Qseven EHL

The new Engicam module developed on Qseven® standard, based on Intel® Elkhart Lake™ processor series, is built on new levels of CPU with high-performance multimedia processing with integrated IoT features, for real-time applications, security and functional safety.

HIGHLIGHTS

- **Intel** Elkhart Lake
- **GRAPHICS** 2 x LVDS 18/24 bit channel, 1 x HDMI, eDP 1.3
- **MEMORY and STORAGE** Starting from 2GB LDDR4, eMMC, 2 x SATA

APPLICATIONS

Automotive | Biomedical/Medical devices | Transportation | Digital Signage Infotainment | Robotics

FEATURES

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CPU	• Intel Atom X6211E Dual Core @ 1.2 GHz, 1.5MB L2 cache, 6W • Intel Atom X6413E Quad Core @ 1.5 GHz ,1.5MB L2 cache, 9W • Intel Atom X6425E Quad Core @ 1.8 GHz, 1.5MB L2 cache, 12W • Intel Atom X6212RE Dual Core @ 1.2 GHz, 1.5MB L2 cache, 6W • Intel Atom X6414RE Quad Core @ 1.5 GHz, 1.5MB L2 cache, 9W • Intel Atom X6425RE Quad Core @ 1.9 GHz, 1.5MB L2 cache, 12W • Intel Atom X6427FE Quad Core @ 1.9 GHz, 1.5MB L2 cache, 12W • Intel Atom X6200FE Dual Core @ 1.0 GHz, 1.5MB L2 cache, 4.5W
CORES	Up to 4
MEMORY	Starting from 2GB LPDDR4
GRAPHICS	• Intel® 11th generation (Gen 11) LP graphics controller. • DirectX 12.1 compliant, OpenGL ES 3.1/3.0/2.0/1.1, OpenGL 4.5 supported, OpenCL™ 1.2
VIDEO INTERFACES	• HDMI up 4K@60Hz • eDP to LVDS Dual channel up to 1920x1080 @ 60Hz via eDP bridge • DP up to 4096x2160@60Hz • eDP up to 4096x2160@60Hz
VIDEO PROCESSING	• HEVC/H.265, H.264, VP9, VP8, WMV9/VC1, MPEG-2, VC-1. JPEG/MJPEG dec • HEVC/H.265, H.264, VP9, JPEG/MJPEG enc

AUDIO	• I2S i/f • HDA
USB	• 8 x USB 2.0 • 2 x USB 3.0 (optional)
MASS STORAGE	• eMMC • 2 x SATA
PERIPHERAL INTERFACES	PCIe 3.0 , UART, I2C, SPI, CAN Bus, Watchdog Trigger, LPC, Thermal Control, Fan Control, SDIO
OPERATING SYSTEM	• Linux • Windows
NETWORKING	• 1 x Gb Ethernet interface
DIMENSIONS	70 x 70 mm
OPERATING TEMPERATURE*	Industrial (-40°C to 110°C Tj*)

* Valid for all components except CPU. Customer shall consider junction temperature for CPU. Temperature will widely depend on application. Specific cooling solutions could be necessary for the final system.

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BLOCK DIAGRAM