

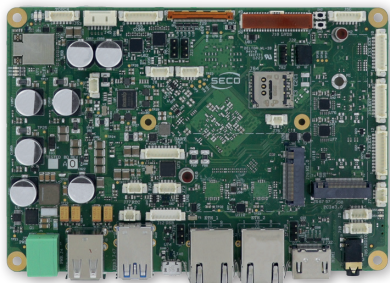
# Single Board Computer



**SAYLOR**

**3.5" SBC with Rockchip RK3568 SoC**

## Up to 4K Multimedia Arm® Computing with Wireless and Wired Connectivity



### HIGHLIGHTS



**CPU**  
Rockchip RK3568 SoC



**CONNECTIVITY**  
2x GbE; opt Wi-Fi; 2x RS-232 or RS-485, 2x CAN; M.2 slot for modem and on-board microSIM slot



**GRAPHICS**  
Mali-G52 1-Core-2EE



**MEMORY**  
Soldered-down DDR4-3200 memory, up to 4GB



### MAIN FIELDS OF APPLICATION



Digital Signage - Infotainment



Edge Computing



Energy



Fitness Equipment



Info Kiosks



In-Vehicle Infotainment Systems



Surveillance



Vending

### FEATURES

Processor	Rockchip RK3568 processor <ul style="list-style-type: none"> <li>4x Cortex®-A55 cores, up to 2.0GHz, 64-bit architecture, with Neural Processing Unit (NPU)</li> </ul>	USB	2x USB 3.0 Type-A 1x USB 2.0 Type-A 1x USB 2.0 OTG micro-AB muxed with one USB 3.0 (used for Deep Recovery) 1x USB 2.0 internal pin header 1x USB 2.0 internal pin header, dedicated to touch screen
Memory	Soldered-down DDR4-3200 memory, up to 4GB	Audio	TRRS combo audio jack (stereo mic in, stereo line out) Mono speaker out (amplified 1.3Watt @80hm) on internal header 1x PDM signal ports on internal header
Graphics	Mali-G52 1-Core-2EE GPU <ul style="list-style-type: none"> <li>OpenGL ES 1.1/2.0/3.2</li> <li>Vulkan 1.0 and 1.1</li> <li>OpenCL 2.0 Full Profile</li> </ul> Embedded Video CODEC <ul style="list-style-type: none"> <li>H.265/H.264/NP9 4K@60fps HW decoding</li> <li>VP8/VC1/MPEG-4/MPEG-2/MPEG-1 1080p @60fps HW decoding</li> <li>H.265/H.264 1080p@60fps HW encoding</li> </ul> Supports 3 independent video outputs	Serial Ports	1x debug UART 1x JTAG port 2x 4 wire RS-232 / RS-422 / RS-485 (multistandard transceivers) on internal header 2x 2 wire TTL UART ports on internal header
Video Interfaces	HDMI™ LVDS single / dual channel interface eDP 1.3 interface	Other Interfaces	2x 2-lanes MIPI-CSI camera connector or 1x 4-lanes M.2 Socket 2 Key M for AI accelerator modules Dedicated connector for I2C touch screen controller 8x GPIOs or 4x GPIOs + 4 ADC (factory configuration alternatives) 2x CAN, 1x I2C, 1x SPI
Video Resolution	HDMI™: up to 4K x 2K @60Hz LVDS: up to 1920 x 1080 @60Hz eDP: up to 4096 x 2160 (4K)	Power Supply	+12V <sub>DC</sub> .. +24V <sub>DC</sub> range RTC battery
Mass Storage	eMMC 5.1 drive soldered on-board, up to 64GB (first boot device) microSD slot (second boot device) I2C flash QSPI flash (factory option)	Operating System	Linux Yocto Android
Networking	2x Gigabit Ethernet ports, implemented using TI DP83867 Ethernet PHY on RGMII interface coming from SoC Optional on-board M.2 1216 module WLAN 802.11 a/b/g/n/ac + BT 5.0 M.2 Socket 2 Key B for LTE module + microSIM card slot on-board	Operating Temperature*	0°C ÷ +60°C (Commercial version) -30°C ÷ +85°C (Extended version, with WiFi/BT module on-board) -40°C ÷ +85°C (Industrial version)
		Dimensions	146 x 102 mm (3.5" form factor)

\* Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.



www.seco.com

### BLOCK DIAGRAM

