

NOVASom P-line is a family of Linux based SBCs specifically developed for markets requiring low cost boards that maintain the high performance and industrial high quality levels such as the High end multimedia, vending, domotics and IoT applications.

The small credit card size board contains everything necessary to guarantee an immediate bootstrap, driving of a display, connecting via Ethernet and USB plus two strips for possible expansion and an mPCIe slot ready for use with any WiFi, BT, modem, GPS.

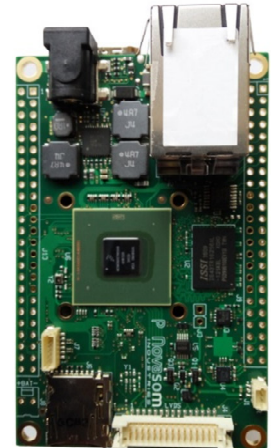















Table with 3 columns: Feature, Description, and SBC-P-Line Boards (P6/P7/P8). Rows include Processor, Graphics, Memory, Power, Multimedia, I/O, USB, Communication, Networking, Generic, Operating temperature, Dimension, and Operating System.

- UP TO 5 YEARS TOTAL WARRANTY
• 15 YEARS LIFETIME AVAILABILITY
• ONLY INDUSTRIAL COMPONENTS
• FOR INDUSTRIAL AND CRITICAL APPLICATIONS



NOTE: for more information refer to Hardware User Manual.



	SBC Board code	SBC-P6B	SBC-P7D	SBC-P8E
 Processor	CPU (800MHz in extended temperature) PERFORMANCE MIPS (COREMARK)	I.MX6 SOLO @1GHz 1128 (0,94)	I.MX6 DUAL LITE @1GHz 2532 (2.11)	I.MX6 QUAD @ 1GHz 3696 (3.08)
 Graphic	GRAPHIC ENGINE	GL/ES/CL 3D (1 shader) + 2D	GL/ES/CL 3D (1 shader) + 2D	GL/CL 3D (4 shader) + 2x 2D
 Memory	RAM memory DDR3 at 32bit eMMC flash memory µSD slot (SD card not included)	512MB N Y	1GB N Y	1GB Y- 4GB Y
 Power	Power supply, inversion polarity protected 2.5 mm Power Supply jack Power Consumption [W]	5 V ± 5% Y 5	6.5 ± 18V Y 6	6.5 ± 18V Y 9
 Multimedia	HDMI full size connector with CEC LVDS with backlight power supply MIPI/DSI Interface PCAP on LVDS Connector (Dedicated I2C Channel) Lane CSI for Camera sensor (¹) Lane DSI for Display sensor (¹) IR Input on connector 3pin picoblade	Y LVDS 2ch@1920x1080 Y (on strip) (⁴) 1 2 (on strip) (⁴) 2 (on strip) (⁴) N	Y LVDS 2ch@1920x1080 Y (on strip) (⁴) 1 2 (on strip) (⁴) 2 (on strip) (⁴) Y	Y LVDS 2ch@1920x1080 Y (on strip) (⁴) 1 2 (on strip) (⁴) 2 (on strip) (⁴) Y
 I/O	Audio PCM @3,3 V SPDIF output On Board GPIO @3,3 V on strip	Y (on strip) (⁴) Y (on strip) (⁴) 8 (up to 51)	Y (on strip) (⁴) Y (on strip) (⁴) 8 (up to 51)	Y (on strip) (⁴) Y (on strip) (⁴) 8 (up to 51)
 USB	USB port Host/Device on type A USB OTG *	1 and same on strip (⁴) 1 (on strip) (⁴)	1 and same on strip (⁴) 1 (on strip) (⁴)	1 and same on strip (⁴) 1 (on strip) (⁴)
 Communication	I2C internally powered @3,3 V I2C externally powered @ 3,3 V(²) Full UART @ 3,3 V Full UART externally powered @ 3,3 V/1,8 V(²) TX/RX only UART externally powered @ 3,3 V/1,8V(²) SPI with Slave Select CAN cell(¹) RS485(¹) RS232(¹) Console RS232 on connector 3pin picoblade On board mPCIe slot full featured with SIM bay On board SATA	1 1 (on strip) (⁴) 1 (on strip) (⁴) 1 (on strip) (⁴) 1 (on strip) (⁴) 1 3 (on strip) (⁴) 2 (on strip) (⁴) N 1 (on strip) (⁴) Y N N	1 1 (on strip) (⁴) 1 (on strip) (⁴) 1 (on strip) (⁴) 1 (on strip) (⁴) 1 3 (on strip) (⁴) 1 (on strip) (⁴) 1 with hs transceiver 1 with transceiver 1 with transceiver Y Y N	1 1 (on strip) (⁴) 1 (on strip) (⁴) 1 (on strip) (⁴) 1 (on strip) (⁴) 1 3 (on strip) (⁴) 1 with hs transceiver 1 with hs transceiver 1 with transceiver Y Y Y (only with adapter)
 Networking	RJ 45 Ethernet connector on board (No POE)	100MBPS	100MBPS	100MBPS
 Generic	Additional nr. 2 user led mPCIe activity LED RTC chipset with Battery recharger Additional USB port Host/Device on expansion on strip (⁴)	Y na Y (battery not included) 3	Y Y Y (battery not included) 3	Y Y Y (battery not included) 3
 Temperature	Operating temperature	Normal range (-20/+75) °C Industrial range (-40/+85) °C available on request with minor limitation (³)		
 Dimension	Mechanical size Form factor	86 mm x 54 mm Credit Card Size		
 Operating System	Distributions supported	Linux kernel 3.10.53/4.1.15, Android 4.2.2/4.3/4.4/5.X, Ubuntu12.04/14.04, Suse, Mandriva, Open WRT		

(¹) Signals dedicated and cannot be used as GPIO. They can be found floating accordingly to the equipment.

(²) Signals powered externally from a 1.8V or 3.3V source. The 3.3V source can come from the NOVASomP.

(³) MOQ = 500pz, processor @800MHz

(⁴) Strip NOT mounted (2.54), to leave customer free for any choice

NOTE: Tailor made and custom solutions are available to solve any problem, just call.

Our stock change frequently: if a product is on stock, for samples MOQ=1. For production MOQ =500pz. Average Lead Time = 16 weeks. For MOQ less than 500 price change..