

QBlissA9

Qseven Module with NXP i.MX 6 Processor

Characteristics

- ARM Cortex®-A9 Single-/ Dual-/ Quad-Core up to 1GHz
- up to 1GB SLC Flash, up to 4GB DDR3-RAM
- 1x (2x) Channel TFT LVDS LCD-Controller
- DVI Interface
- 1x Ethernet 10/ 100/ 1000 MBit
- 1x USB2.0 Device, 4x USB2.0 Host
- 1x CAN2.0, 2x I²C, 1x SPI
- 1x uSD-Card (via SDIO)
- 1x AC97 (Audio + Touch Interface)
- 1x PCIe express (2.0)
- 1x SATA
- Digital Camera Interface (optional)
- Windows Embedded Compact 7/ WEC13/ Linux
- 5V

Description

Since the Qseven™ form factor was introduced; many manufacturers of boards and software have adopted it. The combination of Qseven™ and RISC gains more and more importance. The reason is the compatibility of the offered boards, as well as the small form factor (70x70mm) with an inexpensive plug connector. QBlissA9 runs on NXP i.MX 6 Quad-Core ARM Cortex A9 CPU.

Important data of this high-performance CPU are 3D graphic (100MTri/s, 1000 Mpx/s), Hardware Decoder/ Encoder with a resolution up to 1080p, H.264 HP, HDMI v.1.4, ARMv7™, NEON, VFPv3, SATA-II interface, as well as Gigabit Ethernet.

Another characteristic is the long availability of the CPU of at least 15 years (NXP Product Longevity Program). With its 2-channel LVDS (up to WUXGA - 1920x1200) and DVI (up to HD1080), QBlissA9 is perfectly suited for multimedia applications.

The module offers an unprecedented combination of high-end computer graphic and simultaneously low power loss. The i.MX 6 CPU is also available with Single- /Dual- and Quad-Core in the same body. Therefore, further versions of QBlissA9 in different power classes are disposable.

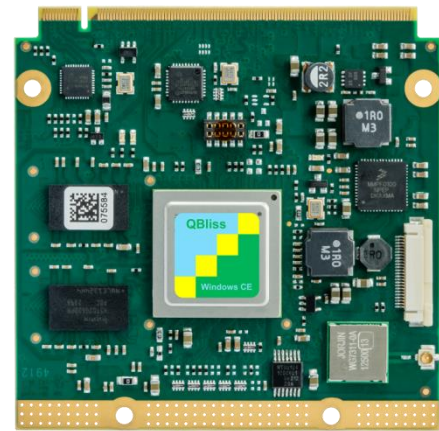
On-Board Operating System



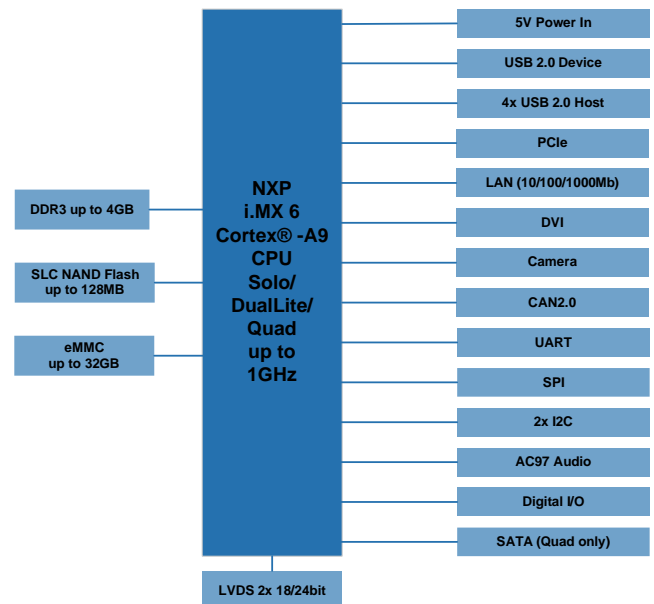
A customized WEC 7/2013 (Silverlight, IE, Mediaplayer) with Compact Framework 3.x, creates the base of your development. i.MX 6 provides hardware units, which relieve the CPU significantly and have a positive effect on fluent graphic display and power consumption.



F&S Linux (BSP, uboot, BSP, Buildroot, QT, GStreamer) already comes with a customized kernel and all interface drivers, including Source. It also has a Cross Compiler Toolchain to develop own bootloaders, kernels or further software.



Block Diagram



Starter Kit

The QBlissA9 starter kit contains a QBlissA9-V11-LIN or – WEC7, a base board in PicoITX form factor, with standard connectors and plug connectors for the offered interfaces. Furthermore, a cable kit and an access code to download documentation, current software, drivers and example programs, are included. We also offer suiting display kits and adapters. Additionally, we offer a 4-hour workshop. The goal of the workshop is, to learn how to handle the QBlissA9 starter kit, to get introduced to the development area and to complete it with a running system (QBlissA9, display and touch panel). A support forum with more than 3000 registered customers is always online to answer any upcoming questions.



