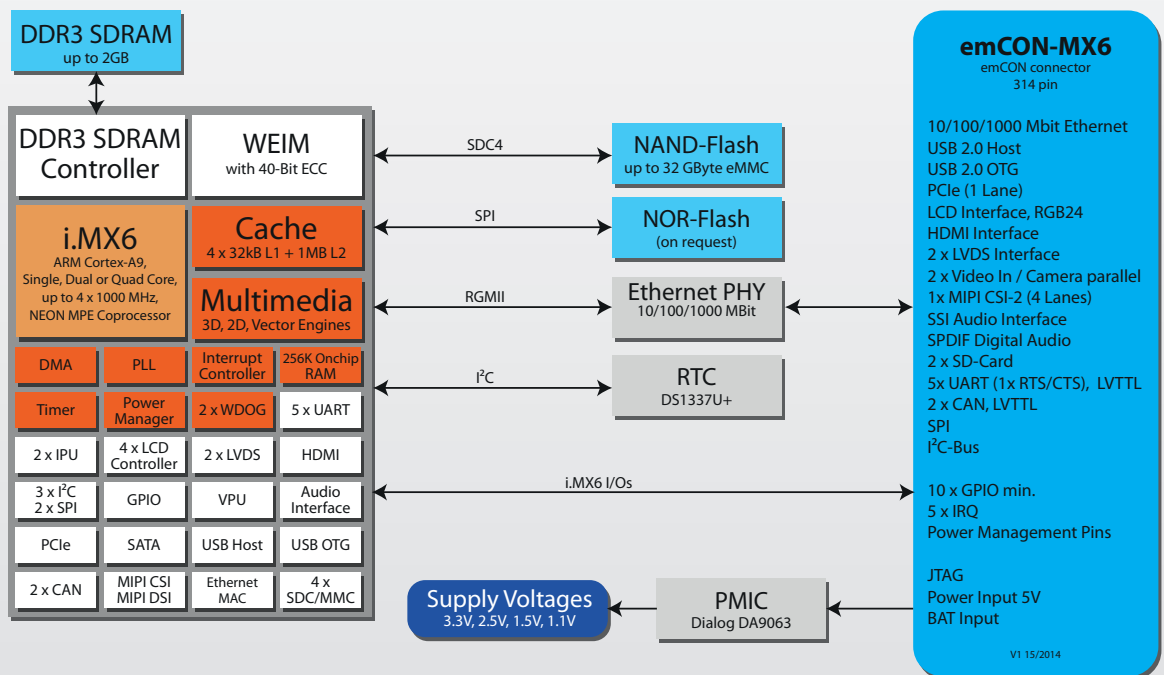
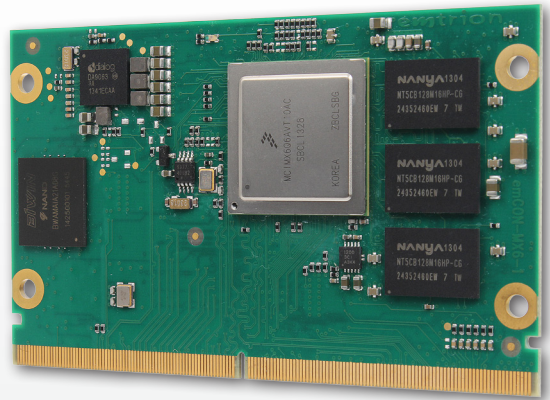


emCON-MX6D
emCON-MX6Q

Processor module

with NXP dual/quad core Cortex-A9 processor



Getting started with your embedded development!

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emCON-MX6 D/Q as CPU-Module or Single Board Computer

| | emCON-MX6D | emCON-MX6Q | SBC |
|---|---|--|---|
| |  |  |  |
| Product | emCON-MX6D | emCON-MX6Q | emCON-MX6-SBC |
| Windows | WEC on request | | |
| Linux | Linux | | |
| QNX | QNX on request | | |
| Android | Android | | |
| CPU manufacturer | NXP i.MX6 | | |
| CPU architecture | ARM Cortex-A9 (dual core) | ARM Cortex-A9 (quad core) | ARM Cortex-A9 (dual/quad core) |
| CPU performance | 2x 1 GHz - up to 5.000 MIPS | 4x 1 GHz - up to 10.000 MIPS | up to 4x 1 GHz - up to 10.000 MIPS |
| Co-Processor | 2x ARM NEON™ | 4x ARM NEON™ | up to 4x ARM NEON™ |
| Video processing (hardware accelerated) | H.264 decode at 2x 1080p30, H.264 encode at 2x 720p30 or 1x 1080p30 | | |
| 2D (hardware accelerated) | openVG 1.1 | | |
| 3D (hardware accelerated) | OpenGL ES 2.0 & 1.1, Direct3D | | |
| GPU Computing | openCL EP | | |
| RAM | 512 MB up to 2GB DDR3-SDRAM | | |
| Flash | up to 64 GB eMMC | | |
| Ethernet | 1000Base-T / 100Base-TX / 10Base-T | | |
| UART | 5 | | 1x RS232, 4x LVTTTL |
| USB Host | 2.0 high speed | | 3x 2.0 high speed via USB hub |
| USB Device | 2.0 high speed (OTG) | | |
| Serial-ATA | SATA II (3 Gbps) | | |
| PCIe | 1 Lane | | miniPCI Express interface |
| Digital Audio | SPDIF IN/OUT | | |
| Analog Audio | SSI interface | | Stereo out |
| LCD interface | 4 Interfaces, up to Full-HD (1x RGB, 2x LVDS, 1x HDMI 1.4) | | 4 Interfaces, up to Full-HD (1x RGB, 2xLVDS, 1x HDMI 1.4) |
| Video In/Camera | YUV422 interface for 2 x CMOS Cameras up to 16MPixel or PAL/NTSC CODEC | | YUV422 interface for 1 x CMOS Cameras up to 16MPixel or PAL/NTSC CODEC |
| | MIPI CSI-2 Interface (4 Lanes) | | MIPI CSI-2 Interface (2 Lanes) |
| CAN | 2 x 2.0 A/B | | 2 x 2.0 A/B (LVTTTL) |
| I2C | 1 | | |
| SPI | 1 | | |
| Digital GPIO | min. 8 | | min. 8 |
| MMC/SDC | 2 x MMC/SD (SDIO) | | 1 x micro SD |
| RTC (battery buffered) | yes | | 1x battery holder with CR1632 |
| JTAG | yes | | yes |
| Size in mm | 82 x 50 x 10 | | 150 x 100 x 18 |
| max. power consumption | 5V @ 2A max. | 5V @ 3A max. | 5 V @ 5A max. |
| Operating temperature | 0...+70°C, opt. -40...+85°C | | 0...+70°C, opt. -25...+85°C |
| Interface to carrier board | emCON connector (314 pos.) | | |
| Carrier boards available | yes | | - |
| Developer kits available | yes | | yes |
| Custom specific solutions | yes | | yes |

Subject to change without notice.
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