efus™, the new COM form factor by F&S Elektronik Systeme GmbH
Compact, inexpensive and extremely flexible form factor for Cortex-A CPUs

easy   starter kits, workshops, customized WEC 2013/ Linux, free support
functional   various interfaces, expandable with wireless modules, easy base board
universal   for visualization, communication, control (in industrial and medical applications)
small   a size of only 47 x 62mm, 5V Single Supply

At the embedded world 2014 we introduced first samples of our new COM form factor efus™.
Now we have starterkits with customized WEC 2013 and Linux available.

The new form factor efus™ by F&S Elektronik Systeme GmbH uses a common 230 pin MXM-2 edge connector, known from Qseven. The pin assignment of this plug connector is based on the EasyLayout concept, where signal lines leading to plug connectors do not cross. A four-layer circuit board is sufficient for the baseboard. For hardware development, the layout data for EAGLE is available for free.

For the mechanical attachment of efus™ on the base board, the locking mechanism EasyMount is used. Customers, who need further functions on the module, can be helped with an easy, inexpensive and low-risk redesign. Expansions for WLAN (with chip antenna or socket), ZigBee, Z-Wave or EnOcean are already available.

F&S offers a project guarantee. The customer is supported from the very beginning of his project until the successful completion. Starter kit, workshops, documentations for hard- and software development, as well as free F&S support are at hand.

The first module of this new product family, efus™A9, comes with a Freescale i.MX6 Cortex-A9 CPU. This high-performance CPU offers 3D graphics (100MTri/s, 1000Mpx/s), Hardware Decoder/Encoder with a resolution up to 1080p, H.264 HP, HDMI v1.4. , ARMv7™, NEON and VFPv3 for your multimedia applications. Other important features are the long-time availability of up to 15 years and the temperature range of -40°C - +85°C.
The memory is up to 1GByte RAM and 32GByte Flash. The 230 pin finger-type contact hosts interfaces like Gigabit-Ethernet, USB Host, USB Device, 2x CAN, 2x I^{2}C, 2x SPI, 4x Serial, GPIOs, 1+1 uSD-Card, I^{2}S, SATA, PCIe and camera. Display connections in digital RGB and 1 + 2 channel LVDS (up to FullHD, JILI30 compatible), as well as DVI are available simultaneously. A resistive 4-wire touch controller, as well as a capacitive touch controller can be connected. The power supply is 5V, the power consumption of the Single-Core version is about 1.5W (typ.).

efus™A9 runs on Linux, Windows Embedded Compact 7 and Windows Embedded Compact 2013. Another highlight is the inexpensive price from€39,- (depending on features and quantity, excl. VAT).

Further modules in efus™ form factor will be introduced in the course of the year 2014 (Cortex-A5 by the end of 2014).
efus™A9 can be purchased directly from F&S Elektronik Systeme (www.fs-net.de) or from one of our distributors.f the Single-Core version is about €39,- (depending on features and purchase quantity, excl. VAT), which is extraordinarily inexpensive for a module with Cortex-A9 - 1GHz CPU, numerous interfaces and its high flexibility.

Further modules in efus™ form factor will follow within 2014 (with Cortex-A5 by Q4/2014). efus™A9 is distributed directly by F&S Elektronik Systeme or by our distributors all over Europe.

Find further information at www.fs-net.de.

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