

TX27: World's smallest, Low-Power i.MX27 System on Module

Ka-Ro electronics is a pioneer in embedded low power computer on module systems. Ka-Ro has used its extensive know-how and experience to integrate Freescale's i.MX processors into a new range of modules which fully exploit the CPUs performance and features. The TX27 is the first of the Ka-Ro electronics' TX series of computer on modules designed especially for Freescale i.MX multimedia processors.

The TX27 module is the smallest of its kind in the world (Figure 1). It is implemented on a standard SODIMM 200 module and boasts a tiny footprint of just 67.6 x 26.0 mm with a maximum thickness of 4.2 mm.

Figure 1.



Specifications and Features

- Freescale i.MX27: 400 MHz CPI
- Mobile DDR-SDRAM: 64 MB to 128 MB
- NAND Flash memory: 128 Mbyte
- SODIMM 200 Modul: 67.6 x 26 x 4.2 mm
- Operating temp. range: -20 °C to +85 °C
- 10/100 Mbps Ethernet
- High speed USB 2.0 OTG
- High speed USB 2.0 Host
- LCD controller to 800 x 600
- MPEG-4 .263/H.264 hardware CODEC
- Camera interface

Benefits

- Smallest module with Freescale i.MX27 in the world
- Extremely low-power
- Excellent price/performance ratio
- Standard pinout optimized for Freescale i.MX processors

Applications

- Mobile applications
- Diagnostic systems
- Aftersales service tools
- Access and remote access tools

Ka-Ro Starter-Kit V for TX Modules with Freescale i.MX Processor

The Starter-Kit V is a ready-to-use development system for building applications based on the TX embedded processor boards with Freescale i.MX processors (Figure 2). A main benefit of the Starter-Kit V is its compatibility not only to the i.MX37 which is also already available as a module system from Ka-Ro, but also to any future Freescale i.MX processors.

Key Features Starter-Kit V

- SODIMM 200 TX socket
- Two SD card sockets
- USB 2.0 OTG connector
- USB 2.0 Host connector
- D-SUB 15 VGA connector
- 40pin LCD flat cable header compatible to Starter-Kit III and IV
- 3.5 mm headphone connector

Figure 2.

■ JTAG interface

- UCB1400 audio codec and touchscreen controller
- RS232 on 10-pin flat cable header
- RS232 on SUB-D header
- All pins of the TX socket are connected to daughter board slot for easy application design-in
- 10/100 Mbit/s Ethernet
- Operating Voltage: 5 V_{DC}
- Power supply by USB-OTG or screw header
- 100 x 160 mm
- Schematics of the baseboard are included for reference

Software

As with all Ka-Ro Starter-Kits, in the Starter-Kit V both a Linux kernel and a Windows® CE BSP (Board Support Package) are included in the development platforms.

Windows CE BSPs and Linux kernels support all the components of the Starter-Kits and are developed and supported by Ka-Ro.

Customization of BSPs is possible at all stages.

For more information, please visit www.karo-electronics.de or contact your local SPOERLE FAE.









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