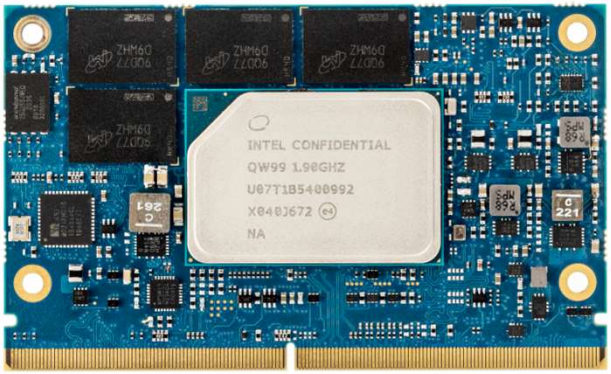
SmarCore EHL

The new Engicam module standard SMARC, based on Intel® processors ELKHART LAKE ™ series ATOM ® x6000E build on new levels of CPU and graphics performance with integrated IoT features, real-time performance, manageability, security, and functional safety.



HIGHLIGHTS

- Standard SMARC
- Suitable for IoT and real time performance

APPLICATIONS

Industrial · Digital Signage Infotainment · Transportation · Automotive · Avionics · Surveillance · Robotics · Biomedical/ Medical devices · Home Automation

FEATURES

Windows 10

CPU	• Intel Atom X6211E Dual Core @ 1.2 GHz (burst 3.0 GHz) 1.5MB L2 cache, 6W • Intel Atom X6413E Quad Core @ 1.5 GHz (burst 3.0 GHz) 1.5MB L2 cache, 9W • Intel Atom X6425E Quad Core @ 1.8 GHz (burst 3.0 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 up to 1.9GHz, L2 cache 1.5MB
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, Vulkan 1.0 APIs, Dedicated FIVR for Graphics, Intel® Virtualization Technology for Directed I/O (VT-d)
VIDEO INTERFACES	• HDMI up to 4096x2160@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 interface
NETWORKING	• 2x GB Ethernet interface
USB	• 2x USB HOST 3.0 • 3x USB HOST 2.0 • 1x USB OTG 2.0
MASS STORAGE	• Starting from 16GB eMMC drive soldered on-board • SATA Gen3.2
PERIPHERAL INTERFACES	UART, I2C, SPI, CAN, SDIO, GPIOs, JTAG (optional)
PCIE	1x PCIe 3.0
OPERATING SYSTEM	• Ubuntu • Windows 10
POWER SUPPLY	+5 V DC
DIMENSIONS	Standard SMARCTM 2.0 short size module
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.

intel partner Gold

ENGICAM
EMBEDDED SOLUTIONS

SmarCore EHL

BLOCK DIAGRAM