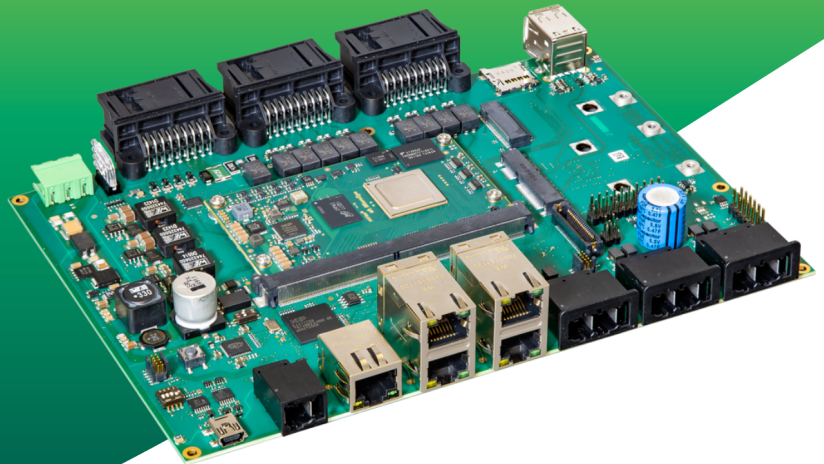


miriac® SBC-S32G399A

The miriac® SBC-S32G399A Single Board Computer integrates NXP's S32G399A Arm® vehicle network processor family for connected vehicle communication

- 8 Arm® Cortex®-A53 cores
- 4 Arm® Cortex®-M7 lockstep cores for real-time applications
- Automotive Ethernet Switch SJA1110
- Time Sensitive Networking (TSN)
- Automotive Buses: CAN, FlexRay, LIN

