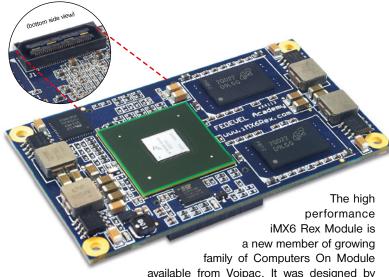
iMX6 Rex Module

Open Source Hardware and Software project

The smaller than credit card sized iMX6 Rex Module is targeting skilled development teams demanding high computing power and high speed peripherals for their multimedia applications. Together with the iMX6 Rex Base Board it creates EMBEDDED solution with all of the must-have peripherals, designed to speed up your development process.



available from Voipac. It was designed by FEDEVEL Academy and is currently the only i.MX6

DualLite/Dual/Quad/QuadPlus ARM® Cortex® - A9 based Open Source COM solution available with complete Altium Designer project documentation, including Schematic, BOM and PCB files.

It is available with up to 1.2GHz clocked NXP (Freescale) i.MX6 multicore CPU, 4GB of soldered DDR3 SDRAM, Gigabit Ethernet PHY, High-Speed USB 2.0, HDMI, LVDS, SATA, and PCI Express, and offers 3D video and graphics acceleration.

All of the design-extensive parts are located at the 12-layer HDI micro-via iMX6 Rex Module that is available in 3 standard configurations. These can be further customized to better match your device temperature range and performance requirements thus helping you to stay within budget.

All of the standard configuration iMX6 Rex Modules are equipped with one 60pin High Speed Header on position J1 that provides access to the following basic, must-have peripherals: HDMI, 1Gb Ethernet, USB, SD, UART, SPI.

The ULTRA and PROfessional configuration iMX6 Rex Modules are equipped also with the second 60pin High Speed Header on position J2 that contains additional and high speed peripherals: Audio, LVDS, SATA, PCIE, SD, USB, UART, JTAG, and 2x I2C.

iMX6 Rex Module is available with the Open Source development environment including access to complete documentation and ready-to-run SW support for Linux and Android.

Hardware Specification

CPU: NXP i.MX6 ARM® Cortex® - A9

up to 1.2 GHz QuadPlus

SPI FLASH: up to 64Mbit

DDR3-1066 SDRAM: up to 4GB, 533MHz Ethernet: 10/100/1000 Mbps

I/O voltage: 3.3V

Input power: 7 to 24 V (DC)

Temperature range: Commercial 0°C to +70°C

Extended -20°C to +70°C Industrial -40°C to +85°C

Dimensions: 70 x 40 mm

High speed 60-pin board to board socket: 1/2 Lead free / RoHS compliant

Key Features

High-Speed USB 2.0

HDMI (up to QXGA 2048x1536)

LVDS (up to WXGA 1366x768)

Video Processing Unit, 1080p decoding and encoding (H.264, VC1, RV10, DivX, etc.)

Integrated GPU with OpenGL-ES 1.1 and 2.0, OpenVG 1.1, Windows Direct3D and OpenCL EP

Vector graphics processing unit (GPUVGv2)

PCIE SATA

SD / MMC

CMOS UART / I2C / SPI

Digital audio

JTAG

User LED / Power LED

Supported Software

Yocto 2.3 (preinstalled)

Android 7.1 Nougat (preinstalled upon request)











Your Local Distributor: