

μQ7-A75-J

µQseven® standard module with NXP i.MX 6 Processor

Small, flexibile OTS module at proprietary costs



Ready-to-use" and "ready-to-market" ost-effective product which sively supports SoC native features



- Excellent price-performance ratio
- The best combination of low power consumption, size and price
- Complete BSP, easy migration between the entire i.MX 6 product family















NXP i MX 6 Family based on ARM® CORTEX-A9 processors



Internet of Things



PDA Electronics

Other

Interfaces



Wireless Technologies

| | Processor | - i.MX6S Solo - Single core up to 1GHz - i.MX6DL Dual Lite - Dual core up to 1GHz per core |
|----------|---------------------|--|
| * | Max Cores | 2 |
| A | Memory | Up to 1GB DDR3L on-board (up to 512MB with i.MX6S Solo) 32-bit I/F |
| Ş | Graphics | Dedicated 2D Hardware accelerator Dedicated 3D Hardware accelerator, supports OpenGL® ES2.0 3D Supports 2 independent displays |
| 1911 | Video Interfaces | $1\ x$ LVDS Dual Channel or $2\ x$ LVDS Single Channel $18\ /\ 24$ bit interface HDMI Interface |
| | Video Resolution | LVDS, resolution up to 1920x1200 HDMI, resolution up to 1080p |
| 9 | Mass Storage | On-board eMMC drive, up to 8 GB SD / MMC / SDIO interface Internal SPI Flash for booting |
| 4 | Networking | FastEthernet (10 / 100 Mbps) interface |
| ← | USB | 1 x USB OTG interface 1 x USB 2.0 Host interface |
| ::::: | PCI-e | 1 x PCI-e x1 lane (only PCI-e 1.1 and Gen2 are supported) |
| | Audio | I2S / AC'97 Audio interface |
| | | |

On the card edge connector, many pins can be used as General Purpose I / Os or to implement some(*) of the following extra functionalities:

- Additional SD interface
- Up to 4 UARTs
- CAN interface
- Watchdog(s)
- I2C interfaces
- PWM outputs
- SPI interface
- Additional Audio interface

(*) not all the combinations are allowed simultaneously Power Management Signals

| | Power | +5V _{DC} ± 5% |
|----|-----------|------------------------|
| | Supply | Optional Low Power RT0 |
| os | Operating | Linux |

System 0°C ÷ +60 °C (Commercial temp.) Operating Temperature* -40°C ÷ +85°C (Industrial version)

40 x 70 mm (1.57" x 2.76") Dimensions

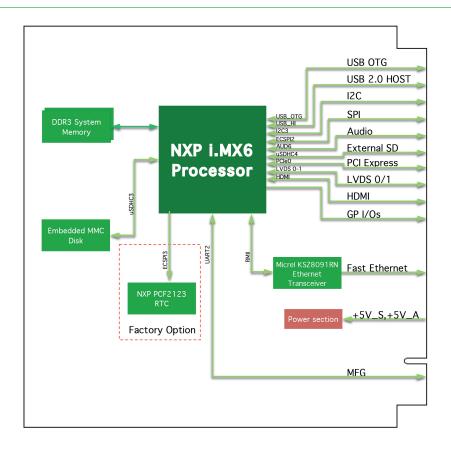
*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider applicationspecific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.



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BLOCK DIAGRAM



ORDERING INFORMATION

| PN* | DESCRIPTION |
|-------------------|--|
| QA75-1110-1000-C0 | μQ7 w / i.MX6 Solo - RAM DDR3L 256MB single chip - eMMC 4GB - RTC Low Power - Comm.Temp |
| QA75-2310-1000-C0 | μQ7 w / i.MX6 DualLite - RAM DDR3L 512MB dual chip - eMMC 4GB - RTC Low Power - Comm.Temp |
| QA75-2410-1000-C0 | μQ7 w / i.MX6 DualLite - RAM DDR3L 1GB dual chip - eMMC 4GB - RTC Low Power - Comm.Temp |
| QA75-1110-1000-I0 | μQ7 - μQ7-A75-J w/i.MX6 Solo - RAM DDR3L 256MB single chip - eMMC 4GB - RTC Low Power - Ind.Temp |
| QA75-2310-1000-I0 | μQ7 - μQ7-A75-J w/i.MX6 DualLite - RAM DDR3L 512MB dual chip - eMMC 4GB - RTC Low Power - Ind.Temp |
| QA75-2410-1000-I0 | μQ7 - μQ7-A75-J w/i.MX6 DualLite - RAM DDR3L 1GB dual chip - eMMC 4GB - RTC Low Power - Ind.Temp |

^{*}Additional configurations may be available. Please inquire for more information.

ACCESSORIES

| PN | DESCRIPTION |
|-------------------|---|
| QA42-0000-2111-I0 | Carrier Board for Qseven® rel. 2.0 Compliant modules on 3.5" Form factor - HDMI - 2nd Ethernet Port - LVDS - Debug Port |
| QA30-Q7XDK-0000 | Qseven® Cross Platform Development Kit 2.0 |
| QA42-Q7XSK-2100 | Q7 - Cross Platform Starter Kit 2.0 - HDMI - LVDS, 7" touch display included |
| QA75-DISS-1-PK | μQ7 w / i.MX6 Solo & Dual Heat Spreader (PASSIVE) |
| QA75-DISS-2-PK | μQ7 w / i.MX6 Solo & Dual Heat Sink (PASSIVE) |
| ASK-425 | Adapter for mounting a microQ7 module on standard Qseven® carrier boards |