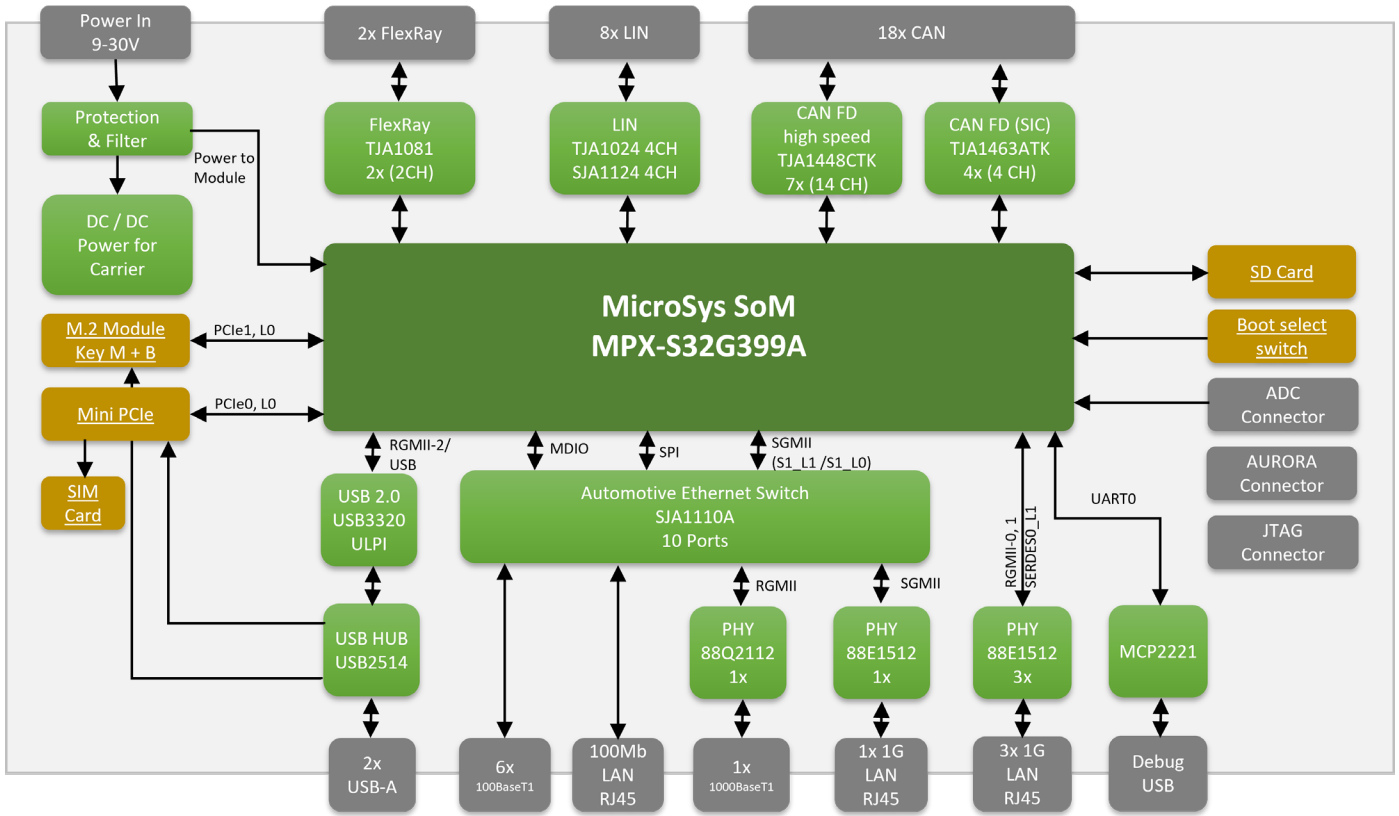


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NXP® S32G399A processor based SBCs for vehicle network computing

The miriac® SBC-S32G399A Single Board Computer is based on NXP's S32G399A vehicle network processor. It integrates a miriac® MPX-S32G399A System on Module designed by MicroSys. The system combines numerous high speed Ethernet interfaces for automotive networking – provided by the SJA1110 automotive switch – with standard automotive busses like Flexray (2x), LIN (8x) or CAN (16x plus 2x CAN FD). It is a communication and compute thoroughbred for innovative automotive and industrial sensor fusion applications.





Features

CPU	
Architecture	Arm® Cortex®-A53
Processor	NXP® S32G274A CPU: 4 Arm® Cortex®-A53 64-bit cores, 3 Arm® Cortex®-M7 dual-cores
DRAM	4 GB 32-bit soldered LPDDR4 RAM at 3200 MT/s
Memory	
Flash	64 MB QSPI Flash
Flash Card	Yes
Boot Flash	Boot select: XSPI, eMMC or external SD card
eMMC	16 GB
Ethernet	
1GbE	1x
1000BASE-T1	1x
100 Mb	1x
100BASE-T1	6x
TSN / IEEE 1588	Yes

High Speed IO

USB 2.0	1x
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miniUSB	1x
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IO

CAN FD	18x
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FlexRay	2x
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LIN	8x
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Analog Inputs (ADCs)	12x
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GPIOs	Yes
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JTAG Debug Interface	Yes
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Aurora Interface	Yes
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miniPCle	1x
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M.2	1x (type M)
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Operating Condition

Power Supply Voltage	Single +12 V DC power input (+9 to +36 V)
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Optional Power Supply Voltage	Single DC power input (+6 V to +36 V)
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RTC	Yes
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RTC-Buffer	Supercap
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Temperature	0 °C to 70 °C
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Mechanical

Dimensions	200 mm x 140 mm
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Software / Additional

Software Support	<ul style="list-style-type: none">• Linux• VxWorks (on request)• Others (on request)
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Additional	Development Kit for immediate start up; includes power supply, Linux pre-installed
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Our standard product versions offer what we consider to be the optimum configuration in terms of performance, price, usage and TDP. The product features lists specify the maximum range of functions per interface. However, not all interfaces or functions are always available in parallel. Flexible SERDES multiplexing is one of the reasons for this. In addition, we provide multiple memory expansion options and are also happy to accommodate specific customer wishes. So do not hesitate to contact us directly to discuss your desired configuration.

Name	Code	Description	Status
Development Kit basic for miriac® MPX-S32G399A	8629	<ul style="list-style-type: none"> miriac® MPX-S32G399A CRX-S32G incl.BSP and accessories 	active
AIP-S32G274A Development Kit basic for miriac® MPX-S32G274A + 1x Hailo-8™	8590	<ul style="list-style-type: none"> miriac® MPX-S32G399A CRX-S32G 1x Hailo-8™ M.2 AI Acceleration Module (NGFF M.2 2242/2260/2280 Key M Card) incl.BSP and accessories 	TBD

Take a look at related products

