## The New Form Factor efus





Our latest product family represents 20 years of experience in RISC Boards

easy

starter kits customized operating systems (Linux, WEC 2013) free support from F&S

**functional** 

various interfaces expandable with wireless modules easy base board based on "EasyLayout" standard

universal

visualization communication control

small

47 x 62mm only 5V Single Supply

**Original Size** 



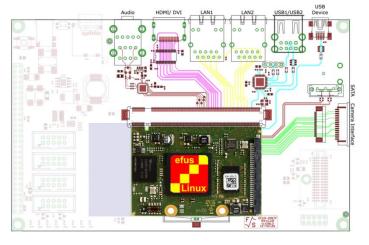
The **efus** project guarantee stands for free support. We are always at your side during your development. To start your project optimally, we offer starter kits and workshops.

The **efusA9** Computer-On-Module price (per 1000) also offers the lowest baseboard costs for YOUR development and production!

#### Why?

Our answer is **EASYMOUNT!** No need for screws to fix the module in high vibration surroundings, just click the module on your baseboard and the unit is resistant for shocks up to 50G!

**EASYLAYOUT**: Only 4 layers are needed to cause a minimum of crossing wires and a minimum count of vias for your baseboard. We developed our new form factor **efus** with focus on minimizing your development time.



You can start directly - just in time – you only need to download the EAGLE Source board design and libraries! Just put your needs on the baseboard and place your prototype order!

# You want to have a special custom chip ON MODULE?

We have the solution: We will develop a special interface opposite the LVDS connector.

We offer inexpensive expandable areas, so the custom chip (e.g. WLAN, ZigBee, etc.) can be placed on module – only the software drivers need to be adjusted.

Our customers trust us: more than 60 % of our generated revenues come from the medical device industry.





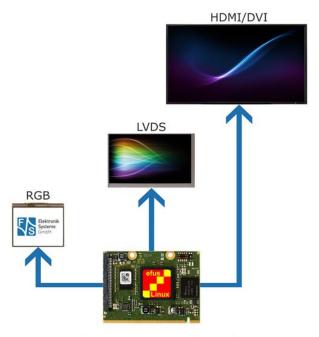


#### **Description**

The applied i.MX6 Cortex-A9 CPU comes with high performance, excellent multimedia features like 3D (100MTri/s. 1000Mpx/s), graphics Hardware Decoder/Encoder with a resolution up to 1080p, H.264 HP, HDMI v1.4. , ARMv7 $^{\text{TM}}$ , NEON and VFPv3. Freescale's focus on chip design was low power consumption.

When using the ARM Cortex-A9 CPU, you definitely constitute the right compromise between performance/MHz consumption/MHz and power (0.35mW/MHz). ARM Cortex-A15 does indeed offer a higher performance (about 70% more at equal frequency), but it also has a much higher power consumption (about 100% more at equal frequency). Other important features are the long-time availability of up to 15 years and the temperature range of -40°C - +85°C.

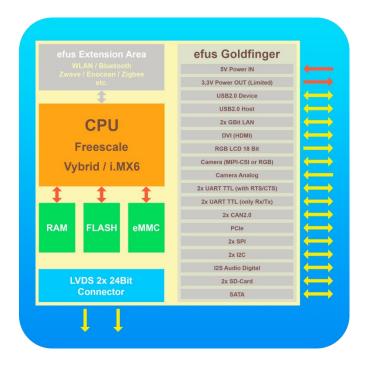
Additionally, the module offers various interfaces. It also enables the possibility to control a RGB display, a LVDS display and a DVI screen simultaneously.



### simultaneous displaying

#### **Support**

Linux, WEC 7, as well as Windows Compact 2013 are available for efusA9. All starter kits are shipped with 7" TFT and pre-installed operating system. Optionally one has the opportunity to book a four-hour workshop in the short term (Windows Embedded CE or Linux). The customer can choose from additional hard- and software extensions (camera kit, UpDate programm, safe file system, etc.). We are looking forward to your questions via forum, phone, e-mail or in person.



#### **Technical Data**

Power Supply:  $+5V_{DC}/\pm5\%$ 

Power Consumption:

Interfaces: 1x Ethernet 10/100/1000MB

> 4x Serial 1x USB2.0 Host 1x USB2.0 Device 2x CAN2.0

2x I2C 2x SPI

1x I2S (Audio Codec) 2x SDIO (SD-Card) 1x SATA

PCIe (2.0) Camera Interface /YUV4:2:2 CCIR-656

TFT LCD-Interface: 18bit RGB &

> 1-2x 24bit LVDS & DVI up to 1GB DDR3-RAM

up to 1GB Flash Program Memory:

+ 32GB eMMC ARM Cortex-A9

Processor: Single-/Dual-Core 800MHz/1GHz

0°C - +70°C, Temperature Range: (-20°C - +85°C/

-40°C - +85°C optional)

Size: 47mm x 62.1mm x 11mm

 $(I \times b \times d)$ 

Weight: tbd



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RAM: