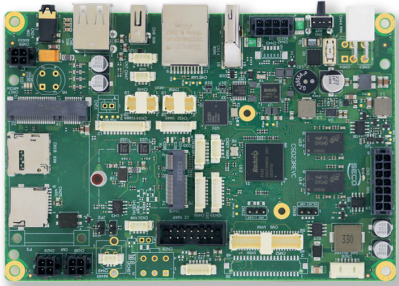


Single Board Computer



JUNO

3.5" SBC with Rockchip PX30 SoC



HIGHLIGHTS

CPU
Rockchip PX30 Processor

CONNECTIVITY
10/100 Ethernet; 4x USB 2.0 ports; M.2 Key E Slot for WiFi + BT modules; miniPCI-e slot for modems; up to 2x RS-232 + 1 x RS-485 + 1x CAN + 4x UARTs

GRAPHICS
Mali-G31 GPU

MEMORY
Soldered-down DDR3L memory, up to 4GB



MAIN FIELDS OF APPLICATION



FEATURES

Processor	Rockchip PX30 processor, 4x Cortex®-A35 cores	Serial Ports	1x TTL or RS-232 port (factory alternative) 1x Debug UART 1x TTL or RS-232 port (factory alternatives to microSD slot) 1x RS-485 port on internal connector 1x CAN port
Max Cores	4	Other Interfaces	miniSIM Slot for USB Modem modules on miniPCI-e form factor Optional CSI Camera connector Ultra-low Power RTC Trusted Secure Element 4-Channel LED Driver connector Microcontroller Programmable Interfaces: 2x 4-Wire UARTs on internal connector 2x 2-Wire UARTs on internal connector 1x SPI connector 2x I2C on internal connector 8-channel timer connector 16x GPIOs @3.3V 16x GPIOs @3.3V
Memory	Soldered-down DDR3L memory, up to 4GB total, 32-bit interface	Power Supply	+12V _{DC} ÷ +24 V _{DC} RTC battery
Graphics	Mali-G31 GPU with High performance dedicated 2D processor OpenGL ES 1.1 / 2.0 / 3.2, Vulkan 1.0, OpenCL 2.0, DX11 FL9_3 Embedded VPU, able to offer: • Multi-format 1080p 60fps video decoders (H.265, H.264, VC-1, MPEG-4, VP8) • H.264 1080p@30fps HW encoding Supports 2 independent video outputs	Operating System	Linux Yocto Android
Video Interfaces	LVDS Single / Dual Channel interface HDMI interface	Operating Temperature*	0°C ÷ +60°C (Commercial Temperature range) -20°C ÷ +85°C (Extended Temperature range)
Video Resolution	HDMI Up to 1920x1080p LVDS Up to 1280x800	Dimensions	146 x 102 mm (3.5" form factor)
Mass Storage	eMMC 5.1 Drive soldered on-board, up to 64GB Optional microSD Slot	*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.	
Networking	1x 10/100 Ethernet port Optional M.2 Socket 1 Key E Slot for WiFi/BT LE external modules Optional miniPCI-e slot (USB interface only) for external modem modules		
USB	3x USB 2.0 Host ports on standard Type-A slots USB Recovery internal connector 2x USB 2.0 ports on internal pin headers		
Audio	PMIC embedded Audio Codec Stereo audio out on internal header TRRS combo jack for Headphone and Mic In Line Out audio jack or I2S Audio Class-D amplifier with stereo out available on internal connector (factory alternatives) Buzzer on-board		



BLOCK DIAGRAM

