





## KSTR-SAMA5D27

- Arm<sup>®</sup> Cortex<sup>®</sup>-A5 500 MHz Processor
- 10/100 Mbit/s Ethernet, 96 Mbit/s Wi-Fi b/g/n, Bluetooth 4.1 LE
- Arm® TrustZone® Security, Stackable GPIO Headers, Secure Boot
- USB-C/Li-Ion battery powered with battery charging features
- Compact Form Factor: 50×70 mm

## A KESTREL KSTR-SAMA5D27 Single Board Computer



## KSTR-SAMA5D27 Specifications SoC Microchip SAMA5D27, 1 core Arm® Cortex®-A5 500 MHz 32-Bit CPU SoC Arm® TrustZone®, Secure Boot, Hardware encryption engine, Memory Integrity Monitor, Real-time clock on-die, Less than 200 µA low power state with fast wake up, 5 µA backup mode

Memory	256 MB LPDDR2
Ethernet	10/100 Mbit/s Ethernet (RJ-45)
Wireless connectivity	2.4 GHz WLAN IEEE 802.11 b/g/n Bluetooth 4.1
Mass storage	SD card slot 4 KB EEPROM
USB	1x USB 2.0 OTG (USB Type-C connector) 1x USB 2.0 Host (on expansion header)
Debug	Console debug UART on the expansion header Conclusive Developer Cable connector providing access to: - System UART - JTAG port - System I2C bus (EEPROM programing)
Software support	Linux 6.5 & 6.1, U-Boot, Yocto, Buildroot, Ubuntu, FreeBSD (on request)
Additional features	3 status LEDs - Power Indicator, System Heartbeat, user programmable RTC Battery backup (CR1220) for RTC and static RAM VDDIO voltage switch pins (3.3 V or 1.8 V selection) Reset switch 34 and 30 pin connectors with the following interfaces: - 3.3 V, 2.5 V, 1.8 V, 5.0 V and VBAT power supply pins - 2x Flexcom (configurable: I2C, SPI, UART) - I2C - 6 channel ADC with Vref - 10-bits ISC (Image Sensor Controller), 10-bit and 12-bit sensors support - 4-channel PWM - Timer I/O - CAN - USB - PDMIC audio input - Console UART - QWIIC connector
Power supply	USB Type-C connector External Li-Ion battery with charging, charge level and temperature monitoring support. 3 pin connector and solder pads.
Dimensions	50 x 70 mm

## **About Conclusive Engineering**

We provide reliable development and consulting services for various embedded platforms, assisting enterprises and manufacturing companies in optimizing their processes through tailored embedded system services, products, and hardware solutions.

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