ENGICAM
EMBEDDED SOLUTIONS

SmarCore ADL-N

SMARC

The new Engicam module for machine learning, IoT connectivity, multimedia and HMI applications is based on SMARC® standard. SmarCore ADL-N is based on Intel ® Core™ i3 N-Series, Intel Atom® x7000E series and Intel® Processors N Series.

HIGHLIGHTS

- Standard SMARC 2.1.1
- Powerful Intel ® Core processor with a Neural Processing Unit (NPU)
- Suitable for machine learning, vision and advanced multimedia applications

APPLICATIONS

Artificial Intelligence | Industrial | Digital Signage Infotainment | Transportation | Automotive | Avionics | Surveillance | Robotics | Biomedical/ Medical devices | Gaming | Home Automation

FEATURES

Linux · Windows 10 · Windows IoT

CPU	Intel® Alder Lake N	
CORES	Intel Core™ i3 N-Series Intel Atom® x7000E Series Intel Processor N Series	
MEMORY	Up to 16GB (@ up to 4800MT/s) LPDDR5	
GRAPHICS	UHD Intel, OpenGL 4.6, OpenCL 3.0 , Direct X 12.1, IPU 6	
VIDEO INTERFACES	• LVDS 18/24bit up to Full HD • Display Port • HDMI 2x (1x via DP) up to Full HD • 2x MIPI-CSI – 2-4 lanes	
VIDEO PROCESSING	• HEVC/ H265, VP9, AV1 dec • HEVC/H265 enc	
AUDIO	• I²S interface • HDA	
NETWORKING	2x 2.5GB Ethernet interface	

USB	• 6x USB 2.0 • 2x USB 3.0
MASS STORAGE	Starting from 4GB eMMC drive soldered on-board
PERIPHERAL INTERFACES	UART, I²C, SPI, GPIOs
PCIE	4x PCIe 3.0
OPERATING SYSTEM	• Linux • Windows 10/ Windows IoT
POWER SUPPLY	+5V DC
DIMENSIONS	Standard SMARC short size module
OPERATING TEMPERATURE*	Commercial qualified

* 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

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BLOCK DIAGRAM