Low-power embedded architecture platform for Computer-on-Modules based on ARM and X86 technology. Perfect fit for mobile, embedded, connected solutions with scalable building blocks. Optimized pin-out definition for versatile architectures. Constructed to withstand harsh industrial environments.

SMARC 2.0
Computer-On-Module Solutions

The SMARC™ (Smart Mobility Architecture) standard has in a matter of a few years become a major driving force behind the enablement of innovative ultra-low-power embedded computing technology solutions. Market demand and the disruptive influence of the Internet of Things (IoT) have already hastened the arrival of a new specification, SMARC 2.0.

About Kontron – Member of the S&T Group

Kontron is a global leader in IoT/Embedded Computing Technology (ECT). As a part of technology group S&T, Kontron offers a combined portfolio of secure hardware, middleware and services for Internet of Things (IoT) and Industry 4.0 applications. With its standard products and tailor-made solutions based on highly reliable state-of-the-art embedded technologies, Kontron provides secure and innovative applications for a variety of industries. As a result, customers benefit from accelerated time-to-market, reduced total cost of ownership, product longevity and the best fully integrated applications overall.

For more information, please visit: www.kontron.com

About the Intel® Internet of Things Solutions Alliance

From modular components to market-ready systems, Intel and the 400+ global member companies of the Intel® Internet of Things Solutions Alliance provide scalable, interoperable solutions that accelerate deployment of intelligent devices and end-to-end analytics. Close collaboration with Intel and each other enables Alliance members to innovate with the latest IoT technologies, helping developers deliver first-in-market solutions.

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MODULE STANDARD FOR X86 AND ARM
Optimized pin-out definition for versatile architectures

CREATING MOBILE, EMBEDDED, CONNECTED SOLUTIONS
Ultra low-power, low profile

PERFECT FIT FOR IIOT APPLICATIONS
High connectivity with USB, PCIe, up to 2 x LAN and 2x CAN
| BOARDS & MODULES – SMARC™ |

