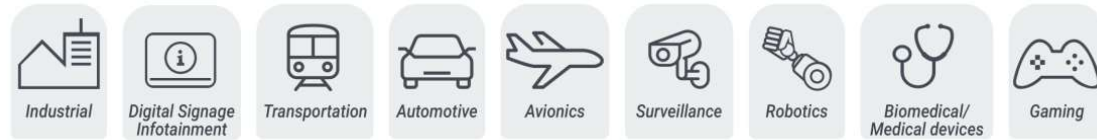


SmarCore Apl-x86

Engicam introduces SmarCore APL-x86 SOM based on Low Power Intel® Atom™, Celeron® and Pentium® processors (formerly Apollo Lake™). The module is based on the Smarc standard pinout..



APPLICATIONS



FEATURES

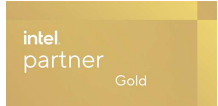
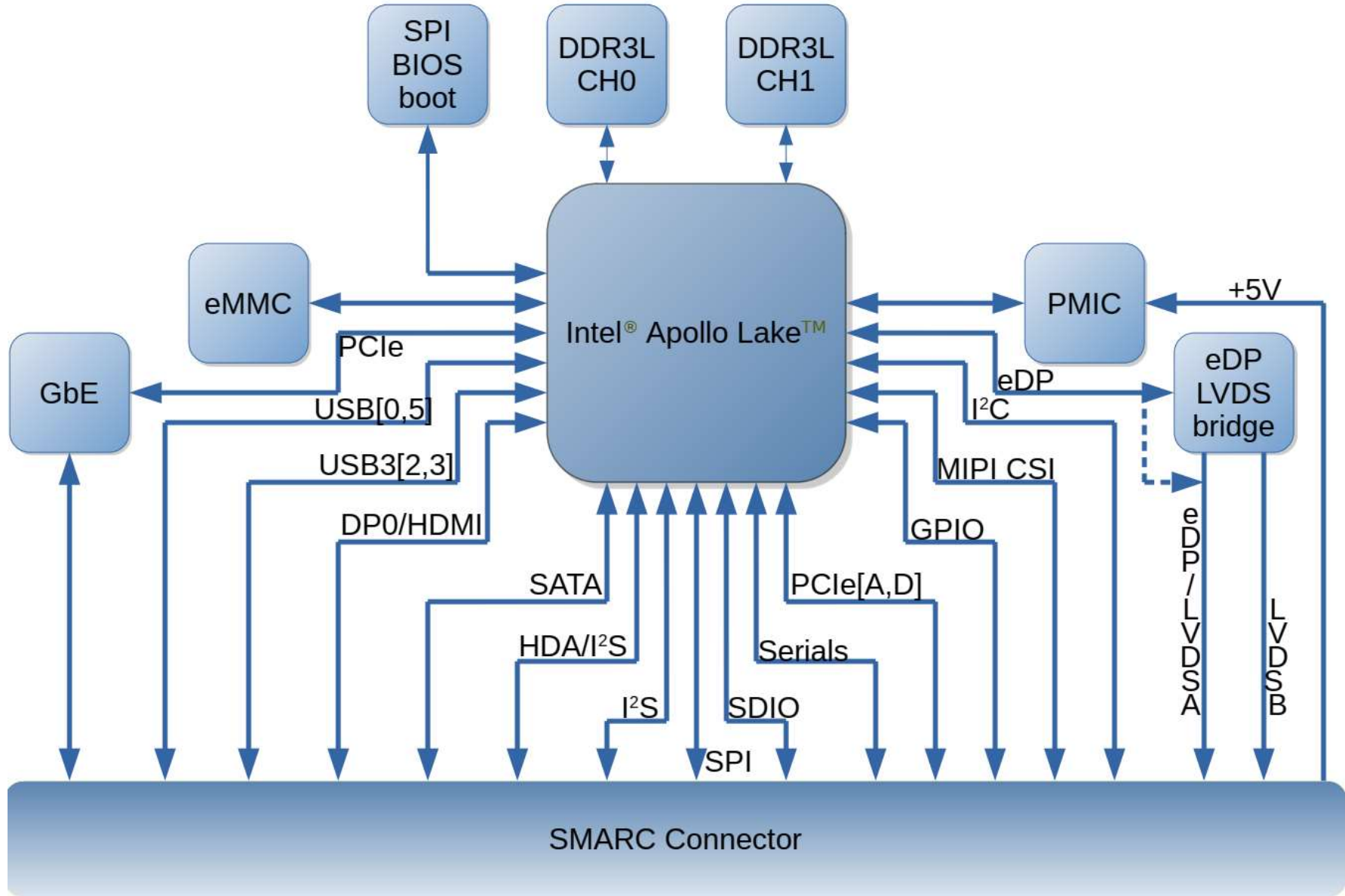


Windows 10 Windows IoT

CPU	<ul style="list-style-type: none"> Intel Atom x7-E3950 (4 x 1.6 / 2.0 GHz, 2MB L2 cache, 12W) Intel Atom x5-E3940 (4 x 1.6 / 1.8 GHz, L2 cache 2MB, 9W) Intel Atom x5-E3930 (2 x 1.3 / 1.8 GHz, L2 cache 1MB, 6.5W) Intel Celeron N3350 (2 x 1.1 / 2.4 GHz, L2 cache 1MB, 6W) Intel Pentium N4200 (4 x 1.1 / 2.5 GHz, L2 cache 2MB, 6W)
CORES	Up to 4 up to 2.5GHz, L2 cache 2MB
MEMORY	On board, Up to 8GB LPDDR4
GRAPHICS	<ul style="list-style-type: none"> Intel 9th generation (Gen9) LP graphics and media encode/decode engine
VIDEO INTERFACES	<ul style="list-style-type: none"> LVDS Dual channel up to 1920x1080 @60Hz via eDP bridge HDMI up to 3840x2160 @30Hz or 1920x1080 @60Hz DP up to 3840x2160 @30Hz or 1920x1080 @60Hz eDP 4K available without LVDS MIPI-CSI 1x4 lane and 1x2 lane
VIDEO PROCESSING	<ul style="list-style-type: none"> HW accelerated encode HEVC (L5), H.264 (L5.2), MVC (L5.1) VP8, JPEG/MJPEG HW accelerated decode HEVC (L5.1), H.264 (L5.2), MVC(L5.2) VP8, VP9, MPEG2, VC-1,WMV9, JPEG/MJPEG
AUDIO	<ul style="list-style-type: none"> HDA interface I²S interface
NETWORKING	<ul style="list-style-type: none"> 1x Intel®I210 (industrial)

USB	<ul style="list-style-type: none"> 2 x USB 3.0 4 x USB 2.0
MASS STORAGE	<ul style="list-style-type: none"> SATA Gen3 16 Gb eMMC 5.0 expandable
PERIPHERAL INTERFACES	<ul style="list-style-type: none"> 2 x I²C 1 x RS232 x Debug/Console) 2 x RS232 (1 x RS485 available on rev.A) Panel Header (PWR, RST, Led CTRL)
PCIe	<ul style="list-style-type: none"> Up to 4x PCIe Gen2
OPERATING SYSTEM	<ul style="list-style-type: none"> Linux Yocto Windows 10 Windows IoT enterprise – Windows IoT core
POWER SUPPLY	+12 to 24 V DC
DIMENSIONS	Standard SMARC™ 2.0 short size module
OPERATING TEMPERATURE	Industrial and consumer qualified

BLOCK DIAGRAM



Matlog