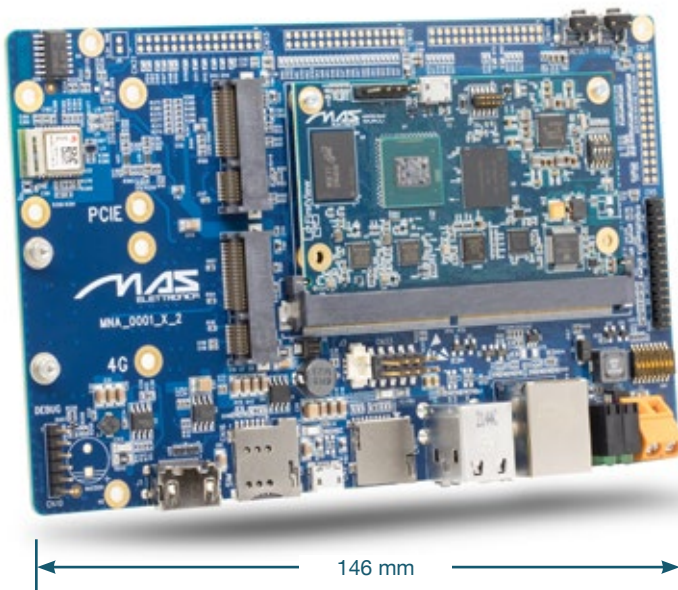


SBC ARI IMX8M PLUS



Processor

CPU: Up to 1.8GHz Quad Cortex™-A53 NXP i.MX 8M Plus
MCU: 800MHz Cortex-M7
DSP: HiFi4 DSP
PERFORMANCE (DMIPS): Up to 16,560

Software

Yocto Kirkstone LTS



Application areas



INDUSTRIAL



MEDICAL

SBC ARI IMX8M PLUS

ARI Single Board Computer SBC built upon the NXP i.MX 8M PLUS embedded multicore applications processor. It's standard 3,5" and SMARC 2.0 form factor guarantees the complete modularity of the solution. SBC ARI IMX8M PLUS is ready to use solution and ideal for applications where time to market is critical.



Features of the CPU module. Below are the principal Features of the Module.

CPU
CPU: Up to 1.8GHz Quad Cortex™-A53 NXP i.MX 8M Plus MCU: 800MHz Cortex-M7 DSP: HiFi4 DSP PERFORMANCE (DMIPS): Up to 16,560
VIDEO
HDMI: 1XHDMI CONNECTOR V2.0a up to 4Kp30 DSI: MIPI-DSI 1920x1080 24-bit LVDS: 2XLVDS CONNECTOR 1920x1080 24-bit Touch controller: Capacitive
STORAGE AND RAM
RAM: 2 – 8 GB LPDDR4 eMMC: 8 – 128 GB uSD: 1x uSD connector
CONNECTIVITY
WIFI: Wi-Fi 802.11b/g/n Certified module integrated with Client and Soft AP. LAN: 1xGigabit ethernet connector USB: 2X USB 2.0 Connectors CAN: 2xCAN FD 2.0 RS485: 2XRS485 RS232: 2xRS232
SECURITY
TPM Trusted Platform Module compliant 2.0 integrato.
MULTIMEDIA
2D/3D Graphics Acceleration: GC7000UL/ GC520L Video Encode / Decode: 1080p60 H.265/ H.264/ VP9/ VP8 Decoder, 1080p60 H.265/ H.264 Encoder Camera Interfaces: 1x MIPI CSI2 AI/ML: AI/ML NPU acceleration 2.3 TOPS

PERIPHERALS
SPI: 2X SPI (1X4 BIT;1X1BIT) I2C: 4X I2C GPIO: 40 GPIO ULTIMATED WITH OTHER PERIPHERALS RTC: 1XRTC WITH BATTERY
SOFTWARE SUPPORT
Linux kernel 5.15.xx YOCTO Kirkstone
MECHANICAL SPECIFICATION
Dimensioni: 102 x 146 mm
ELECTRICAL SPECIFICATIONS
Alimentazione: 9-36VDC Consumi: 200mA@12V
TEMPERATURE SPECIFICATIONS
-40 to +85°C
LONGEVITY
2036

BLOCK DIAGRAM SBC ARI IMX8M PLUS