### SMARC-sXBTi

**COMPLIANCE**
- SMARC 1.1

**DIMENSIONS (H x W x D)**
- 82 mm x 50 mm

**CPU**
- Intel Atom® x5-E3930, 2C, 1.3 / 2.0 GHz, 6 W TDP

**MAIN MEMORY**
- Up to 2 GByte DDR3

**GRAPHICS CONTROLLER**
- Intel® HD Graphics (Gen7)

**ETHERNET CONTROLLER**
- Intel® I210T

**SATA**
- 1x SATA (x2)

**FLASH ONBOARD**
- Up to 64 GByte eMMC

**USB**
- 2x USB 3.0 (via AFB)

**POWER SUPPLY**
- 5 W TDP

**TEMPERATURE**
- Industrial temperature: -40 °C to +85 °C non-operating
- 0 °C to +60 °C operating,

**SPECIAL FEATURES**
- Ultra low-power: 2x CAN interfaces

### SMARC-sXAL(4) (E2)

**COMPLIANCE**
- SMARC 2.0

**DIMENSIONS (H x W x D)**
- 82 mm x 50 mm

**CPU**
- Intel Atom® x7-E3950, 4C, 2.4 GHz, 8 W TDP

**MAIN MEMORY**
- Up to 32 GByte LPDDR4 (SMARC-sXAL4)

**GRAPHICS CONTROLLER**
- 2D/3D acceleration

**ETHERNET CONTROLLER**
- Intel® i210AT

**SATA**
- 1x SATA (dual/quad core)-solo

**FLASH ONBOARD**
- Up to 64 GByte eMMC

**USB**
- 2x USB 3.0 (incl. USB 2.0) + 4x USB 2.0

**POWER SUPPLY**
- 6 W TDP

**TEMPERATURE**
- Operating: -40 °C to +85 °C

### SMARC-sAMX6i

**COMPLIANCE**
- SMARC 1.1

**DIMENSIONS (H x W x D)**
- 82 mm x 50 mm

**CPU**
- Intel Atom® x5-E3930, 2C, 1.3 / 2.0 GHz, 6 W TDP

**MAIN MEMORY**
- Up to 32 GByte LPDDR4 (SMARC-sXAL4)

**GRAPHICS CONTROLLER**
- 2D/3D acceleration

**ETHERNET CONTROLLER**
- Intel® i210AT

**SATA**
- 1x SATA (dual/quad core)-solo

**FLASH ONBOARD**
- Up to 64 GByte eMMC

**USB**
- 2x USB 3.0 (via AFB)

**POWER SUPPLY**
- 6 W TDP

**TEMPERATURE**
- Operating: -40 °C to +85 °C

### SMARC-sAMX7

**COMPLIANCE**
- SMARC 2.0

**DIMENSIONS (H x W x D)**
- 82 mm x 50 mm

**CPU**
- Intel® Celeron® N3350, 2C, 1.1 / 2.4 GHz, 5 W TDP

**MAIN MEMORY**
- Up to 8GB LPDDR4

**GRAPHICS CONTROLLER**
- 2D/3D acceleration

**ETHERNET CONTROLLER**
- Intel® H81

**SATA**
- 1x SATA (dual/quad core)-solo

**FLASH ONBOARD**
- Up to 64 GByte eMMC

**USB**
- 2x USB 3.0 (incl. USB 2.0) + 4x USB 2.0

**POWER SUPPLY**
- 6 W TDP

**TEMPERATURE**
- Operating: -40 °C to +85 °C

### SMARC-sAMX8X

**COMPLIANCE**
- SMARC 2.0

**DIMENSIONS (H x W x D)**
- 82 mm x 50 mm

**CPU**
- Intel® Pentium® N4200, 4C, 1.1 / 2.0 GHz, 6.5 W TDP

**MAIN MEMORY**
- Up to 8GB LPDDR4

**GRAPHICS CONTROLLER**
- 2D/3D acceleration

**ETHERNET CONTROLLER**
- Intel® X550

**SATA**
- 1x SATA (dual/quad core)-solo

**FLASH ONBOARD**
- Up to 64 GByte eMMC

**USB**
- 2x USB 3.0 (incl. USB 2.0) + 4x USB 2.0

**POWER SUPPLY**
- 6 W TDP

**TEMPERATURE**
- Operating: -40 °C to +85 °C

### SMARC-sAL28

**COMPLIANCE**
- SMARC 2.0

**DIMENSIONS (H x W x D)**
- 82 mm x 50 mm

**CPU**
- Intel® Pentium® N4200, 4C, 1.1 / 2.0 GHz, 6.5 W TDP

**MAIN MEMORY**
- Up to 8GB LPDDR4

**GRAPHICS CONTROLLER**
- 2D/3D acceleration

**ETHERNET CONTROLLER**
- Intel® X550

**SATA**
- 1x SATA (dual/quad core)-solo

**FLASH ONBOARD**
- Up to 64 GByte eMMC

**USB**
- 2x USB 3.0 (incl. USB 2.0) + 4x USB 2.0

**POWER SUPPLY**
- 6 W TDP

**TEMPERATURE**
- Operating: -40 °C to +85 °C

### SMARC 2.0 Carrier plus SMARC Evaluation Carrier

**COMPLIANCE**

**DIMENSIONS (H x W x D)**
- 82 mm x 50 mm

**CPU**
- Intel Atom® E3845, 4C, 1.91 GHz, 9 W TDP

**MAIN MEMORY**
- Up to 16 GB DDR3L-1333 memory down

**GRAPHICS CONTROLLER**
- Intel® HD Graphics (Gen7)

**ETHERNET CONTROLLER**
- Intel® I210T

**SATA**
- 1x SATA (dual/quad core)-solo

**FLASH ONBOARD**
- Up to 64 GByte eMMC

**USB**
- 2x USB 3.0 (incl. USB 2.0) + 4x USB 2.0

**POWER SUPPLY**
- 5 W TDP

**TEMPERATURE**
- Operating: -40 °C to +85 °C

### SMARC 3.0 Carrier plus

**COMPLIANCE**

**DIMENSIONS (H x W x D)**
- 82 mm x 50 mm

**CPU**
- Intel® Pentium® N4200, 4C, 1.1 / 2.0 GHz, 6.5 W TDP

**MAIN MEMORY**
- Up to 8GB LPDDR4

**GRAPHICS CONTROLLER**
- 2D/3D acceleration

**ETHERNET CONTROLLER**
- Intel® X550

**SATA**
- 1x SATA (dual/quad core)-solo

**FLASH ONBOARD**
- Up to 64 GByte eMMC

**USB**
- 2x USB 3.0 (incl. USB 2.0) + 4x USB 2.0

**POWER SUPPLY**
- 6 W TDP

**TEMPERATURE**
- Operating: -40 °C to +85 °C