and its products we have found a powerful regional partner, who can also facilitate modifications of hardware and software directly and straightforwardly. The needed interfaces can be allocated without any problems. The custom design of the system fits well into our own Corporate Identity, so that our customers and employees can identify seamlessly with this system. The service and support from the Janz Tec's employees is phenomenal!"

The ARM-based PanelPC provides a 6,5-inch screen size. With up to four CANopen interfaces this control unit is suitable for many different applications with Windows CE operating systems 5.0 or 6.0. Using this hardware in adverse environment temperatures from -30°C to +60°C is no problem, because the ARM processor employed produces just little lost heat, allowing completely passive cooling. Display backlighting uses the newest LED (light emitting diode) technology. The manufacturer assures system availability for a minimum of eight to ten years. ◄