

NOVASom S-line was specifically designed to be “no compromise board”, designed for **critical** applications like **railways, military, medical, avionics or automotive applications.**

















		SBC-S6, S7, S8 boards	
	Processor	CPU	I.MX6 S/DL/Q/QUAD PLUS @1GHz
		PERFORMANCE MIPS (COREMARK)	1128/2532/3696
	Graphics	GRAPHICS ENGINE	VIVANTO
	Memory	RAM memory DDR3 at 64bit	from 512MB up to 4GB
		eMMC flash memory	from 2GB up to 32 GB
		µSD slot	Y (up to 32GB)
	Power	Power supply inversion polarity protected	6.5 / 36V with burst protection
		Power Consumption [W]	6/9/12 working, 1.6 stdby
	Multimedia	HDMI full size connector with CEC	Y, FHD, ver 1.4
		LVDS with backlight power supply	LVDS 2ch up to 1920x1080
		DD (ttl direct display) connectors (requires adapter)	Y, RGB
		MIPI / DSI Interface (requires connector adapter)	Y, FHD
		PCAP on LVDS Connector (Dedicated I2C Channel)	1
		Touch On Board	1 resistive 4 wire
		IR Input	Y, on 3pin picoblade
	I/O	3,5 mm Audio connector (HP, MIC, Line-in, Line out)	Y, jack and picoblade
		On strip GPIO @3,3 V	Y, up to 14
		GPIO configurable signals on carrier connector 120 pin @3,3 V	41
	USB	USB port Host/Device on TYPE - A	2
		USB OTG on micro TYPE AB	1
	Communication	I2C @3,3 V	1 ON STRIP CONNECTOR
		SPI with Slave select	1 ON STRIP CONNECTOR
		CAN High Speed	2 without TRANSCEIVER ON STRIP
		RS485	1 ON STRIP CONNECTOR without transceiver
		PCIExpress BUS on rugged 120 pin carrier connector	Y
		On board SATA with connector	Y (only quad)
		Console RS232 3 pin Pico Blade Connector	Y
	Networking	RJ 45 Ethernet connector on board (No POE)	Gigabit
		WiFi - BT chipset on board with external antenna	Y
	Generic	Additional nr. 2 user led + lux optical guide	Y
		Keyboard (6 keys + 2 led) connector	Y
		User reset push-button	Y
		SENSORS (MEMS on 9 axis and barometer)	Y
		Enhanced RTC chipset with Backup Battery rechargeable (1)	Y
		Rugged Expansion 120 pin connector for CARRIER	Y
	Temperature	Operating temperature	(-20 /+70) °C extended (-40 / +85) °C
	Dimension	Mechanical size	100 x 75 mm
		Form factor	Pico ITX
	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

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



NOTE: for more information please refer to Hardware User Manual.



	SBC Board code	SBC-S7B	SBC-S7C	SBC-S8FT	Tailor Made options available (TM)
 Processor	CPU	I.MX6 DUAL LITE @1GHz	I.MX6 DUAL LITE @1GHz / I.MX6 QUAD @ 1GHz	I.MX6 QUAD @ 1GHz	
	PERFORMANCE MIPS (COREMARK)	2532 (2.11)	2532 (2.11)	3696 (3.08)	
 Graphic	GRAPHICS ENGINE	GLES/CL 3D (1 shader) + 2D	GLES/CL 3D (1 shader) + 2D	GL/CL 3D (4 shader) + 2x 2D	
 Memory	RAM memory DDR3 at 32bit (from 512MB up to 2GB)	na	na	na	TM
	RAM memory DDR3 at 64bit (from 512MB up to 4GB)	Y-1GB	Y-1GB	Y-1GB	TM
	eMMC flash memory (from 2GB to 32 GB)	Y-4GB	Y-4GB	Y-4GB	TM
	µSD slot (op to 32GB)	Y	Y	Y	
 Power	Power supply inversion polarity protected with burst protected	N (5V only)	N (5V only)	6.5 / 36V	TM
	Power Consumption [W]	6	6	9	
 Multimedia	HDMI full size connector	Y	Y	Y	TM
	LVDS with backlight power supply	LVDS 1ch@1366X768	LVDS 2ch@1920x1080	LVDS 2ch@1920x1080	TM
	DD (ttl direct display) connectors (requires piggy lcd)	Y	N	Y	TM
	DSI Interface	N	N	Y	
	Touch On Board	1	1	1	
	PCAP on LVDS Connector (Dedicated I2C Channel)	1	1	1	
	MIPI display and camera connector	N	N	Y	TM
	PWM for backlight control	Y	Y	Y	
	IR Input on connector 3pin picoblade	N	N	Y	TM
 I/O	3,5 mm Audio connector (HP, MIC, Line-in, Line out)	N	Y	Y	TM
	On strip GPIO @ 3,3 V	Y (up to 14)	Y (up to 14)	Y (up to 14)	
	GPIO configurable signals on carrier connector 120 pin @ 3,3 V	41	41	41	
 USB	USB port Host/Device on TYPE - A	2	2	2	TM
	USB OTG on micro TYPE AB	0	1	1	TM
 Communication	I2C @ 3,3 V	1 ON PIGGY CONNECTOR	1 ON PIGGY CONNECTOR	1 ON PIGGY CONNECTOR	
	SPI with Slave select	1 ON PIGGY CONNECTOR	1 ON PIGGY CONNECTOR	1 ON PIGGY CONNECTOR	
	CAN High Speed	2 W/O TRANSCEIVER	2 W/O TRANSCEIVER	2 W/O TRANSCEIVER	
	RS485	1 ON PIGGY CONNECTOR	1 ON PIGGY CONNECTOR	1 ON PIGGY CONNECTOR	
	PCI Express BUS on rugged 120 pin carrier connector	Y	Y	Y	
	On board SATA with connector	N	N/Y	Y	
	Console RS232 3pin picoblade connector	Y	Y	Y	
 Networking	RJ 45 Ethernet connector on board (No POE)	Gigabit	Gigabit	Gigabit	TM
	WiFi - BT chipset on board with external antenna	N	Y	Y	
 Generic	Additional nr. 2 user led + lux optical guide	N	N	Y	TM
	User reset push-button	Y	Y	Y	
	Keyboard (6 keys + 2 led) connector	N	N	Y	TM
	Enhanced RTC chipset with Backup Battery rechargeable (1)	N	Y (no battery)	Y	TM
	Console 3 pin Pico Blade Connector	Y	Y	Y	
 Expansion	SENSORS (MEMS on 9 axis and barometer)	N	N	Y	TM
	Rugged expansion 120 pin connector for CARRIER	N	N	Y	
	UART , SPI , I2C on Piggy Connector	1 \ 1 \ 1	1 \ 1 \ 1	1 \ 1 \ 1	
	GPIO configurable signals on expansion connector 120 pin	N	N	41	
	External USB port Host/Device on expansion connector 120 pin	N	N	2	
 Temperature	PCI express interface line on expansion connector 120 pin	N	N	1	
	SATA interface on expansion connector 120 pin	na	na	1	
	Operating temperature	-20/+70 °C extended -40/+85 °C (option)			
 Dimension	Mechanical size	125 mm x 95 mm			
	Form factor	Pico ITX compatible			
 Operating System	Distributions supported	Linux kernel 3.0.101/3.10.17, Android 4.2.2/4.3/4.4/5.X, Ubuntu12.04/14.04, Suse, Mandriva, Open WRT			

(1) Enhanced RTC chipset has a max current consumption of 1µA against the 30µA of the built in RTC of the I.MX processor
NOTE: OPTIONS are related to the Tailor Made solutions. You choose the CPU than the options you need and you have your Tailor Made board.